



**ENERGY LABORATORIES, INC.** • 2821 Plant Street • Rapid City, SD 57702 • [www.energylab.com](http://www.energylab.com)  
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## ANALYTICAL SUMMARY REPORT

July 29, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050143

Quote ID: R286

Project Name: Edgemont

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	POWERTECH USA, INC. (Dewey-Burdock In Situ Uranium Recovery Facility)
	ASLBP #: 10-898-02-MLA-BD01
	Docket #: 04009075
	Exhibit #: APP-015-N-00-BD01
	Admitted: 8/19/2014
	Rejected:
Other:	Identified: 8/19/2014 Withdrawn: Stricken:

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 5/13/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050143-001	DewBurd GW681	05/12/08 12:45	05/13/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050143-001  
Client Sample ID: DewBurd GW681

Report Date: 07/29/08  
Collection Date: 05/12/08 12:45  
Date Received: 05/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	174	mg/L		5		1	A2320 B	05/19/08 09:16/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	05/19/08 09:16/mb
Bicarbonate as HCO <sub>3</sub>	212	mg/L		5		1	A2320 B	05/19/08 09:16/mb
Calcium	65.5	mg/L		0.5		2	E200.7	05/23/08 16:01/eli-c
Chloride	15	mg/L		1		1	E300.0	05/13/08 22:19/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	05/13/08 22:19/jmh
Magnesium	25.1	mg/L		0.5		2	E200.7	05/23/08 16:01/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	05/15/08 13:00/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/13/08 22:19/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/13/08 22:19/jmh
Potassium	9.6	mg/L		0.5		2	E200.7	05/23/08 16:01/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	05/23/08 16:01/eli-c
Sodium	212	mg/L	D	2		2	E200.7	05/23/08 16:01/eli-c
Sulfate	449	mg/L	D	3		50	E300.0	05/13/08 22:02/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	05/16/08 14:54/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	05/19/08 00:00/jmh
pH	7.91	s.u.		0.01		1	A4500-H B	05/16/08 11:40/tb
Sodium Adsorption Ratio (SAR)	5.6	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	900	mg/L		5		1	A2540 C	05/14/08 08:25/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	05/23/08 16:01/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/04/08 04:31/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/23/08 16:01/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	05/23/08 16:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/04/08 04:31/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/23/08 16:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/04/08 04:31/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/23/08 16:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/04/08 04:31/eli-c
Manganese	0.10	mg/L		0.01		2	E200.7	05/23/08 16:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/04/08 04:31/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/23/08 16:01/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/23/08 16:01/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	06/03/08 15:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/04/08 04:31/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050143-001  
Client Sample ID: DewBurd GW681

Report Date: 07/29/08  
Collection Date: 05/12/08 12:45  
Date Received: 05/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 04:31/eli-c
Uranium	0.0095	mg/L		0.0003		1	E200.8	06/04/08 04:31/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	05/23/08 16:01/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	05/23/08 16:01/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/03/08 22:53/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:07/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2220	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Gross Alpha precision (±)	32.1	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Gross Alpha MDC	4.5	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Gross Beta	675	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Gross Beta precision (±)	7.9	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	07/15/08 06:03/eli-c
Lead 210	40.5	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Lead 210 MDC	16.0	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Lead 210 precision (±)	10.2	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	407	pCi/L				1	E903.0	05/28/08 13:52/eli-c
Radium 226 precision (±)	3.7	pCi/L				1	E903.0	05/28/08 13:52/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/23/08 11:45/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/23/08 11:45/eli-c
Gross Gamma	290	pCi/L		20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	35	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	20.8	pCi/L				1	E909.0M	06/29/08 08:15/eli-c
Lead 210 precision (±)	9.4	pCi/L				1	E909.0M	06/29/08 08:15/eli-c
Lead 210 MDC	15.1	pCi/L				1	E909.0M	06/29/08 08:15/eli-c
Polonium 210	2.4	pCi/L		1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	1.8	pCi/L				1	E903.0	06/02/08 15:56/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
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MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050143-001  
Client Sample ID: DewBurd GW681

Report Date: 07/29/08  
Collection Date: 05/12/08 12:45  
Date Received: 05/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	06/02/08 15:56/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/02/08 15:56/eli-c
Thorium 230	0.7	pCi/L		0.2		1	E907.0	05/23/08 10:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	05/23/08 10:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	246	pCi/L		100		1	D5072-92	05/19/08 19:17/eli-c
Radon 222 precision (±)	107	pCi/L				1	D5072-92	05/19/08 19:17/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/28/08 13:40/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/20/08 22:05/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/23/08 17:14/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/20/08 22:05/eli-c
Copper	ND	mg/L		0.01		2	E200.7	05/20/08 22:05/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	05/20/08 22:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Manganese	0.10	mg/L		0.01		2	E200.7	05/20/08 22:05/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/02/08 08:05/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	05/28/08 13:40/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/20/08 22:05/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/28/08 13:40/eli-c
Strontium	1.3	mg/L		0.1		2	E200.7	05/20/08 22:05/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/28/08 13:40/eli-c
Uranium	0.0104	mg/L		0.0003		1	E200.8	05/28/08 13:40/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/23/08 17:14/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.47	%				1	A1030 E	07/18/08 00:00/jmh
Anions	13.3	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	14.8	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	891	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	07/18/08 00:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
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MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080519A-ALK-SEL-W							
Sample ID: LCS1_080519A	Laboratory Control Sample					Run: PH_COND1-R_080519A			05/19/08 09:09
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080519A	Method Blank					Run: PH_COND1-R_080519A			05/19/08 09:13
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050158-009AMS	Sample Matrix Spike					Run: PH_COND1-R_080519A			05/19/08 09:51
Alkalinity, Total as CaCO <sub>3</sub>	168	mg/L	5.0	102	80	120			
Sample ID: R08050158-009AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080519A			05/19/08 09:53
Alkalinity, Total as CaCO <sub>3</sub>	168	mg/L	5.0	102	80	120	0.0	10	
Method: A2510 B		Batch: 080516_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080516	Laboratory Control Sample					Run: PH_COND2-R_080516A			05/16/08 14:52
Conductivity @ 25 C	1440	umhos/cm	5.0	102	90	110			
Sample ID: LCS1-1_080516	Laboratory Control Sample					Run: PH_COND2-R_080516A			05/16/08 14:52
Conductivity @ 25 C	143	umhos/cm	5.0	95	90	110			
Sample ID: LCS2-1_080516	Laboratory Control Sample					Run: PH_COND2-R_080516A			05/16/08 14:53
Conductivity @ 25 C	4970	umhos/cm	5.0	99	90	110			
Sample ID: R08050199-001ADUP	Sample Duplicate					Run: PH_COND2-R_080516A			05/16/08 15:02
Conductivity @ 25 C	2560	umhos/cm	5.0				0.8	10	
Method: A2540 C		Batch: 080514A-SLDS-TDS-W							
Sample ID: LCS1_080514A	Laboratory Control Sample					Run: BAL-4-R_080515A			05/14/08 08:22
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	106	90	110			
Sample ID: MBLK1_080514A	Method Blank					Run: BAL-4-R_080515A			05/14/08 08:23
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08050158-006AMS	Sample Matrix Spike					Run: BAL-4-R_080515A			05/14/08 08:29
Solids, Total Dissolved TDS @ 180 C	400	mg/L	5.0	104	80	120			
Sample ID: R08050158-006AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080515A			05/14/08 08:29
Solids, Total Dissolved TDS @ 180 C	400	mg/L	5.0	102	80	120	1.0	10	
Method: A2580 B		Batch: 080519-ORP-ISE-W							
Sample ID: R08050143-001F	Sample Duplicate					Run: PH_COND1-R_080519B			05/19/08 00:00
Oxidation-Reduction Potential	240	mV					2.2	10	

### Qualifiers:

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ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SE3114-080603A		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C102059			06/03/08 11:03
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-81-1</b>	Laboratory Control Sample					Run: SUB-C102059			06/03/08 11:05
Selenium-IV	0.051	mg/L	0.0010	101	90	110			
<b>Sample ID: C08050602-001EMS</b>	Sample Matrix Spike					Run: SUB-C102059			06/03/08 11:14
Selenium-IV	0.051	mg/L	0.0010	101	85	115			
<b>Sample ID: C08050602-001EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C102059			06/03/08 11:16
Selenium-IV	0.051	mg/L	0.0010	103	85	115	1.1	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080603B		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C102093			06/03/08 15:00
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-81-1</b>	Laboratory Control Sample					Run: SUB-C102093			06/03/08 15:02
Selenium	0.051	mg/L	0.0010	101	90	110			
<b>Sample ID: C08050602-001EMS</b>	Sample Matrix Spike					Run: SUB-C102093			06/03/08 15:06
Selenium	0.049	mg/L	0.0010	98	85	115			
<b>Sample ID: C08050602-001EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C102093			06/03/08 15:08
Selenium	0.050	mg/L	0.0010	99	85	115	1.3	10	
<b>Method: A4500-H B</b>							Batch: 080516_1_PH-W		
<b>Sample ID: LCS_pH-1_080516</b>	Laboratory Control Sample					Run: PH_COND2-R_080516A			05/16/08 11:36
pH	6.93	s.u.	0.010	101	98.55	101.45			

### Qualifiers:

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b> Batch: A2008-05-15_2_NH3_01									
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01				Run: TECHAA2-R_080515A		05/15/08 11:37
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.27	mg/L	0.10	108	90	110	Run: TECHAA2-R_080515A		05/15/08 11:38
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.26	mg/L	0.10	105	90	110	Run: TECHAA2-R_080515A		05/15/08 11:39
<b>Sample ID: R08050116-003BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.46	mg/L	0.10	92	80	120	Run: TECHAA2-R_080515A		05/15/08 12:54
<b>Sample ID: R08050116-003BMDS</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.48	mg/L	0.10	100	80	120	Run: TECHAA2-R_080515A	4.7	05/15/08 12:55 10
<b>Method: D5072-92</b> Batch: C_R101445									
<b>Sample ID: MB-R101445</b> Radon 222	Method Blank 30	pCi/L					Run: SUB-C101445		05/19/08 19:17
<b>Sample ID: LCS-R101445</b> Radon 222	Laboratory Control Sample 301	pCi/L	100	89	70	130	Run: SUB-C101445		05/19/08 19:17
<b>Sample ID: C08050602-001GDUP</b> Radon 222	Sample Duplicate 246	pCi/L	100				Run: SUB-C101445	0.0	05/19/08 19:17 30

### Qualifiers:

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ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18608		
Sample ID: MB-18608	Method Blank		Run: SUB-C101431				05/20/08 21:33		
Barium	ND	mg/L	0.006						
Boron	0.03	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.003	mg/L	0.001						
Sample ID: LCS3-18608	Laboratory Control Sample		Run: SUB-C101431				05/20/08 21:37		
Barium	0.526	mg/L	0.10	105	85	115			
Boron	0.547	mg/L	0.10	103	85	115			
Chromium	0.536	mg/L	0.050	107	85	115			
Copper	0.537	mg/L	0.010	107	85	115			
Iron	2.87	mg/L	0.030	115	85	115			
Manganese	2.71	mg/L	0.010	109	85	115			
Nickel	0.532	mg/L	0.050	106	85	115			
Strontium	0.547	mg/L	0.10	109	85	115			
Zinc	0.553	mg/L	0.010	110	85	115			
Sample ID: R08050143-001D	Sample Matrix Spike		Run: SUB-C101431				05/20/08 22:09		
Barium	0.529	mg/L	0.10	106	70	130			
Boron	0.549	mg/L	0.10	102	70	130			
Chromium	0.523	mg/L	0.050	105	70	130			
Copper	0.519	mg/L	0.010	104	70	130			
Iron	2.89	mg/L	0.030	114	70	130			
Manganese	2.77	mg/L	0.010	107	70	130			
Nickel	0.525	mg/L	0.050	105	70	130			
Strontium	1.78	mg/L	0.10	103	70	130			
Zinc	0.533	mg/L	0.010	105	70	130			
Sample ID: R08050143-001D	Sample Matrix Spike Duplicate		Run: SUB-C101431				05/20/08 22:13		
Barium	0.517	mg/L	0.10	103	70	130	2.3	20	
Boron	0.541	mg/L	0.10	101	70	130	1.5	20	
Chromium	0.519	mg/L	0.050	104	70	130	0.8	20	
Copper	0.516	mg/L	0.010	103	70	130	0.7	20	
Iron	2.86	mg/L	0.030	113	70	130	1.0	20	
Manganese	2.70	mg/L	0.010	104	70	130	2.7	20	
Nickel	0.536	mg/L	0.050	107	70	130	2.1	20	
Strontium	1.76	mg/L	0.10	98	70	130	1.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>									Batch: C_18608
<b>Sample ID: R08050143-001D</b>	Sample Matrix Spike Duplicate			Run: SUB-C101431			05/20/08 22:13		
Zinc	0.526	mg/L	0.010	104	70	130	1.2	20	
<b>Sample ID: MB-18608</b>	Method Blank			Run: SUB-C101693			05/23/08 17:06		
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.004	mg/L	0.001						
<b>Sample ID: LCS3-18608</b>	Laboratory Control Sample			Run: SUB-C101693			05/23/08 17:10		
Barium	0.541	mg/L	0.10	108	85	115			
Boron	0.540	mg/L	0.10	105	85	115			
Chromium	0.534	mg/L	0.050	107	85	115			
Copper	0.543	mg/L	0.010	109	85	115			
Iron	2.84	mg/L	0.030	113	85	115			
Manganese	2.73	mg/L	0.010	109	85	115			
Nickel	0.540	mg/L	0.050	108	85	115			
Strontium	0.541	mg/L	0.10	108	85	115			
Zinc	0.532	mg/L	0.010	106	85	115			
<b>Sample ID: R08050143-001D</b>	Sample Matrix Spike			Run: SUB-C101693			05/23/08 17:18		
Barium	0.553	mg/L	0.10	111	70	130			
Boron	0.618	mg/L	0.10	108	70	130			
Chromium	0.542	mg/L	0.050	108	70	130			
Copper	0.554	mg/L	0.010	111	70	130			
Iron	2.89	mg/L	0.030	114	70	130			
Manganese	2.86	mg/L	0.010	111	70	130			
Nickel	0.556	mg/L	0.050	111	70	130			
Strontium	1.81	mg/L	0.10	102	70	130			
Zinc	0.552	mg/L	0.010	109	70	130			
<b>Sample ID: R08050143-001D</b>	Sample Matrix Spike Duplicate			Run: SUB-C101693			05/23/08 17:22		
Barium	0.547	mg/L	0.10	109	70	130	1.1	20	
Boron	0.612	mg/L	0.10	107	70	130	1.0	20	
Chromium	0.532	mg/L	0.050	106	70	130	1.9	20	
Copper	0.547	mg/L	0.010	109	70	130	1.1	20	
Iron	2.87	mg/L	0.030	113	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18608		
Sample ID: R08050143-001D		Sample Matrix Spike Duplicate			Run: SUB-C101693		05/23/08 17:22		
Manganese	2.82	mg/L	0.010	109	70	130	1.5	20	
Nickel	0.544	mg/L	0.050	109	70	130	2.3	20	
Strontium	1.79	mg/L	0.10	98	70	130	1.2	20	
Zinc	0.539	mg/L	0.010	106	70	130	2.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101693		
Sample ID: MB-080523A	Method Blank		Run: SUB-C101693				05/23/08 15:53		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.04	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.005	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.03	mg/L	0.003						
Zinc	0.004	mg/L	0.002						
Sample ID: LFB-080523A	Laboratory Fortified Blank		Run: SUB-C101693				05/23/08 15:57		
Silica	0.37	mg/L	0.10	93	85	125			
Aluminum	0.98	mg/L	0.10	98	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.1	mg/L	0.10	103	85	125			
Calcium	52	mg/L	0.50	104	85	125			
Chromium	1.00	mg/L	0.050	100	85	125			
Iron	1.1	mg/L	0.030	106	85	125			
Magnesium	52	mg/L	0.50	103	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	0.98	mg/L	0.10	98	85	125			
Nickel	1.0	mg/L	0.050	102	85	125			
Potassium	46	mg/L	0.50	92	85	125			
Sodium	49	mg/L	0.77	98	85	125			
Vanadium	1.1	mg/L	0.10	102	85	125			
Zinc	0.99	mg/L	0.010	99	85	125			
Sample ID: R08050143-001C	Sample Matrix Spike		Run: SUB-C101693				05/23/08 16:05		
Aluminum	2.01	mg/L	0.10	99	70	130			
Barium	2.12	mg/L	0.10	104	70	130			
Boron	2.26	mg/L	0.10	105	70	130			
Chromium	2.11	mg/L	0.050	103	70	130			
Iron	2.19	mg/L	0.030	107	70	130			
Manganese	2.24	mg/L	0.010	105	70	130			
Molybdenum	2.03	mg/L	0.10	99	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101693		
Sample ID: R08050143-001C	Sample Matrix Spike			Run: SUB-C101693			05/23/08 16:05		
Nickel	2.16	mg/L	0.050	106	70	130			
Vanadium	2.23	mg/L	0.10	108	70	130			
Zinc	2.09	mg/L	0.010	102	70	130			
Calcium	176	mg/L	1.0	108	70	130			
Magnesium	137	mg/L	1.0	109	70	130			
Potassium	103	mg/L	1.0	92	70	130			
Silica	4.99	mg/L	0.10	96	70	130			
Sodium	310	mg/L	1.5	96	70	130			
Sample ID: R08050143-001C	Sample Matrix Spike Duplicate			Run: SUB-C101693			05/23/08 16:09		
Aluminum	1.87	mg/L	0.10	92	70	130	7.6	20	
Barium	2.06	mg/L	0.10	101	70	130	2.6	20	
Boron	2.18	mg/L	0.10	102	70	130	3.3	20	
Chromium	2.02	mg/L	0.050	99	70	130	4.4	20	
Iron	2.13	mg/L	0.030	104	70	130	2.8	20	
Manganese	2.16	mg/L	0.010	101	70	130	3.5	20	
Molybdenum	1.97	mg/L	0.10	96	70	130	2.8	20	
Nickel	2.05	mg/L	0.050	101	70	130	4.8	20	
Vanadium	2.18	mg/L	0.10	105	70	130	2.4	20	
Zinc	2.02	mg/L	0.010	98	70	130	3.5	20	
Calcium	169	mg/L	1.0	101	70	130	4.0	20	
Magnesium	131	mg/L	1.0	104	70	130	4.3	20	
Potassium	103	mg/L	1.0	91	70	130	0.4	20	
Silica	4.81	mg/L	0.10	79	70	130	3.6	20	
Sodium	310	mg/L	1.5	97	70	130	0.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18608		
<b>Sample ID: MB-18608</b>	Method Blank		Run: SUB-C101838				05/28/08 13:27		
Antimony	0.0002	mg/L	0.0002						
Arsenic	0.0006	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	5E-05						
Selenium	0.0002	mg/L	0.0002						
Silver	4E-05	mg/L	4E-05						
Thallium	4E-05	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18608</b>	Laboratory Control Sample		Run: SUB-C101838				05/28/08 13:34		
Antimony	0.578	mg/L	0.050	115	85	115			
Arsenic	0.553	mg/L	0.0010	111	85	115			
Beryllium	0.276	mg/L	0.010	111	85	115			
Cadmium	0.268	mg/L	0.010	107	85	115			
Lead	0.553	mg/L	0.050	111	85	115			
Molybdenum	0.553	mg/L	0.10	111	85	115			
Selenium	0.546	mg/L	0.0010	109	85	115			
Silver	0.0527	mg/L	0.010	105	85	115			
Thallium	0.566	mg/L	0.10	113	85	115			
Uranium	0.443	mg/L	0.00030	89	85	115			
<b>Sample ID: R08050143-001D</b>	Sample Matrix Spike		Run: SUB-C101838				05/28/08 13:47		
Antimony	0.571	mg/L	0.050	114	70	130			
Arsenic	0.546	mg/L	0.0010	108	70	130			
Beryllium	0.266	mg/L	0.010	106	70	130			
Cadmium	0.262	mg/L	0.010	105	70	130			
Lead	0.554	mg/L	0.050	111	70	130			
Molybdenum	0.550	mg/L	0.10	110	70	130			
Selenium	0.529	mg/L	0.0010	106	70	130			
Silver	0.0517	mg/L	0.010	103	70	130			
Thallium	0.577	mg/L	0.10	115	70	130			
Uranium	0.471	mg/L	0.00030	92	70	130			
<b>Sample ID: R08050143-001D</b>	Sample Matrix Spike Duplicate		Run: SUB-C101838				05/28/08 13:54		
Antimony	0.569	mg/L	0.050	114	70	130	0.2	20	
Arsenic	0.546	mg/L	0.0010	109	70	130	0.1	20	
Beryllium	0.268	mg/L	0.010	107	70	130	0.7	20	
Cadmium	0.257	mg/L	0.010	103	70	130	1.7	20	
Lead	0.548	mg/L	0.050	109	70	130	1.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18608		
Sample ID: R08050143-001D	Sample Matrix Spike Duplicate			Run: SUB-C101838			05/28/08 13:54		
Molybdenum	0.551	mg/L	0.10	110	70	130	0.2	20	
Selenium	0.535	mg/L	0.0010	107	70	130	1.2	20	
Silver	0.0507	mg/L	0.010	101	70	130	1.9	20	
Thallium	0.558	mg/L	0.10	111	70	130	3.3	20	
Uranium	0.460	mg/L	0.00030	90	70	130	2.6	20	
Method: E200.8							Batch: C_18653		
Sample ID: MB-18653	Method Blank			Run: SUB-C102135			06/03/08 22:39		
Uranium	5E-05	mg/L	2E-05						
Sample ID: LCS1-18653	Laboratory Control Sample			Run: SUB-C102135			06/03/08 22:46		
Uranium	0.0230	mg/L	0.00030	109	80	120			
Sample ID: R08050199-001I	Post Digestion Spike			Run: SUB-C102135			06/03/08 23:06		
Uranium	0.0510	mg/L	0.00030	101	70	130			
Sample ID: R08050199-001I	Post Digestion Spike Duplicate			Run: SUB-C102135			06/03/08 23:13		
Uranium	0.0518	mg/L	0.00030	103	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R102135		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C102135				06/03/08 13:25		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	7E-05	mg/L	3E-05						
Thorium 232	6E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C102135				06/03/08 13:32		
Arsenic	0.0548	mg/L	0.0010	110	85	115			
Cadmium	0.0538	mg/L	0.0010	108	85	115			
Copper	0.0545	mg/L	0.0010	109	85	115			
Lead	0.0529	mg/L	0.0010	106	85	115			
Mercury	0.00522	mg/L	0.0010	104	85	115			
Silver	0.0195	mg/L	0.0010	97	85	115			
Thorium 232	0.0526	mg/L	0.0010	105	85	115			
Uranium	0.0529	mg/L	0.00030	106	85	115			
<b>Sample ID: C08051200-001CMS</b>	Sample Matrix Spike		Run: SUB-C102135				06/03/08 14:34		
Arsenic	0.0557	mg/L	0.0010	107	70	130			
Cadmium	0.0516	mg/L	0.0010	103	70	130			
Copper	0.0534	mg/L	0.0010	102	70	130			
Lead	0.0537	mg/L	0.0010	104	70	130			
Mercury	0.00484	mg/L	0.0010	97	70	130			
Silver	0.0103	mg/L	0.0050	103	70	130			
Uranium	0.0632	mg/L	0.00030	109	70	130			
<b>Sample ID: C08051200-001CMSD</b>	Sample Matrix Spike Duplicate		Run: SUB-C102135				06/03/08 14:41		
Arsenic	0.0563	mg/L	0.0010	108	70	130	1.2	20	
Cadmium	0.0525	mg/L	0.0010	105	70	130	1.7	20	
Copper	0.0551	mg/L	0.0010	105	70	130	3.2	20	
Lead	0.0559	mg/L	0.0010	109	70	130	3.9	20	
Mercury	0.00499	mg/L	0.0010	100	70	130	3.0	20	
Silver	0.0102	mg/L	0.0050	102	70	130	0.5	20	
Uranium	0.0640	mg/L	0.00030	111	70	130	1.3	20	
<b>Sample ID: R08050143-001C</b>	Post Digestion Spike		Run: SUB-C102135				06/04/08 04:38		
Arsenic	0.0547	mg/L	0.0010	105	70	130			
Cadmium	0.0493	mg/L	0.010	99	70	130			
Copper	0.0516	mg/L	0.010	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R102135		
Sample ID: R08050143-001C	Post Digestion Spike			Run: SUB-C102135			06/04/08 04:38		
Lead	0.0527	mg/L	0.050	105	70	130			
Mercury	0.00513	mg/L	0.0010	103	70	130			
Silver	0.0107	mg/L	0.010	53	70	130			S
Thorium 232	0.0533	mg/L	0.0010	107	70	130			
Uranium	0.0633	mg/L	0.00030	107	70	130			
Sample ID: R08050143-001C	Post Digestion Spike Duplicate			Run: SUB-C102135			06/04/08 04:45		
Arsenic	0.0527	mg/L	0.0010	101	70	130	3.7	20	
Cadmium	0.0498	mg/L	0.010	100	70	130	1.0	20	
Copper	0.0502	mg/L	0.010	98	70	130	2.6	20	
Lead	0.0527	mg/L	0.050	105	70	130	0.1	20	
Mercury	0.00522	mg/L	0.0010	104	70	130	1.7	20	
Silver	0.0130	mg/L	0.010	65	70	130	20	20	SR
Thorium 232	0.0540	mg/L	0.0010	108	70	130	1.4	20	
Uranium	0.0632	mg/L	0.00030	107	70	130	0.2	20	
Method: E245.1							Batch: C_B_32731		
Sample ID: MB-32731	Method Blank			Run: SUB-C102024			06/02/08 07:27		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32731	Laboratory Fortified Blank			Run: SUB-C102024			06/02/08 07:30		
Mercury	0.0021	mg/L	0.0010	105	85	115			
Sample ID: B08051951-002AMS	Sample Matrix Spike			Run: SUB-C102024			06/02/08 08:23		
Mercury	0.0021	mg/L	0.0010	103	70	130			
Sample ID: B08051951-002AMSD	Sample Matrix Spike Duplicate			Run: SUB-C102024			06/02/08 08:28		
Mercury	0.0018	mg/L	0.0010	92	70	130	12	30	
Method: E245.1							Analytical Run: SUB-C102024		
Sample ID: QCS	Initial Calibration Verification Standard						06/02/08 07:06		
Mercury	0.0021	mg/L	0.0010	103	90	110			

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R34773		
<b>Sample ID: LFB0805130630-3</b>	Laboratory Fortified Blank		Run: DIONEX_080513A				05/13/08 19:18		
Chloride	4.51	mg/L	0.50	90	90	110			
Fluoride	1.77	mg/L	0.10	89	90	110			S
Nitrogen, Nitrate as N	2.24	mg/L	0.10	90	90	110			
Nitrogen, Nitrite as N	2.31	mg/L	0.10	92	90	110			
Sulfate	13.4	mg/L	1.0	89	90	110			S
<b>Sample ID: LFB0805130630-4</b>	Laboratory Fortified Blank		Run: DIONEX_080513A				05/13/08 20:07		
Chloride	4.59	mg/L	0.50	92	90	110			
Fluoride	1.80	mg/L	0.10	90	90	110			
Nitrogen, Nitrate as N	2.27	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.36	mg/L	0.10	94	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
<b>Sample ID: R08050135-001BMS</b>	Sample Matrix Spike		Run: DIONEX_080513A				05/13/08 21:13		
Chloride	35.9	mg/L	0.50		80	120			A
Fluoride	2.22	mg/L	0.10	97	80	120			
Nitrogen, Nitrate as N	23.2	mg/L	0.10		80	120			A
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	80	120			
Sulfate	40.2	mg/L	1.0	76	80	120			S
<b>Sample ID: R08050135-001BMSD</b>	Sample Matrix Spike Duplicate		Run: DIONEX_080513A				05/13/08 21:29		
Chloride	35.8	mg/L	0.50		80	120	0.1	10	A
Fluoride	2.15	mg/L	0.10	93	80	120	3.2	10	
Nitrogen, Nitrate as N	23.3	mg/L	0.10		80	120	0.2	10	A
Nitrogen, Nitrite as N	2.30	mg/L	0.10	92	80	120	4.3	10	
Sulfate	39.8	mg/L	1.0	74	80	120	1.1	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0476		
Sample ID: MB-GrAB-0476	Method Blank				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	-1	pCi/L							
Gross Beta	-3	pCi/L							
Sample ID: UNAT-GrAB-0476	Laboratory Control Sample				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	150	pCi/L	112		70	130			
Sample ID: Cs137-GrAB-0476	Laboratory Control Sample				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L	109		70	130			
Sample ID: C08060608-001PMS	Sample Matrix Spike				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	130	pCi/L	88		70	130			
Sample ID: C08060608-001PMSD	Sample Matrix Spike Duplicate				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	120	pCi/L	87		70	130	0.6	19.2	
Sample ID: C08060608-001PMS	Sample Matrix Spike				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L	104		70	130			
Sample ID: C08060608-001PMSD	Sample Matrix Spike Duplicate				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L	102		70	130	2.1	16.1	
Method: E901.1							Batch: C_R101877		
Sample ID: LCS-R101877	Laboratory Control Sample				Run: SUB-C101877			05/28/08 05:30	
Cesium 137	1140	pCi/L	20	82	70	130			
Sample ID: MB-R101877	Method Blank				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L						U	
Sample ID: C08050919-001HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	6600	pCi/L	20				0.1	30	
Sample ID: C08051031-005HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18653		
Sample ID: C08050705-001BMS	Sample Matrix Spike				Run: SUB-C102132			06/02/08 21:44	
Radium 226	63	pCi/L		81	70	130			
Sample ID: C08050705-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C102132			06/02/08 21:44	
Radium 226	62	pCi/L		79	70	130	2.2	25.2	
Sample ID: MB-18653	Method Blank				Run: SUB-C102132			06/02/08 21:44	
Radium 226	-2	pCi/L							U
Sample ID: LCS-18653	Laboratory Control Sample				Run: SUB-C102132			06/02/08 21:44	
Radium 226	13	pCi/L		92	70	130			
Method: E903.0							Batch: C_RA226-2817		
Sample ID: C08050599-001AMS	Sample Matrix Spike				Run: SUB-C101998			05/28/08 13:50	
Radium 226	8.1	pCi/L		71	70	130			
Sample ID: C08050599-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C101998			05/28/08 13:50	
Radium 226	6.9	pCi/L		60	70	130	16	46	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: MB-RA226-2817	Method Blank				Run: SUB-C101998			05/28/08 16:36	
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2817	Laboratory Control Sample				Run: SUB-C101998			05/28/08 16:36	
Radium 226	8.5	pCi/L		109	70	130			
Method: E907.0							Batch: C_18653		
Sample ID: C08050701-004AMS	Sample Matrix Spike				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	82.5	pCi/Filter	0.20	88	70	130			
Sample ID: C08050701-004AMSD	Sample Matrix Spike Duplicate				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	89.3	pCi/Filter	0.20	96	70	130	8.0	30	
Sample ID: LCS-R101872	Laboratory Control Sample				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	55.2	pCi/Filter	0.20	115	70	130			
Sample ID: MB-R101872	Method Blank				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	0.7	pCi/Filter							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b> Batch: C_R102219									
Sample ID: LCS-R102219	Laboratory Control Sample				Run: SUB-C102219				05/23/08 11:45
Thorium 230	6.70	pCi/L	0.20	96	70	130			
Sample ID: R08050143-001H	Sample Matrix Spike				Run: SUB-C102219				05/23/08 11:45
Thorium 230	10.3	pCi/L	0.20	105	70	130			
Sample ID: R08050143-001H	Sample Matrix Spike Duplicate				Run: SUB-C102219				05/23/08 11:45
Thorium 230	9.40	pCi/L	0.20	98	70	130	9.1	30	
Sample ID: MB-R102219	Method Blank				Run: SUB-C102219				05/23/08 11:45
Thorium 230	ND	pCi/L							U
<b>Method: E909.0M</b> Batch: C_18653									
Sample ID: R08050199-001I	Sample Matrix Spike				Run: SUB-C102938				06/29/08 08:15
Lead 210	1200	pCi/L		96	70	130			
Sample ID: R08050199-001I	Sample Matrix Spike Duplicate				Run: SUB-C102938				06/29/08 08:15
Lead 210	2400	pCi/L		102	70	130	71	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R102938	Method Blank				Run: SUB-C102938				06/29/08 08:15
Lead 210	ND	pCi/L							U
Sample ID: LCS-R102938	Laboratory Control Sample				Run: SUB-C102938				06/29/08 08:15
Lead 210	520	pCi/L		88	70	130			
<b>Method: E909.0M</b> Batch: C_R104386									
Sample ID: C08050730-004FMS	Sample Matrix Spike				Run: SUB-C104386				06/27/08 08:45
Lead 210	1000	pCi/L		172	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD are acceptable the batch is approved.									
Sample ID: C08050730-004FMSD	Sample Matrix Spike Duplicate				Run: SUB-C104386				06/27/08 08:45
Lead 210	670	pCi/L		115	70	130	40	30	R
Sample ID: MB-R104386	Method Blank				Run: SUB-C104386				06/27/08 08:45
Lead 210	-2	pCi/L							U
Sample ID: LCS-R104386	Laboratory Control Sample				Run: SUB-C104386				06/27/08 08:45
Lead 210	110	pCi/L		98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R102444		
Sample ID: C08050737-001HMS	Sample Matrix Spike				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	51	pCi/L	1.0	112	70	130			
Sample ID: C08050737-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	48	pCi/L	1.0	107	70	130	5.0	30	
Sample ID: LCS-R102444	Laboratory Control Sample				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	58	pCi/L	1.0	133	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R102444	Method Blank				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	-0.1	pCi/L							U
Method: RMO-3008							Batch: C_R103071		
Sample ID: C08051031-005IMS	Sample Matrix Spike				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	42	pCi/L	1.0	99	70	130			
Sample ID: C08051031-005IMSD	Sample Matrix Spike Duplicate				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	52	pCi/L	1.0	124	70	130	21	30	
Sample ID: LCS-R103071	Laboratory Control Sample				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	110	pCi/L	1.0	121	70	130			
Sample ID: MB-R103071	Method Blank				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	0.5	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## Chain of Custody and Analytical Request Record

Page \_\_\_\_ of \_\_\_\_

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESREC</b>		Project Name, PWS, Permit, Etc. <b>PowerTech Dairy Buckle</b>		Sample Origin State: _____		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: <b>RESREC</b>		Contact Name: <b>PowerTech Dairy Buckle</b>		Phone/Fax: <b>605.342.1225</b>		Email: <b>eric.kraus@resrec.com</b>	
Invoice Address:		Invoice Contact & Phone:		Purchase Order:		Quote/Bottle Order:	
Special Report/Formats - ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC				Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other			
				ANALYSIS REQUESTED			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) <b>Dew Burd GWSR1</b>		Collection Date <b>5/14/08</b>	Collection Time <b>12:45</b>	MATRIX <b>W</b>		SEE ATTACHED Normal Turnaround (TAT)	
1						RUSH Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	
2						Comments: <b>set 6</b>	
3						Receipt Temp <b>6.6 °C</b>	
4						On Ice <input checked="" type="radio"/> Yes <input type="radio"/> No	
5						Custody Seal Intact Y N Signature Y N	
6						March	
7							
8							
9							
10							
Custody Record Must be Signed		Relinquished by (print): <b>Eric Kraus</b>		Date/Time: <b>5/15/08 11:05</b>		Signature: <b>[Signature]</b>	
Sample Disposal:		Return to Client:		Lab Disposal:		Received by (print): <b>Eric Kraus</b>	
						Date/Time: <b>5/13/08 8:46</b>	
						Signature: <b>[Signature]</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

July 29, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050199

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 5/14/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050199-001	DewBurd GW680	05/13/08 16:06	05/14/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050199-001  
Client Sample ID: DewBurd GW680

Report Date: 07/29/08  
Collection Date: 05/13/08 16:06  
Date Received: 05/14/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	262	mg/L		5		1	A2320 B	05/19/08 11:19/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/19/08 11:19/mb
Bicarbonate as HCO3	319	mg/L		5		1	A2320 B	05/19/08 11:19/mb
Calcium	421	mg/L		0.5		2	E200.7	05/29/08 15:05/eli-c
Chloride	12	mg/L		1		1	E300.0	05/16/08 20:58/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	05/16/08 20:58/jmh
Magnesium	129	mg/L		0.5		2	E200.7	05/29/08 15:05/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/15/08 15:11/jmh
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	05/16/08 20:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/16/08 20:58/jmh
Potassium	19.5	mg/L		0.5		2	E200.7	05/29/08 15:05/eli-c
Silica	3.8	mg/L		0.5		2	E200.7	05/29/08 15:05/eli-c
Sodium	126	mg/L	D	2		2	E200.7	05/29/08 15:05/eli-c
Sulfate	1200	mg/L	D	3		50	E300.0	05/16/08 20:09/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2580	umhos/cm		5.0		1	A2510 B	05/16/08 14:57/tb
Oxidation-Reduction Potential	270	mV				1	A2580 B	05/19/08 00:00/jmh
pH	7.14	s.u.		0.01		1	A4500-H B	05/16/08 12:14/tb
Sodium Adsorption Ratio (SAR)	1.4	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	05/20/08 09:49/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/29/08 15:05/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/02/08 20:42/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/29/08 15:05/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	05/29/08 15:05/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/02/08 20:42/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/29/08 15:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/02/08 20:42/eli-c
Iron	0.19	mg/L		0.03		2	E200.7	05/29/08 15:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/02/08 20:42/eli-c
Manganese	0.47	mg/L		0.01		2	E200.7	05/29/08 15:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/02/08 20:42/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/29/08 15:05/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/29/08 15:05/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	05/30/08 17:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/02/08 20:42/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050199-001  
Client Sample ID: DewBurd GW680

Report Date: 07/29/08  
Collection Date: 05/13/08 16:06  
Date Received: 05/14/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Thorium 232	ND	mg/L		0.005			1	E200.8	06/02/08 20:42/eli-c
Uranium	0.0213	mg/L		0.0003			1	E200.8	06/02/08 20:42/eli-c
Vanadium	ND	mg/L		0.1			2	E200.7	05/29/08 15:05/eli-c
Zinc	0.01	mg/L		0.01			2	E200.7	05/29/08 15:05/eli-c
METALS - SUSPENDED									
Uranium	0.0004	mg/L		0.0003			1	E200.8	06/03/08 22:59/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	05/30/08 13:57/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	05/30/08 18:20/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	6500	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Gross Alpha precision (±)	83.7	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Gross Alpha MDC	10.6	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Gross Beta	2250	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Gross Beta precision (±)	23.3	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Gross Beta MDC	10.1	pCi/L					1	E900.0	07/15/08 06:03/eli-c
Lead 210	37.7	pCi/L					1	E909.0M	06/27/08 08:45/eli-c
Lead 210 MDC	16.0	pCi/L					1	E909.0M	06/27/08 08:45/eli-c
Lead 210 precision (±)	10.2	pCi/L					1	E909.0M	06/27/08 08:45/eli-c
Polonium 210	2.0	pCi/L		1.0			1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	1.5	pCi/L					1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	1430	pCi/L					1	E903.0	05/29/08 14:22/eli-c
Radium 226 precision (±)	6.6	pCi/L					1	E903.0	05/29/08 14:22/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	06/02/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	06/02/08 15:00/eli-c
Gross Gamma	940	pCi/L		20			1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	58	pCi/L					1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	20.3	pCi/L	U				1	E909.0M	06/29/08 08:15/eli-c
Lead 210 precision (±)	36.4	pCi/L					1	E909.0M	06/29/08 08:15/eli-c
Lead 210 MDC	60.5	pCi/L					1	E909.0M	06/29/08 08:15/eli-c
Polonium 210	9.1	pCi/L		1.0			1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	4.9	pCi/L					1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	13.2	pCi/L					1	E903.0	06/02/08 21:44/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050199-001  
Client Sample ID: DewBurd GW680

Report Date: 07/29/08  
Collection Date: 05/13/08 16:06  
Date Received: 05/14/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	2.3	pCi/L				1	E903.0	06/02/08 21:44/eli-c
Radium 226 MDC	1.7	pCi/L				1	E903.0	06/02/08 21:44/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	05/23/08 10:30/eli-c
Thorium 230 precision (±)	0.9	pCi/L				1	E907.0	05/23/08 10:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	151000	pCi/L		100		1	D5072-92	05/19/08 19:17/eli-c
Radon 222 precision (±)	699	pCi/L				1	D5072-92	05/19/08 19:17/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/07/08 05:46/eli-c
Arsenic	0.005	mg/L		0.001		1	E200.8	05/29/08 02:58/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/29/08 02:58/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/07/08 05:46/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	05/29/08 18:11/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	05/29/08 02:58/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/29/08 18:11/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/29/08 02:58/eli-c
Iron	0.34	mg/L		0.03		2	E200.7	05/29/08 18:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/29/08 02:58/eli-c
Manganese	0.50	mg/L		0.01		2	E200.7	05/29/08 18:11/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 18:07/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	05/29/08 02:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/29/08 02:58/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/07/08 05:46/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/07/08 05:46/eli-c
Strontium	8.1	mg/L		0.1		1	E200.8	05/29/08 02:58/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/29/08 02:58/eli-c
Uranium	0.0238	mg/L		0.0003		1	E200.8	05/29/08 02:58/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	05/29/08 18:11/eli-c
DATA QUALITY								
A/C Balance (± 5)	10.2	%				1	A1030 E	07/18/08 00:00/jmh
Anions	30.6	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	37.6	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	2080	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.11					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 3 of 3



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080519A-ALK-SEL-W							
Sample ID: LCS1_080519A	Laboratory Control Sample				Run: PH_COND1-R_080519A		05/19/08 09:09		
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080519A	Method Blank				Run: PH_COND1-R_080519A		05/19/08 09:13		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050190-010AMS	Sample Matrix Spike				Run: PH_COND1-R_080519A		05/19/08 11:13		
Alkalinity, Total as CaCO <sub>3</sub>	184	mg/L	5.0	91	80	120			
Sample ID: R08050190-010AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080519A		05/19/08 11:15		
Alkalinity, Total as CaCO <sub>3</sub>	192	mg/L	5.0	98	80	120	4.3	10	
Method: A2510 B		Batch: 080516_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080516	Laboratory Control Sample				Run: PH_COND2-R_080516A		05/16/08 14:52		
Conductivity @ 25 C	1440	umhos/cm	5.0	102	90	110			
Sample ID: LCS1-1_080516	Laboratory Control Sample				Run: PH_COND2-R_080516A		05/16/08 14:52		
Conductivity @ 25 C	143	umhos/cm	5.0	95	90	110			
Sample ID: LCS2-1_080516	Laboratory Control Sample				Run: PH_COND2-R_080516A		05/16/08 14:53		
Conductivity @ 25 C	4970	umhos/cm	5.0	99	90	110			
Sample ID: R08050199-001ADUP	Sample Duplicate				Run: PH_COND2-R_080516A		05/16/08 15:02		
Conductivity @ 25 C	2560	umhos/cm	5.0				0.8	10	
Method: A2540 C		Batch: 080520A-SLDS-TDS-W							
Sample ID: LCS1_080520A	Laboratory Control Sample				Run: BAL-4-R_080520A		05/20/08 09:30		
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080520A	Method Blank				Run: BAL-4-R_080520A		05/20/08 09:32		
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: R08040168-001ADUP	Sample Duplicate				Run: BAL-4-R_080520A		05/20/08 09:33		
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0				1.8	20	
Sample ID: R08050215-003AMS	Sample Matrix Spike				Run: BAL-4-R_080520A		05/20/08 09:54		
Solids, Total Dissolved TDS @ 180 C	470	mg/L	5.0	107	80	120			
Sample ID: R08050215-003AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080520A		05/20/08 09:55		
Solids, Total Dissolved TDS @ 180 C	470	mg/L	5.0	108	80	120	0.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 080519-ORP-ISE-W		
Sample ID: R08050143-001F	Sample Duplicate				Run: PH_COND1-R_080519B			05/19/08 00:00	
Oxidation-Reduction Potential	240	mV					2.2	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080530B		
Sample ID: MBLK	Method Blank				Run: SUB-C101945			05/30/08 13:53	
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample				Run: SUB-C101945			05/30/08 13:55	
Selenium-IV	0.053	mg/L	0.0010	105	90	110			
Sample ID: R08050199-001E	Sample Matrix Spike				Run: SUB-C101945			05/30/08 13:59	
Selenium-IV	0.053	mg/L	0.0010	106	85	115			
Sample ID: R08050199-001E	Sample Matrix Spike Duplicate				Run: SUB-C101945			05/30/08 14:01	
Selenium-IV	0.054	mg/L	0.0010	107	85	115	1.0	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080530C		
Sample ID: MBLK	Method Blank				Run: SUB-C101946			05/30/08 17:18	
Selenium	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample				Run: SUB-C101946			05/30/08 17:20	
Selenium	0.054	mg/L	0.0010	108	90	110			
Sample ID: R08050199-001E	Sample Matrix Spike				Run: SUB-C101946			05/30/08 17:36	
Selenium	0.056	mg/L	0.0010	112	85	115			
Sample ID: R08050199-001E	Sample Matrix Spike Duplicate				Run: SUB-C101946			05/30/08 17:38	
Selenium	0.056	mg/L	0.0010	112	85	115	0.0	10	
<b>Method: A4500-H B</b>							Batch: 080516_1-PH-W		
Sample ID: LCS_pH-1_080516	Laboratory Control Sample				Run: PH_COND2-R_080516A			05/16/08 11:36	
pH	6.93	s.u.	0.010	101	98.55	101.45			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b> Batch: A2008-05-15_2_NH3_01									
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01				Run: TECHAA2-R_080515A		05/15/08 11:37
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.27	mg/L	0.10	108	90	110	Run: TECHAA2-R_080515A		05/15/08 11:38
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.26	mg/L	0.10	105	90	110	Run: TECHAA2-R_080515A		05/15/08 11:39
<b>Sample ID: R08050196-004CMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.24	mg/L	0.10	95	80	120	Run: TECHAA2-R_080515A		05/15/08 15:07
<b>Sample ID: R08050196-004CMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.23	mg/L	0.10	92	80	120	3.9	10	05/15/08 15:08
<b>Method: D5072-92</b> Batch: C_R101445									
<b>Sample ID: MB-R101445</b> Radon 222	Method Blank 30	pCi/L					Run: SUB-C101445		05/19/08 19:17
<b>Sample ID: LCS-R101445</b> Radon 222	Laboratory Control Sample 301	pCi/L	100	89	70	130	Run: SUB-C101445		05/19/08 19:17
<b>Sample ID: C08050787-001BDUP</b> Radon 222	Sample Duplicate 251000	pCi/L	100				Run: SUB-C101445	6.6	05/19/08 19:17 30
<b>Sample ID: C08050602-001GDUP</b> Radon 222	Sample Duplicate 246	pCi/L	100				Run: SUB-C101445	0.0	05/19/08 19:17 30
<b>Method: E200.7</b> Batch: C_18620									
<b>Sample ID: R08050199-001D</b> Boron Chromium Iron Manganese Zinc	Sample Matrix Spike 0.653 0.534 3.04 3.09 0.543	mg/L mg/L mg/L mg/L mg/L	0.10 0.050 0.030 0.010 0.010	106 107 108 104 107	70 70 70 70 70	130 130 130 130 130	Run: SUB-C102628		06/12/08 20:50
<b>Sample ID: R08050199-001D</b> Boron Chromium Iron Manganese Zinc	Sample Matrix Spike Duplicate 0.665 0.529 3.01 3.08 0.543	mg/L mg/L mg/L mg/L mg/L	0.10 0.050 0.030 0.010 0.010	108 106 107 104 107	70 70 70 70 70	130 130 130 130 130	1.8 0.9 0.9 0.3 0.0	20 20 20 20 20	06/12/08 20:54

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101901		
Sample ID: MB-080529A	Method Blank		Run: SUB-C101901				05/29/08 14:57		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.02						
Barium	ND	mg/L	0.006						
Boron	0.03	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	0.007	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.004	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.02	mg/L	0.003						
Zinc	0.003	mg/L	0.002						
Sample ID: LFB-080529A	Laboratory Fortified Blank		Run: SUB-C101901				05/29/08 15:01		
Silica	0.37	mg/L	0.10	93	85	125			
Aluminum	0.92	mg/L	0.10	92	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.1	mg/L	0.10	107	85	125			
Calcium	55	mg/L	0.50	110	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	107	85	125			
Magnesium	53	mg/L	0.50	106	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	0.98	mg/L	0.10	98	85	125			
Nickel	1.0	mg/L	0.050	100	85	125			
Potassium	47	mg/L	0.50	94	85	125			
Sodium	51	mg/L	0.77	101	85	125			
Vanadium	1.1	mg/L	0.10	108	85	125			
Zinc	1.0	mg/L	0.010	-143	85	125			S
Sample ID: R08050199-001C	Sample Matrix Spike		Run: SUB-C101901				05/29/08 15:09		
Aluminum	1.77	mg/L	0.10	87	70	130			
Barium	2.07	mg/L	0.10	101	70	130			
Boron	2.29	mg/L	0.10	103	70	130			
Chromium	2.06	mg/L	0.050	101	70	130			
Iron	2.37	mg/L	0.030	107	70	130			
Manganese	2.52	mg/L	0.010	100	70	130			
Molybdenum	1.97	mg/L	0.10	96	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101901		
Sample ID: R08050199-001C		Sample Matrix Spike		Run: SUB-C101901			05/29/08 15:09		
Nickel	2.04	mg/L	0.050	100	70	130			
Vanadium	2.24	mg/L	0.10	108	70	130			
Zinc	2.09	mg/L	0.010	102	70	130			
Calcium	507	mg/L	1.0		70	130			A
Magnesium	232	mg/L	1.0	102	70	130			
Potassium	110	mg/L	1.0	89	70	130			
Silica	5.07	mg/L	0.10		70	130			A
Sodium	226	mg/L	1.5	98	70	130			
Sample ID: R08050199-001C		Sample Matrix Spike Duplicate		Run: SUB-C101901			05/29/08 15:16		
Aluminum	1.94	mg/L	0.10	95	70	130	9.2	20	
Barium	2.01	mg/L	0.10	98	70	130	3.1	20	
Boron	2.26	mg/L	0.10	101	70	130	1.4	20	
Chromium	2.01	mg/L	0.050	99	70	130	2.2	20	
Iron	2.32	mg/L	0.030	104	70	130	2.4	20	
Manganese	2.48	mg/L	0.010	98	70	130	1.7	20	
Molybdenum	1.94	mg/L	0.10	94	70	130	1.8	20	
Nickel	2.01	mg/L	0.050	99	70	130	1.3	20	
Vanadium	2.13	mg/L	0.10	103	70	130	5.0	20	
Zinc	2.04	mg/L	0.010	99	70	130	2.6	20	
Calcium	496	mg/L	1.0		70	130	2.3	20	A
Magnesium	231	mg/L	1.0	101	70	130	0.4	20	
Potassium	110	mg/L	1.0	89	70	130	0.6	20	
Silica	5.13	mg/L	0.10		70	130	1.2	20	A
Sodium	226	mg/L	1.5	99	70	130	0.3	20	
Sample ID: C08050806-001BMS2		Sample Matrix Spike		Run: SUB-C101901			05/29/08 16:09		
Aluminum	4.64	mg/L	0.10	91	70	130			
Barium	5.04	mg/L	0.10	98	70	130			
Boron	5.83	mg/L	0.10	101	70	130			
Chromium	5.04	mg/L	0.050	99	70	130			
Iron	5.74	mg/L	0.044	103	70	130			
Manganese	5.09	mg/L	0.010	100	70	130			
Molybdenum	4.81	mg/L	0.10	94	70	130			
Nickel	4.96	mg/L	0.050	97	70	130			
Vanadium	5.51	mg/L	0.10	105	70	130			
Zinc	5.09	mg/L	0.010	99	70	130			
Calcium	483	mg/L	1.0	103	70	130			
Magnesium	307	mg/L	1.0	101	70	130			
Potassium	236	mg/L	1.0	90	70	130			
Silica	7.16	mg/L	0.10	74	70	130			

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101901		
Sample ID: C08050806-001BMS2	Sample Matrix Spike		Run: SUB-C101901				05/29/08 16:09		
Sodium	691	mg/L	2.7	95	70	130			
Sample ID: C08050806-001BMSD2	Sample Matrix Spike Duplicate		Run: SUB-C101901				05/29/08 16:13		
Aluminum	4.81	mg/L	0.10	94	70	130	3.7	20	
Barium	4.89	mg/L	0.10	95	70	130	3.1	20	
Boron	5.65	mg/L	0.10	98	70	130	3.1	20	
Chromium	4.87	mg/L	0.050	96	70	130	3.4	20	
Iron	5.61	mg/L	0.044	100	70	130	2.2	20	
Manganese	4.91	mg/L	0.010	96	70	130	3.6	20	
Molybdenum	4.73	mg/L	0.10	93	70	130	1.6	20	
Nickel	4.83	mg/L	0.050	95	70	130	2.6	20	
Vanadium	5.31	mg/L	0.10	101	70	130	3.8	20	
Zinc	4.87	mg/L	0.010	95	70	130	4.5	20	
Calcium	471	mg/L	1.0	98	70	130	2.6	20	
Magnesium	298	mg/L	1.0	98	70	130	2.9	20	
Potassium	237	mg/L	1.0	90	70	130	0.3	20	
Silica	7.21	mg/L	0.10	76	70	130			
Sodium	694	mg/L	2.7	97	70	130	0.5	20	
Method: E200.7_8							Batch: C_18620		
Sample ID: R08050199-001D	Sample Matrix Spike		Run: SUB-C101901				05/29/08 18:15		
Boron	0.663	mg/L	0.0010	105	70	130			
Chromium	0.548	mg/L	0.0010	110	70	130			
Iron	3.16	mg/L	0.0010	113	70	130			
Manganese	3.18	mg/L	0.0010	107	70	130			
Zinc	0.568	mg/L	0.0010	111	70	130			
Sample ID: R08050199-001D	Sample Matrix Spike Duplicate		Run: SUB-C101901				05/29/08 18:19		
Boron	0.687	mg/L	0.0010	110	70	130	3.6	20	
Chromium	0.552	mg/L	0.0010	110	70	130	0.8	20	
Iron	3.20	mg/L	0.0010	114	70	130	1.3	20	
Manganese	3.21	mg/L	0.0010	108	70	130	0.8	20	
Zinc	0.573	mg/L	0.0010	112	70	130	0.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18620		
<b>Sample ID: MB-18620</b>	Method Blank		Run: SUB-C101838				05/29/08 00:50		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0005	mg/L	5E-05						
Barium	0.0001	mg/L	9E-05						
Cadmium	ND	mg/L	3E-05						
Copper	0.0003	mg/L	0.0002						
Lead	ND	mg/L	5E-05						
Molybdenum	0.0002	mg/L	5E-05						
Nickel	8E-05	mg/L	6E-05						
Silver	0.0001	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	4E-05	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18620</b>	Laboratory Control Sample		Run: SUB-C101838				05/29/08 01:24		
Arsenic	0.499	mg/L	0.0010	100	85	115			
Barium	0.562	mg/L	0.10	112	85	115			
Cadmium	0.249	mg/L	0.010	100	85	115			
Copper	0.471	mg/L	0.010	94	85	115			
Lead	0.542	mg/L	0.050	108	85	115			
Molybdenum	0.563	mg/L	0.10	113	85	115			
Nickel	0.486	mg/L	0.050	97	85	115			
Silver	0.0470	mg/L	0.010	94	85	115			
Strontium	0.568	mg/L	0.10	114	85	115			
Thallium	0.559	mg/L	0.10	112	85	115			
Uranium	0.461	mg/L	0.00030	92	85	115			
<b>Sample ID: R08050199-001D</b>	Sample Matrix Spike		Run: SUB-C101838				05/29/08 03:05		
Antimony	0.607	mg/L	0.050	121	70	130			
Arsenic	0.521	mg/L	0.0010	103	70	130			
Barium	0.588	mg/L	0.10	115	70	130			
Cadmium	0.240	mg/L	0.010	96	70	130			
Copper	0.467	mg/L	0.010	93	70	130			
Lead	0.548	mg/L	0.050	110	70	130			
Molybdenum	0.581	mg/L	0.10	116	70	130			
Nickel	0.488	mg/L	0.050	96	70	130			
Strontium	8.51	mg/L	0.10	70	70	130			A
Thallium	0.577	mg/L	0.10	115	70	130			
Uranium	0.495	mg/L	0.00030	94	70	130			
<b>Sample ID: R08050199-001D</b>	Sample Matrix Spike Duplicate		Run: SUB-C101838				05/29/08 03:11		
Antimony	0.597	mg/L	0.050	119	70	130	1.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18620		
<b>Sample ID: R08050199-001D</b>	Sample Matrix Spike Duplicate			Run: SUB-C101838			05/29/08 03:11		
Arsenic	0.503	mg/L	0.0010	100	70	130	3.4	20	
Barium	0.577	mg/L	0.10	113	70	130	1.8	20	
Cadmium	0.234	mg/L	0.010	94	70	130	2.6	20	
Copper	0.451	mg/L	0.010	90	70	130	3.6	20	
Lead	0.543	mg/L	0.050	109	70	130	0.9	20	
Molybdenum	0.573	mg/L	0.10	114	70	130	1.5	20	
Nickel	0.474	mg/L	0.050	93	70	130	2.9	20	
Strontium	8.38	mg/L	0.10		70	130	1.6	20	A
Thallium	0.566	mg/L	0.10	113	70	130	2.0	20	
Uranium	0.493	mg/L	0.00030	94	70	130	0.3	20	
<b>Sample ID: LCS3-18620</b>	Laboratory Control Sample			Run: SUB-C102053			06/02/08 17:33		
Antimony	0.519	mg/L	0.050	104	85	115			
Arsenic	0.552	mg/L	0.0010	110	85	115			
Barium	0.532	mg/L	0.10	106	85	115			
Beryllium	0.266	mg/L	0.010	106	85	115			
Cadmium	0.269	mg/L	0.010	108	85	115			
Copper	0.509	mg/L	0.010	102	85	115			
Lead	0.529	mg/L	0.050	106	85	115			
Molybdenum	0.526	mg/L	0.10	105	85	115			
Nickel	0.508	mg/L	0.050	102	85	115			
Silver	0.0446	mg/L	0.010	89	85	115			
Strontium	0.543	mg/L	0.10	109	85	115			
Thallium	0.528	mg/L	0.10	106	85	115			
Uranium	0.527	mg/L	0.00032	105	85	115			
<b>Sample ID: MB-18620</b>	Method Blank			Run: SUB-C102135			06/03/08 18:30		
Antimony	0.0002	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Barium	0.0001	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Copper	0.001	mg/L	0.0002						
Lead	1E-05	mg/L							
Molybdenum	ND	mg/L	5E-05						
Nickel	0.0002	mg/L	6E-05						
Silver	5E-05	mg/L	5E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	4E-05						
Uranium	ND	mg/L	3E-05						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18620		
Sample ID: R08050199-001D	Sample Matrix Spike			Run: SUB-C102135			06/03/08 19:51		
Antimony	0.556	mg/L	0.050	111	70	130			
Arsenic	0.518	mg/L	0.0010	102	70	130			
Barium	0.512	mg/L	0.10	100	70	130			
Beryllium	0.259	mg/L	0.010	103	70	130			
Cadmium	0.256	mg/L	0.010	102	70	130			
Copper	0.505	mg/L	0.010	100	70	130			
Lead	0.532	mg/L	0.050	106	70	130			
Molybdenum	0.535	mg/L	0.10	107	70	130			
Nickel	0.506	mg/L	0.050	101	70	130			
Silver	0.0433	mg/L	0.010	86	70	130			
Strontium	7.90	mg/L	0.10		70	130			A
Thallium	0.528	mg/L	0.10	106	70	130			
Uranium	0.533	mg/L	0.00032	102	70	130			
Sample ID: R08050199-001D	Sample Matrix Spike Duplicate			Run: SUB-C102135			06/03/08 19:58		
Antimony	0.559	mg/L	0.050	112	70	130	0.5	20	
Arsenic	0.521	mg/L	0.0010	103	70	130	0.7	20	
Barium	0.515	mg/L	0.10	101	70	130	0.6	20	
Beryllium	0.252	mg/L	0.010	101	70	130	2.5	20	
Cadmium	0.253	mg/L	0.010	101	70	130	1.2	20	
Copper	0.506	mg/L	0.010	100	70	130	0.1	20	
Lead	0.524	mg/L	0.050	105	70	130	1.6	20	
Molybdenum	0.534	mg/L	0.10	107	70	130	0.1	20	
Nickel	0.505	mg/L	0.050	100	70	130	0.3	20	
Silver	0.0455	mg/L	0.010	91	70	130	4.9	20	
Strontium	8.02	mg/L	0.10		70	130	1.5	20	A
Thallium	0.521	mg/L	0.10	104	70	130	1.4	20	
Uranium	0.521	mg/L	0.00032	100	70	130	2.2	20	
Sample ID: R08050199-001D	Sample Matrix Spike			Run: SUB-C102298			06/07/08 05:53		
Antimony	0.537	mg/L	0.050	107	70	130			
Arsenic	0.525	mg/L	0.0010	104	70	130			
Barium	0.534	mg/L	0.10	104	70	130			
Beryllium	0.266	mg/L	0.010	106	70	130			
Cadmium	0.253	mg/L	0.010	101	70	130			
Copper	0.487	mg/L	0.010	97	70	130			
Lead	0.512	mg/L	0.050	102	70	130			
Molybdenum	0.510	mg/L	0.10	102	70	130			
Nickel	0.500	mg/L	0.050	100	70	130			
Selenium	0.499	mg/L	0.0020	100	70	130			
Silver	0.0447	mg/L	0.010	89	70	130			

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18620		
<b>Sample ID: R08050199-001D</b>	Sample Matrix Spike			Run: SUB-C102298			06/07/08 05:53		
Strontium	7.56	mg/L	0.10		70	130			A
Thallium	0.506	mg/L	0.10	101	70	130			
Uranium	0.541	mg/L	0.00032	103	70	130			
<b>Sample ID: R08050199-001D</b>	Sample Matrix Spike Duplicate			Run: SUB-C102298			06/07/08 06:00		
Antimony	0.568	mg/L	0.050	114	70	130	5.6	20	
Arsenic	0.542	mg/L	0.0010	107	70	130	3.3	20	
Barium	0.555	mg/L	0.10	108	70	130	3.8	20	
Beryllium	0.272	mg/L	0.010	109	70	130	2.3	20	
Cadmium	0.263	mg/L	0.010	105	70	130	3.7	20	
Copper	0.505	mg/L	0.010	101	70	130	3.6	20	
Lead	0.533	mg/L	0.050	107	70	130	3.9	20	
Molybdenum	0.535	mg/L	0.10	107	70	130	4.9	20	
Nickel	0.520	mg/L	0.050	104	70	130	3.9	20	
Selenium	0.518	mg/L	0.0020	104	70	130	3.7	20	
Silver	0.0480	mg/L	0.010	96	70	130	7.0	20	
Strontium	7.91	mg/L	0.10		70	130	4.5	20	A
Thallium	0.527	mg/L	0.10	105	70	130	4.1	20	
Uranium	0.566	mg/L	0.00032	108	70	130	4.5	20	
<b>Method: E200.8</b>							Batch: C_18653		
<b>Sample ID: MB-18653</b>	Method Blank			Run: SUB-C102135			06/03/08 22:39		
Uranium	5E-05	mg/L	2E-05						
<b>Sample ID: LCS1-18653</b>	Laboratory Control Sample			Run: SUB-C102135			06/03/08 22:46		
Uranium	0.0230	mg/L	0.00030	109	80	120			
<b>Sample ID: R08050199-001I</b>	Post Digestion Spike			Run: SUB-C102135			06/03/08 23:06		
Uranium	0.0510	mg/L	0.00030	101	70	130			
<b>Sample ID: R08050199-001I</b>	Post Digestion Spike Duplicate			Run: SUB-C102135			06/03/08 23:13		
Uranium	0.0518	mg/L	0.00030	103	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.





## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 07/29/08

Project: Edgemont

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R102053		
Sample ID: LRB	Method Blank				Run: SUB-C102053		06/02/08 13:51		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C102053		06/02/08 13:58		
Arsenic	0.0501	mg/L	0.0010	100	85	115			
Cadmium	0.0507	mg/L	0.0010	101	85	115			
Copper	0.0509	mg/L	0.0010	102	85	115			
Lead	0.0508	mg/L	0.0010	102	85	115			
Mercury	0.00477	mg/L	0.0010	95	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Thorium 232	0.0505	mg/L	0.0010	101	85	115			
Uranium	0.0511	mg/L	0.00030	102	85	115			
Sample ID: R08050199-001C	Post Digestion Spike				Run: SUB-C102053		06/02/08 20:48		
Arsenic	0.0554	mg/L	0.0010	103	70	130			
Cadmium	0.0489	mg/L	0.010	98	70	130			
Copper	0.0481	mg/L	0.010	95	70	130			
Lead	0.0517	mg/L	0.050	103	70	130			
Mercury	0.00484	mg/L	0.0010	97	70	130			
Silver	0.0109	mg/L	0.010	55	70	130			S
Thorium 232	0.0539	mg/L	0.0010	108	70	130			
Uranium	0.0748	mg/L	0.00030	107	70	130			
Sample ID: R08050199-001C	Post Digestion Spike Duplicate				Run: SUB-C102053		06/02/08 20:55		
Arsenic	0.0544	mg/L	0.0010	101	70	130	2.0	20	
Cadmium	0.0477	mg/L	0.010	95	70	130	2.3	20	
Copper	0.0499	mg/L	0.010	98	70	130	3.7	20	
Lead	0.0512	mg/L	0.050	102	70	130	1.0	20	
Mercury	0.00486	mg/L	0.0010	97	70	130	0.5	20	
Silver	0.0111	mg/L	0.010	55	70	130	1.1	20	S
Thorium 232	0.0533	mg/L	0.0010	106	70	130	1.2	20	
Uranium	0.0733	mg/L	0.00030	104	70	130	1.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: C_B_32786		
Sample ID: MB-32786	Method Blank				Run: SUB-C102258		06/04/08 17:57		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32786	Laboratory Fortified Blank				Run: SUB-C102258		06/04/08 18:05		
Mercury	0.0019	mg/L	0.0010	91	85	115			
Sample ID: B08052561-001DMS	Sample Matrix Spike				Run: SUB-C102258		06/04/08 18:14		
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08052561-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C102258		06/04/08 18:16		
Mercury	0.0021	mg/L	0.0010	100	70	130	7.0	30	
Method: E245.1							Analytical Run: SUB-C102258		
Sample ID: QCS	Initial Calibration Verification Standard						06/04/08 17:50		
Mercury	0.0021	mg/L	0.0010	103	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R34815		
Sample ID: LFB0805165430-3	Laboratory Fortified Blank			Run: DIONEX_080516A			05/16/08 19:36		
Chloride	4.67	mg/L	0.50	93	90	110			
Fluoride	1.85	mg/L	0.10	93	90	110			
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
Sample ID: LFB0805165430-4	Laboratory Fortified Blank			Run: DIONEX_080516A			05/16/08 19:52		
Chloride	4.58	mg/L	0.50	92	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.30	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	13.7	mg/L	1.0	91	90	110			
Sample ID: R08050199-001AMS	Sample Matrix Spike			Run: DIONEX_080516A			05/16/08 20:25		
Chloride	249	mg/L	5.4	89	80	120			
Fluoride	94.9	mg/L	0.56	88	80	120			
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1880	mg/L	3.4	90	80	120			
Sample ID: R08050199-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080516A			05/16/08 20:41		
Chloride	242	mg/L	5.4	86	80	120	2.8	10	
Fluoride	92.2	mg/L	0.56	86	80	120	2.9	10	
Nitrogen, Nitrate as N	115	mg/L	1.3	92	80	120	3.2	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	3.2	10	
Sulfate	1860	mg/L	3.4	87	80	120	1.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0476		
Sample ID: MB-GrAB-0476	Method Blank				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	-1	pCi/L							
Gross Beta	-3	pCi/L							
Sample ID: UNAT-GrAB-0476	Laboratory Control Sample				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	150	pCi/L		112	70	130			
Sample ID: Cs137-GrAB-0476	Laboratory Control Sample				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L		109	70	130			
Sample ID: C08060608-001PMS	Sample Matrix Spike				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	130	pCi/L		88	70	130			
Sample ID: C08060608-001PMSD	Sample Matrix Spike Duplicate				Run: SUB-C104198			07/11/08 21:29	
Gross Alpha	120	pCi/L		87	70	130	0.6	19.2	
Sample ID: C08060608-001PMS	Sample Matrix Spike				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L		104	70	130			
Sample ID: C08060608-001PMSD	Sample Matrix Spike Duplicate				Run: SUB-C104198			07/11/08 21:29	
Gross Beta	100	pCi/L		102	70	130	2.1	16.1	
Method: E901.1							Batch: C_R101877		
Sample ID: LCS-R101877	Laboratory Control Sample				Run: SUB-C101877			05/28/08 05:30	
Cesium 137	1140	pCi/L	20	82	70	130			
Sample ID: MB-R101877	Method Blank				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L						U	
Sample ID: C08050919-001HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	6600	pCi/L	20				0.1	30	
Sample ID: C08051031-005HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18653		
Sample ID: C08050601-001ADUP	Sample Duplicate				Run: SUB-C102132			06/02/08 15:56	
Radium 226	-1.2	pCi/L			70	130	7.7	134.8	U
Sample ID: C08050705-001BMS	Sample Matrix Spike				Run: SUB-C102132			06/02/08 21:44	
Radium 226	63	pCi/L		81	70	130			
Sample ID: C08050705-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C102132			06/02/08 21:44	
Radium 226	62	pCi/L		79	70	130	2.2	25.2	
Sample ID: MB-18653	Method Blank				Run: SUB-C102132			06/02/08 21:44	
Radium 226	-2	pCi/L							U
Sample ID: LCS-18653	Laboratory Control Sample				Run: SUB-C102132			06/02/08 21:44	
Radium 226	13	pCi/L		92	70	130			
Method: E903.0							Batch: C_RA226-2820		
Sample ID: TAP WATER-MS	Sample Matrix Spike				Run: SUB-C101991			05/29/08 15:57	
Radium 226	7.4	pCi/L		91	70	130			
Sample ID: TAP WATER-MSD	Sample Matrix Spike Duplicate				Run: SUB-C101991			05/29/08 15:57	
Radium 226	8.2	pCi/L		101	70	130	9.6	23.1	
Sample ID: MB-RA226-2820	Method Blank				Run: SUB-C101991			05/29/08 15:57	
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2820	Laboratory Control Sample				Run: SUB-C101991			05/29/08 15:57	
Radium 226	7.9	pCi/L		102	70	130			
Method: E907.0							Batch: C_18653		
Sample ID: C08050601-001ADUP	Sample Duplicate				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	-0.0950	pCi/L	0.20		70	130	0.0	30	
Sample ID: C08050701-004AMS	Sample Matrix Spike				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	82.5	pCi/Filter	0.20	88	70	130			
Sample ID: C08050701-004AMSD	Sample Matrix Spike Duplicate				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	89.3	pCi/Filter	0.20	96	70	130	8.0	30	
Sample ID: LCS-R101872	Laboratory Control Sample				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	55.2	pCi/Filter	0.20	115	70	130			
Sample ID: MB-R101872	Method Blank				Run: SUB-C101872			05/23/08 10:30	
Thorium 230	0.7	pCi/Filter							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_R102465		
<b>Sample ID: LCS-R102465</b>	Laboratory Control Sample				Run: SUB-C102465			06/02/08 15:00	
Thorium 230	7.50	pCi/L	0.20	109	70	130			
<b>Sample ID: R08050199-001H</b>	Sample Matrix Spike				Run: SUB-C102465			06/02/08 15:00	
Thorium 230	16.1	pCi/L	0.20	99	70	130			
<b>Sample ID: R08050199-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C102465			06/02/08 15:00	
Thorium 230	17.0	pCi/L	0.20	103	70	130	5.4	30	
<b>Sample ID: MB-R102465</b>	Method Blank				Run: SUB-C102465			06/02/08 15:00	
Thorium 230	ND	pCi/L							
<b>Method: E909.0M</b>							Batch: C_18653		
<b>Sample ID: C08050601-001ADUP</b>	Sample Duplicate				Run: SUB-C102938			06/29/08 08:15	
Lead 210	-2.9	pCi/L					6000	30	R
- Activity of both samples is below detection limit, resulting in high RPD. Batch is acceptable.									
<b>Sample ID: R08050199-001I</b>	Sample Matrix Spike				Run: SUB-C102938			06/29/08 08:15	
Lead 210	1200	pCi/L		96	70	130			
<b>Sample ID: R08050199-001I</b>	Sample Matrix Spike Duplicate				Run: SUB-C102938			06/29/08 08:15	
Lead 210	2400	pCi/L		102	70	130	71	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
<b>Sample ID: MB-R102938</b>	Method Blank				Run: SUB-C102938			06/29/08 08:15	
Lead 210	ND	pCi/L							U
<b>Sample ID: LCS-R102938</b>	Laboratory Control Sample				Run: SUB-C102938			06/29/08 08:15	
Lead 210	520	pCi/L		88	70	130			
<b>Method: E909.0M</b>							Batch: C_R104386		
<b>Sample ID: C08050730-004FMS</b>	Sample Matrix Spike				Run: SUB-C104386			06/27/08 08:45	
Lead 210	1000	pCi/L		172	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD are acceptable the batch is approved.									
<b>Sample ID: C08050730-004FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104386			06/27/08 08:45	
Lead 210	670	pCi/L		115	70	130	40	30	R
<b>Sample ID: MB-R104386</b>	Method Blank				Run: SUB-C104386			06/27/08 08:45	
Lead 210	-2	pCi/L							U
<b>Sample ID: LCS-R104386</b>	Laboratory Control Sample				Run: SUB-C104386			06/27/08 08:45	
Lead 210	110	pCi/L		98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08050199

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R102444		
Sample ID: C08050737-001HMS	Sample Matrix Spike				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	51	pCi/L	1.0	112	70	130			
Sample ID: C08050737-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	48	pCi/L	1.0	107	70	130	5.0	30	
Sample ID: LCS-R102444	Laboratory Control Sample				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	58	pCi/L	1.0	133	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R102444	Method Blank				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	-0.1	pCi/L							U
Method: RMO-3008							Batch: C_R103071		
Sample ID: C08051031-005IMS	Sample Matrix Spike				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	42	pCi/L	1.0	99	70	130			
Sample ID: C08051031-005IMSD	Sample Matrix Spike Duplicate				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	52	pCi/L	1.0	124	70	130	21	30	
Sample ID: LCS-R103071	Laboratory Control Sample				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	110	pCi/L	1.0	121	70	130			
Sample ID: MB-R103071	Method Blank				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	0.5	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>POWER TECH DAWY BURDOCK</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Cory Foreman</b> Phone/Fax: <b>cforeman@respec.com</b>		Email:	Sampler: (Please Print) <b>Erik Klavre</b>
Invoice Address:		Invoice Contact & Phone: <b>6</b>		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <div><input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: <input type="checkbox"/> NELAC</div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) <b>Dewey Burdock GW 650</b>		Collection Date <b>5/13/08</b>	Collection Time <b>16:06</b>	MATRIX <b>N</b>	ANALYSIS REQUESTED <b>As per Quot</b>
					SEE ATTACHED Normal Turnaround (TAT)
					<b>RUSH</b>
					Contact ELI prior to RUSH sample submittal for changes and scheduling - See Instruction Page
					Comments: <b>Set 14</b>
					Receipt Temp <b>8.1</b> °C On Ice <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
					Custody Seal Intact <input type="checkbox"/> Y <input type="checkbox"/> N Signature <input type="checkbox"/> Y <input type="checkbox"/> N Match <input type="checkbox"/> Y <input type="checkbox"/> N
Custody Record MUST be Signed		Requested by (print): <b>Erik Klavre</b>	Date/Time: <b>5/14/08 0715</b>	Signature: <b>Erik Klavre</b>	Received by (print): <b>Mike Hollenbeck</b>
		Requested by (print): <b>Mike Hollenbeck</b>	Date/Time: <b>5/14/08 1510</b>	Signature: <b>Mike Hollenbeck</b>	Received by (print): <b>Linda Carlson</b>
		Sample Disposal: Return to Client:	Lab Disposal:	Date/Time: <b>5/14/08 0715</b>	Signature: <b>Erik Klavre</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





## ANALYTICAL SUMMARY REPORT

August 14, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050229

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 2 samples from RESPEC Inc on 5/19/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050229-001	DewBurd GW681	05/18/08 11:18	05/19/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08050229-002	DewBurd GW679	05/18/08 18:00	05/19/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050229-001  
**Client Sample ID:** DewBurd GW681

**Report Date:** 08/14/08  
**Collection Date:** 05/18/08 11:18  
**Date Received:** 05/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	180	mg/L		5		1	A2320 B	05/19/08 14:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/19/08 14:53/mb
Bicarbonate as HCO3	219	mg/L		5		1	A2320 B	05/19/08 14:53/mb
Calcium	68.4	mg/L		0.5		2	E200.7	06/04/08 18:56/eli-c
Chloride	16	mg/L		1		1	E300.0	05/20/08 14:52/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/20/08 14:52/jmh
Magnesium	25.5	mg/L		0.5		2	E200.7	06/04/08 18:56/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/21/08 17:12/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/20/08 14:52/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/20/08 14:52/jmh
Potassium	9.6	mg/L		0.5		2	E200.7	06/04/08 18:56/eli-c
Silica	4.3	mg/L		0.5		2	E200.7	06/04/08 18:56/eli-c
Sodium	221	mg/L	D	2		2	E200.7	06/04/08 18:56/eli-c
Sulfate	465	mg/L	D	3		50	E300.0	05/20/08 14:02/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1500	umhos/cm		5.0		1	A2510 B	05/23/08 16:01/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	05/19/08 00:00/jmh
pH	8.15	s.u.		0.01		1	A4500-H B	05/23/08 14:31/kh
Sodium Adsorption Ratio (SAR)	5.8	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	05/20/08 10:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/04/08 18:56/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/04/08 15:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/04/08 18:56/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/04/08 18:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/04/08 15:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/04/08 18:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/04/08 15:59/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/04/08 18:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/04/08 15:59/eli-c
Manganese	0.10	mg/L		0.01		2	E200.7	06/04/08 18:56/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/04/08 15:59/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/04/08 18:56/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/04/08 18:56/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	06/03/08 15:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/04/08 15:59/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050229-001  
**Client Sample ID:** DewBurd GW681

**Report Date:** 08/14/08  
**Collection Date:** 05/18/08 11:18  
**Date Received:** 05/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 15:59/eli-c
Uranium	0.0096	mg/L		0.0003		1	E200.8	06/04/08 15:59/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/04/08 18:56/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/04/08 18:56/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 21:57/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:24/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1220	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha precision (±)	21.9	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta	304	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta precision (±)	5.5	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta MDC	3.7	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Lead 210	38.2	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	19.9	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	423	pCi/L				1	E903.0	06/08/08 17:06/eli-c
Radium 226 precision (±)	15.1	pCi/L				1	E903.0	06/08/08 17:06/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/05/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/05/08 15:00/eli-c
Gross Gamma	6600	pCi/L		20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	20.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.6	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	3.2	pCi/L		1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	1.6	pCi/L				1	E903.0	06/03/08 08:59/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050229-001  
Client Sample ID: DewBurd GW681

Report Date: 08/14/08  
Collection Date: 05/18/08 11:18  
Date Received: 05/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	06/03/08 08:59/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/03/08 08:59/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	462000	pCi/L		100		1	D5072-92	05/23/08 07:37/eli-c
Radon 222 precision (±)	1020	pCi/L				1	D5072-92	05/23/08 07:37/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 17:28/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/06/08 17:28/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/27/08 21:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 14:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/27/08 21:31/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	06/06/08 17:28/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/27/08 21:31/eli-c
Copper	ND	mg/L		0.01		2	E200.7	05/27/08 21:31/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	05/27/08 21:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 17:28/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	05/27/08 21:31/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 19:54/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	06/06/08 17:28/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/27/08 21:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 17:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 17:28/eli-c
Strontium	1.3	mg/L		0.1		2	E200.7	05/27/08 21:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 17:28/eli-c
Uranium	0.0108	mg/L		0.0003		1	E200.8	06/06/08 17:28/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	05/27/08 21:31/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.53	%				1	A1030 E	08/09/08 00:00/jmh
Anions	13.8	meq/L				1	A1030 E	08/09/08 00:00/jmh
Cations	15.4	meq/L				1	A1030 E	08/09/08 00:00/jmh
Solids, Total Dissolved Calculated	926	mg/L				1	A1030 E	08/09/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	08/09/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050229-002  
Client Sample ID: DewBurd GW679

Report Date: 08/14/08  
Collection Date: 05/18/08 18:00  
Date Received: 05/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	158	mg/L		5			1	A2320 B	05/19/08 14:58/mb
Carbonate as CO3	ND	mg/L		5			1	A2320 B	05/19/08 14:58/mb
Bicarbonate as HCO3	193	mg/L		5			1	A2320 B	05/19/08 14:58/mb
Calcium	515	mg/L		0.5			2	E200.7	06/04/08 19:00/eli-c
Chloride	11	mg/L		1			1	E300.0	05/20/08 15:24/jmh
Fluoride	0.4	mg/L		0.1			1	E300.0	05/20/08 15:24/jmh
Magnesium	109	mg/L		0.5			2	E200.7	06/04/08 19:00/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1			1	A4500-NH3 G	05/21/08 17:14/jmh
Nitrogen, Nitrate as N	1.1	mg/L		0.1			1	E300.0	05/20/08 15:24/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1			1	E300.0	05/20/08 15:24/jmh
Potassium	11.1	mg/L		0.5			2	E200.7	06/04/08 19:00/eli-c
Silica	6.0	mg/L		0.5			2	E200.7	06/04/08 19:00/eli-c
Sodium	82	mg/L	D	2			2	E200.7	06/04/08 19:00/eli-c
Sulfate	1440	mg/L	D	3			50	E300.0	05/20/08 15:08/jmh
PHYSICAL PROPERTIES									
Conductivity @ 25 C	2880	umhos/cm		5.0			1	A2510 B	05/23/08 16:03/tb
Oxidation-Reduction Potential	240	mV					1	A2580 B	05/19/08 00:00/jmh
pH	7.83	s.u.		0.01			1	A4500-H B	05/23/08 14:34/kh
Sodium Adsorption Ratio (SAR)	0.86	unitless		0.10			1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	2500	mg/L		5			1	A2540 C	05/20/08 10:08/mb
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1			2	E200.7	06/04/08 19:00/eli-c
Arsenic	ND	mg/L		0.001			1	E200.8	06/04/08 16:27/eli-c
Barium	ND	mg/L		0.1			2	E200.7	06/04/08 19:00/eli-c
Boron	0.4	mg/L		0.1			2	E200.7	06/04/08 19:00/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	06/04/08 16:27/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	06/04/08 19:00/eli-c
Copper	ND	mg/L		0.01			1	E200.8	06/04/08 16:27/eli-c
Iron	ND	mg/L		0.03			2	E200.7	06/04/08 19:00/eli-c
Lead	ND	mg/L		0.001			1	E200.8	06/04/08 16:27/eli-c
Manganese	0.04	mg/L		0.01			2	E200.7	06/04/08 19:00/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	06/04/08 16:27/eli-c
Molybdenum	ND	mg/L		0.1			2	E200.7	06/04/08 19:00/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	06/04/08 19:00/eli-c
Selenium	0.010	mg/L		0.005			1	A3114 B	06/03/08 15:19/eli-c
Silver	ND	mg/L		0.005			1	E200.8	06/04/08 16:27/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050229-002  
Client Sample ID: DewBurd GW679

Report Date: 08/14/08  
Collection Date: 05/18/08 18:00  
Date Received: 05/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 16:27/eli-c
Uranium	0.0112	mg/L		0.0003		1	E200.8	06/04/08 16:27/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/04/08 19:00/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/04/08 19:00/eli-c
METALS - SUSPENDED								
Uranium	0.0012	mg/L		0.0003		1	E200.8	06/07/08 22:02/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:26/eli-c
Selenium-VI	0.010	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	22.4	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha precision (±)	6.3	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha MDC	7.5	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta	10.8	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta precision (±)	5.3	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta MDC	8.6	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Lead 210	4.5	pCi/L	U			1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	10.7	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	3.7	pCi/L				1	E903.0	06/08/08 18:37/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/08/08 18:37/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/05/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/05/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-9.8	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	20.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	35.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	-0.3	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	06/03/08 08:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050229-002  
**Client Sample ID:** DewBurd GW679

**Report Date:** 08/14/08  
**Collection Date:** 05/18/08 18:00  
**Date Received:** 05/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	1.1	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Radium 226 MDC	1.8	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Thorium 230	1.4	pCi/L		0.2			1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.9	pCi/L					1	E907.0	05/29/08 15:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	1250	pCi/L		100			1	D5072-92	05/23/08 07:37/eli-c
Radon 222 precision (±)	91.2	pCi/L					1	D5072-92	05/23/08 07:37/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	06/06/08 17:35/eli-c
Arsenic	0.011	mg/L		0.001			1	E200.8	06/06/08 17:35/eli-c
Barium	0.3	mg/L		0.1			2	E200.7	05/27/08 21:35/eli-c
Beryllium	0.002	mg/L		0.001			1	E200.8	06/09/08 15:05/eli-c
Boron	0.4	mg/L		0.1			2	E200.7	05/27/08 21:35/eli-c
Cadmium	ND	mg/L		0.001			1	E200.8	06/06/08 17:35/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	05/27/08 21:35/eli-c
Copper	0.03	mg/L		0.01			2	E200.7	05/27/08 21:35/eli-c
Iron	26.4	mg/L		0.03			2	E200.7	05/27/08 21:35/eli-c
Lead	0.022	mg/L		0.001			1	E200.8	06/06/08 17:35/eli-c
Manganese	0.57	mg/L		0.01			2	E200.7	05/27/08 21:35/eli-c
Mercury	ND	mg/L		0.0001			1	E245.1	06/04/08 19:57/eli-b
Molybdenum	0.02	mg/L		0.01			1	E200.8	06/06/08 17:35/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	05/27/08 21:35/eli-c
Selenium	0.013	mg/L		0.001			1	E200.8	06/06/08 17:35/eli-c
Silver	ND	mg/L		0.005			1	E200.8	06/06/08 17:35/eli-c
Strontium	7.8	mg/L		0.1			2	E200.7	05/27/08 21:35/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	06/06/08 17:35/eli-c
Uranium	0.0164	mg/L		0.0003			1	E200.8	06/06/08 17:35/eli-c
Zinc	0.09	mg/L		0.01			2	E200.7	05/27/08 21:35/eli-c
DATA QUALITY									
A/C Balance (± 5)	6.81	%					1	A1030 E	08/09/08 00:00/jmh
Anions	33.6	meq/L					1	A1030 E	08/09/08 00:00/jmh
Cations	38.5	meq/L					1	A1030 E	08/09/08 00:00/jmh
Solids, Total Dissolved Calculated	2290	mg/L					1	A1030 E	08/09/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.09						1	A1030 E	08/09/08 00:00/jmh

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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**Definitions:** QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080519A-ALK-SEL-W							
Sample ID: LCS1_080519A	Laboratory Control Sample				Run: PH_COND1-R_080519A		05/19/08 09:09		
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080519A	Method Blank				Run: PH_COND1-R_080519A		05/19/08 09:13		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050229-002AMS	Sample Matrix Spike				Run: PH_COND1-R_080519A		05/19/08 15:04		
Alkalinity, Total as CaCO <sub>3</sub>	270	mg/L	5.0	106	80	120			
Sample ID: R08050229-002AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080519A		05/19/08 15:09		
Alkalinity, Total as CaCO <sub>3</sub>	268	mg/L	5.0	104	80	120	0.7	10	
Method: A2510 B		Batch: 080523_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:55		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:56		
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:57		
Conductivity @ 25 C	5000	umhos/cm	5.0	100	90	110			
Sample ID: R08050321-001ADUP	Sample Duplicate				Run: PH_COND2-R_080523B		05/23/08 16:24		
Conductivity @ 25 C	1460	umhos/cm	5.0				2.8	10	
Method: A2540 C		Batch: 080520A-SLDS-TDS-W							
Sample ID: LCS1_080520A	Laboratory Control Sample				Run: BAL-4-R_080520A		05/20/08 09:30		
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080520A	Method Blank				Run: BAL-4-R_080520A		05/20/08 09:32		
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: R08040168-001ADUP	Sample Duplicate				Run: BAL-4-R_080520A		05/20/08 09:33		
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0				1.8	20	
Sample ID: R08050229-001AMS	Sample Matrix Spike				Run: BAL-4-R_080520A		05/20/08 10:05		
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	97	80	120			
Sample ID: R08050229-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080520A		05/20/08 10:07		
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	101	80	120	0.7	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/14/08  
Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 080519-ORP-ISE-W		
Sample ID: R08050143-001F	Sample Duplicate				Run: PH_COND1-R_080519B		05/19/08 00:00		
Oxidation-Reduction Potential	240	mV					2.2	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080603A		
Sample ID: MBLK	Method Blank				Run: SUB-C102059		06/03/08 11:03		
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample				Run: SUB-C102059		06/03/08 11:05		
Selenium-IV	0.051	mg/L	0.0010	101	90	110			
Sample ID: C08050602-001EMS	Sample Matrix Spike				Run: SUB-C102059		06/03/08 11:14		
Selenium-IV	0.051	mg/L	0.0010	101	85	115			
Sample ID: C08050602-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102059		06/03/08 11:16		
Selenium-IV	0.051	mg/L	0.0010	103	85	115	1.1	10	
Sample ID: R08050321-005E	Sample Matrix Spike				Run: SUB-C102059		06/03/08 11:43		
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
Sample ID: R08050321-005E	Sample Matrix Spike Duplicate				Run: SUB-C102059		06/03/08 11:45		
Selenium-IV	0.047	mg/L	0.0010	94	85	115	1.7	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080603B		
Sample ID: MBLK	Method Blank				Run: SUB-C102093		06/03/08 15:00		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample				Run: SUB-C102093		06/03/08 15:02		
Selenium	0.051	mg/L	0.0010	101	90	110			
Sample ID: C08050602-001EMS	Sample Matrix Spike				Run: SUB-C102093		06/03/08 15:06		
Selenium	0.049	mg/L	0.0010	98	85	115			
Sample ID: C08050602-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102093		06/03/08 15:08		
Selenium	0.050	mg/L	0.0010	99	85	115	1.3	10	
Sample ID: R08050321-005E	Sample Matrix Spike				Run: SUB-C102093		06/03/08 15:36		
Selenium	0.045	mg/L	0.0010	91	85	115			
Sample ID: R08050321-005E	Sample Matrix Spike Duplicate				Run: SUB-C102093		06/03/08 15:38		
Selenium	0.045	mg/L	0.0010	90	85	115	0.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080523_1_PH-W		
Sample ID: LCS_pH-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523A		05/23/08 14:21		
pH	6.92	s.u.	0.010	101	98.55	101.45			
Sample ID: R08050229-001ADUP	Sample Duplicate				Run: PH_COND2-R_080523A		05/23/08 14:33		
pH	8.18	s.u.	0.010				0.4	1.25	
Method: A4500-NH3 G							Batch: A2008-05-21_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080521A		05/21/08 14:30		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080521A		05/21/08 14:31		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	109	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080521A		05/21/08 14:32		
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: R08050215-008CMS	Sample Matrix Spike				Run: TECHAA2-R_080521A		05/21/08 17:05		
Nitrogen, Ammonia as N	0.25	mg/L	0.10	99	80	120			
Sample ID: R08050215-008CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080521A		05/21/08 17:07		
Nitrogen, Ammonia as N	0.23	mg/L	0.10	93	80	120	5.8	10	
Sample ID: R08050215-001CMS	Sample Matrix Spike				Run: TECHAA2-R_080521A		05/21/08 17:21		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	80	120			
Sample ID: R08050215-001CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080521A		05/21/08 17:22		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	80	120	0.4	10	
Method: D5072-92							Batch: C_R101703		
Sample ID: C08050968-002IDUP	Sample Duplicate				Run: SUB-C101703		05/23/08 07:37		
Radon 222	141	pCi/L	100				12	30	
Sample ID: MB-R101703	Method Blank				Run: SUB-C101703		05/23/08 07:37		
Radon 222	20	pCi/L							U
Sample ID: LCS-R101703	Laboratory Control Sample				Run: SUB-C101703		05/23/08 07:37		
Radon 222	301	pCi/L	100	92	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18674		
Sample ID: MB-18674	Method Blank		Run: SUB-C101828				05/27/08 21:06		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.007	mg/L	0.001						
Sample ID: LCS3-18674	Laboratory Control Sample		Run: SUB-C101828				05/27/08 21:11		
Barium	0.53	mg/L	0.10	106	85	115			
Boron	0.51	mg/L	0.10	102	85	115			
Chromium	0.52	mg/L	0.050	104	85	115			
Copper	0.52	mg/L	0.010	104	85	115			
Iron	5.5	mg/L	0.030	111	85	115			
Manganese	2.6	mg/L	0.010	105	85	115			
Nickel	0.52	mg/L	0.050	104	85	115			
Strontium	0.54	mg/L	0.10	108	85	115			
Zinc	0.52	mg/L	0.010	103	85	115			
Sample ID: C08050971-007B MS3	Sample Matrix Spike		Run: SUB-C101828				05/27/08 23:08		
Barium	0.58	mg/L	0.10	105	70	130			
Boron	0.60	mg/L	0.10	106	70	130			
Chromium	0.54	mg/L	0.050	107	70	130			
Copper	0.53	mg/L	0.010	106	70	130			
Iron	5.6	mg/L	0.030	111	70	130			
Manganese	2.7	mg/L	0.010	106	70	130			
Nickel	0.54	mg/L	0.050	107	70	130			
Strontium	1.3	mg/L	0.10	101	70	130			
Zinc	0.53	mg/L	0.010	105	70	130			
Sample ID: C08050971-007B MSD3	Sample Matrix Spike Duplicate		Run: SUB-C101828				05/27/08 23:12		
Barium	0.58	mg/L	0.10	104	70	130	1.4	20	
Boron	0.59	mg/L	0.10	104	70	130	1.5	20	
Chromium	0.53	mg/L	0.050	106	70	130	1.3	20	
Copper	0.52	mg/L	0.010	104	70	130	1.9	20	
Iron	5.6	mg/L	0.030	111	70	130	0.2	20	
Manganese	2.6	mg/L	0.010	106	70	130	0.6	20	
Nickel	0.53	mg/L	0.050	106	70	130	1.1	20	
Strontium	1.3	mg/L	0.10	102	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_18674
Sample ID: C08050971-007B MSD3	Sample Matrix Spike Duplicate					Run: SUB-C101828			05/27/08 23:12
Zinc	0.52	mg/L	0.010	104	70	130	1.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102193		
Sample ID: MB-080604A	Method Blank		Run: SUB-C102193				06/04/08 15:38		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.03	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	0.02	mg/L	0.002						
Iron	0.1	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	0.002	mg/L	0.0003						
Molybdenum	0.003	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.02	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080604A	Laboratory Fortified Blank		Run: SUB-C102193				06/04/08 15:42		
Silica	0.38	mg/L	0.10	94	85	125			
Aluminum	0.93	mg/L	0.10	93	85	125			
Barium	1.0	mg/L	0.10	103	85	125			
Boron	1.1	mg/L	0.10	103	85	125			
Calcium	53	mg/L	0.50	106	85	125			
Chromium	1.0	mg/L	0.050	102	85	125			
Iron	1.1	mg/L	0.030	99	85	125			
Magnesium	53	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	104	85	125			
Molybdenum	1.0	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	103	85	125			
Potassium	49	mg/L	0.50	98	85	125			
Sodium	49	mg/L	0.77	98	85	125			
Vanadium	1.1	mg/L	0.10	109	85	125			
Zinc	1.0	mg/L	0.010	104	85	125			
Sample ID: C08050913-002CMS2	Sample Matrix Spike		Run: SUB-C102193				06/04/08 18:39		
Aluminum	2.09	mg/L	0.10	103	70	130			
Barium	2.04	mg/L	0.10	99	70	130			
Boron	2.14	mg/L	0.10	102	70	130			
Chromium	2.10	mg/L	0.050	103	70	130			
Iron	2.16	mg/L	0.030	105	70	130			
Manganese	2.23	mg/L	0.010	99	70	130			
Molybdenum	2.01	mg/L	0.10	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/14/08  
Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102193		
Sample ID: C08050913-002CMS2	Sample Matrix Spike			Run: SUB-C102193			06/04/08 18:39		
Nickel	2.08	mg/L	0.050	102	70	130			
Vanadium	2.08	mg/L	0.10	102	70	130			
Zinc	2.10	mg/L	0.010	103	70	130			
Calcium	177	mg/L	1.0	103	70	130			
Magnesium	135	mg/L	1.0	103	70	130			
Potassium	102	mg/L	1.0	89	70	130			
Silica	4.17	mg/L	0.10		70	130			A
Sodium	286	mg/L	1.5	97	70	130			
Sample ID: C08050913-002CMSD2	Sample Matrix Spike Duplicate			Run: SUB-C102193			06/04/08 18:43		
Aluminum	2.03	mg/L	0.10	99	70	130	3.1	20	
Barium	2.11	mg/L	0.10	103	70	130	3.6	20	
Boron	2.16	mg/L	0.10	104	70	130	1.3	20	
Chromium	2.13	mg/L	0.050	104	70	130	1.6	20	
Iron	2.21	mg/L	0.030	107	70	130	2.2	20	
Manganese	2.28	mg/L	0.010	102	70	130	2.4	20	
Molybdenum	2.08	mg/L	0.10	102	70	130	3.6	20	
Nickel	2.09	mg/L	0.050	103	70	130	0.4	20	
Vanadium	2.14	mg/L	0.10	105	70	130	2.8	20	
Zinc	2.13	mg/L	0.010	104	70	130	1.3	20	
Calcium	180	mg/L	1.0	105	70	130	1.1	20	
Magnesium	136	mg/L	1.0	105	70	130	1.2	20	
Potassium	102	mg/L	1.0	89	70	130	0.4	20	
Silica	4.21	mg/L	0.10		70	130	1.1	20	A
Sodium	282	mg/L	1.5	92	70	130	1.5	20	
Method: E200.8							Batch: C_18688		
Sample ID: C08050953-001FMS	Sample Matrix Spike			Run: SUB-C102315			06/07/08 18:31		
Uranium	0.0132	mg/L	0.00030	97	70	130			
Sample ID: C08050953-001FMSD	Sample Matrix Spike Duplicate			Run: SUB-C102315			06/07/08 18:36		
Uranium	0.0133	mg/L	0.00030	98	70	130	0.8	20	
Sample ID: R08050321-005I	Post Digestion Spike			Run: SUB-C102315			06/07/08 22:50		
Uranium	0.0128	mg/L	0.00030	97	70	130			
Sample ID: R08050321-005I	Post Digestion Spike Duplicate			Run: SUB-C102315			06/07/08 22:55		
Uranium	0.0129	mg/L	0.00030	98	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18768		
<b>Sample ID: MB-18768</b>	Method Blank			Run: SUB-C102298			06/06/08 16:00		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0007	mg/L	5E-05						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	7E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	0.0001	mg/L	5E-05						
Thallium	0.0001	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18768</b>	Laboratory Control Sample			Run: SUB-C102298			06/06/08 16:07		
Antimony	0.580	mg/L	0.050	116	85	115			
Arsenic	0.562	mg/L	0.0010	112	85	115			
Cadmium	0.275	mg/L	0.010	110	85	115			
Lead	0.568	mg/L	0.050	114	85	115			
Molybdenum	0.544	mg/L	0.10	109	85	115			
Selenium	0.569	mg/L	0.0020	114	85	115			
Silver	0.0480	mg/L	0.010	96	85	115			
Thallium	0.564	mg/L	0.10	113	85	115			
<b>Sample ID: C08051073-001MMS3</b>	Sample Matrix Spike			Run: SUB-C102298			06/06/08 18:56		
Antimony	0.540	mg/L	0.050	108	70	130			
Arsenic	0.536	mg/L	0.0010	107	70	130			
Cadmium	0.263	mg/L	0.010	105	70	130			
Lead	0.529	mg/L	0.050	105	70	130			
Molybdenum	0.531	mg/L	0.10	103	70	130			
Selenium	0.527	mg/L	0.0020	104	70	130			
Silver	0.0433	mg/L	0.010	87	70	130			
Thallium	0.519	mg/L	0.10	104	70	130			
Uranium	0.557	mg/L	0.00032	110	70	130			
<b>Sample ID: C08051073-001MMSD3</b>	Sample Matrix Spike Duplicate			Run: SUB-C102298			06/06/08 19:23		
Antimony	0.539	mg/L	0.050	108	70	130	0.2	20	
Arsenic	0.535	mg/L	0.0010	106	70	130	0.2	20	
Cadmium	0.264	mg/L	0.010	106	70	130	0.4	20	
Lead	0.529	mg/L	0.050	105	70	130	0.1	20	
Molybdenum	0.529	mg/L	0.10	103	70	130	0.4	20	
Selenium	0.534	mg/L	0.0020	105	70	130	1.3	20	
Silver	0.0451	mg/L	0.010	90	70	130	4.0	20	
Thallium	0.522	mg/L	0.10	104	70	130	0.5	20	
Uranium	0.572	mg/L	0.00032	113	70	130	2.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18768		
<b>Sample ID: LCS3-18768</b>		Laboratory Control Sample			Run: SUB-C102315		06/07/08 12:11		
Arsenic	0.519	mg/L	0.0010	104	85	115			
Lead	0.509	mg/L	0.050	102	85	115			
Molybdenum	0.504	mg/L	0.10	101	85	115			
Selenium	0.519	mg/L	0.0020	104	85	115			
Uranium	0.519	mg/L	0.00032	104	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R102203		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C102203				06/04/08 12:01		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C102203				06/04/08 12:07		
Arsenic	0.0502	mg/L	0.0010	100	85	115			
Cadmium	0.0502	mg/L	0.0010	100	85	115			
Copper	0.0509	mg/L	0.0010	102	85	115			
Lead	0.0503	mg/L	0.0010	101	85	115			
Mercury	0.00499	mg/L	0.0010	100	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Thorium 232	0.0495	mg/L	0.0010	99	85	115			
Uranium	0.0501	mg/L	0.00030	100	85	115			
<b>Sample ID: C08050903-007GMS4</b>	Post Digestion Spike		Run: SUB-C102203				06/04/08 15:26		
Arsenic	0.0518	mg/L	0.0010	101	70	130			
Cadmium	0.0475	mg/L	0.010	95	70	130			
Copper	0.0482	mg/L	0.010	95	70	130			
Lead	0.0498	mg/L	0.050	100	70	130			
Mercury	0.00459	mg/L	0.0010	92	70	130			
Silver	0.00192	mg/L	0.010	10	70	130			S
Thorium 232	0.0526	mg/L	0.0010	105	70	130			
Uranium	0.170	mg/L	0.00030	107	70	130			
<b>Sample ID: C08050903-007GMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C102203				06/04/08 15:32		
Arsenic	0.0525	mg/L	0.0010	102	70	130	1.3	20	
Cadmium	0.0480	mg/L	0.010	96	70	130	1.0	20	
Copper	0.0485	mg/L	0.010	95	70	130	0.7	20	
Lead	0.0507	mg/L	0.050	101	70	130	1.7	20	
Mercury	0.00480	mg/L	0.0010	96	70	130	4.6	20	
Silver	0.000603	mg/L	0.010	3	70	130	0.0	20	S
Thorium 232	0.0539	mg/L	0.0010	107	70	130	2.5	20	
Uranium	0.172	mg/L	0.00030	110	70	130	1.1	20	
<b>Sample ID: C08050968-002BMS4</b>	Post Digestion Spike		Run: SUB-C102203				06/04/08 17:02		
Arsenic	0.0517	mg/L	0.0010	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/14/08  
Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R102203		
Sample ID: C08050968-002BMS4	Post Digestion Spike			Run: SUB-C102203			06/04/08 17:02		
Cadmium	0.0475	mg/L	0.010	95	70	130			
Copper	0.0492	mg/L	0.010	95	70	130			
Lead	0.0519	mg/L	0.050	103	70	130			
Mercury	0.00525	mg/L	0.0010	105	70	130			
Silver	0.0172	mg/L	0.010	86	70	130			
Thorium 232	0.0533	mg/L	0.0010	107	70	130			
Uranium	0.0536	mg/L	0.00030	107	70	130			
Sample ID: C08050968-002BMDS4	Post Digestion Spike Duplicate			Run: SUB-C102203			06/04/08 17:09		
Arsenic	0.0512	mg/L	0.0010	99	70	130	1.0	20	
Cadmium	0.0468	mg/L	0.010	94	70	130	1.5	20	
Copper	0.0480	mg/L	0.010	92	70	130	2.6	20	
Lead	0.0507	mg/L	0.050	101	70	130	2.2	20	
Mercury	0.00513	mg/L	0.0010	103	70	130	2.3	20	
Silver	0.0154	mg/L	0.010	77	70	130	11	20	
Thorium 232	0.0527	mg/L	0.0010	105	70	130	1.1	20	
Uranium	0.0525	mg/L	0.00030	104	70	130	2.2	20	
Method: E245.1							Batch: C_B_32786		
Sample ID: MB-32786	Method Blank			Run: SUB-C102258			06/04/08 17:57		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32786	Laboratory Fortified Blank			Run: SUB-C102258			06/04/08 18:05		
Mercury	0.0019	mg/L	0.0010	91	85	115			
Sample ID: B08052561-001DMS	Sample Matrix Spike			Run: SUB-C102258			06/04/08 18:14		
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08052561-001DMSD	Sample Matrix Spike Duplicate			Run: SUB-C102258			06/04/08 18:16		
Mercury	0.0021	mg/L	0.0010	100	70	130	7.0	30	
Sample ID: B08052499-002CMS	Sample Matrix Spike			Run: SUB-C102258			06/04/08 19:08		
Mercury	0.0017	mg/L	0.0010	87	70	130			
Sample ID: B08052499-002CMSD	Sample Matrix Spike Duplicate			Run: SUB-C102258			06/04/08 19:11		
Mercury	0.0016	mg/L	0.0010	79	70	130	9.1	30	
Method: E245.1							Analytical Run: SUB-C102258		
Sample ID: QCS	Initial Calibration Verification Standard						06/04/08 17:50		
Mercury	0.0021	mg/L	0.0010	103	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R34857		
Sample ID: LFB0805201727-3	Laboratory Fortified Blank			Run: DIONEX_080520A			05/20/08 13:29		
Chloride	4.71	mg/L	0.50	94	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
Sample ID: LFB0805201727-4	Laboratory Fortified Blank			Run: DIONEX_080520A			05/20/08 13:46		
Chloride	4.66	mg/L	0.50	93	90	110			
Fluoride	1.80	mg/L	0.10	90	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
Sample ID: R08050229-001AMS	Sample Matrix Spike			Run: DIONEX_080520A			05/20/08 14:19		
Chloride	257	mg/L	5.4	90	80	120			
Fluoride	94.2	mg/L	0.56	87	80	120			
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1110	mg/L	3.4	86	80	120			
Sample ID: R08050229-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080520A			05/20/08 14:35		
Chloride	249	mg/L	5.4	87	80	120	3.1	10	
Fluoride	91.2	mg/L	0.56	84	80	120	3.3	10	
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120	2.8	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	3.3	10	
Sulfate	1090	mg/L	3.4	83	80	120	2.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0457		
Sample ID: MB-GrAB-0457	Method Blank				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	0.05	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: Th230-GrAB-0457	Laboratory Control Sample				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	140	pCi/L	100		70	130			
Sample ID: Cs137-GrAB-0457	Laboratory Control Sample				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	87	pCi/L	94		70	130			
Sample ID: C08050953-001EMS	Sample Matrix Spike				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	160	pCi/L	77		70	130			
Sample ID: C08050953-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	150	pCi/L	75		70	130	1.7	17.5	
Sample ID: C08050953-001EMS	Sample Matrix Spike				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	100	pCi/L	93		70	130			
Sample ID: C08050953-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	99	pCi/L	91		70	130	2.5	15.6	
Method: E901.1							Batch: C_R101877		
Sample ID: LCS-R101877	Laboratory Control Sample				Run: SUB-C101877			05/28/08 05:30	
Cesium 137	1140	pCi/L	20	82	70	130			
Sample ID: MB-R101877	Method Blank				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L							U
Sample ID: R08050229-001H	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	6600	pCi/L	20				0.1	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>									Batch: C_18688
<b>Sample ID: C08050913-001IMS</b>	Sample Matrix Spike				Run: SUB-C102137				06/03/08 08:59
Radium 226	77	pCi/L		98	70	130			
<b>Sample ID: C08050913-001IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102137				06/03/08 08:59
Radium 226	72	pCi/L		91	70	130	7.4	25.5	
<b>Sample ID: MB-18688</b>	Method Blank				Run: SUB-C102137				06/03/08 10:37
Radium 226	-0.4	pCi/L							U
<b>Sample ID: LCS-18688</b>	Laboratory Control Sample				Run: SUB-C102137				06/03/08 10:37
Radium 226	15	pCi/L		99	70	130			
<b>Method: E903.0</b>									Batch: C_RA226-2834
<b>Sample ID: C08050917-001AMS</b>	Sample Matrix Spike				Run: SUB-C102415				06/08/08 16:51
Radium 226	430	pCi/L		-30	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.									
<b>Sample ID: C08050917-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102415				06/08/08 16:58
Radium 226	430	pCi/L		53	70	130	1.5	17.2	S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.									
<b>Sample ID: MB-RA226-2834</b>	Method Blank				Run: SUB-C102415				06/09/08 13:54
Radium 226	0.06	pCi/L							U
<b>Sample ID: LCS-RA226-2834</b>	Laboratory Control Sample				Run: SUB-C102415				06/09/08 15:24
Radium 226	7.4	pCi/L		93	70	130			
<b>Method: E907.0</b>									Batch: C_18688
<b>Sample ID: R08050321-001I</b>	Sample Matrix Spike				Run: SUB-C102353				05/29/08 15:00
Thorium 230	20.6	pCi/L	0.20	88	70	130			
<b>Sample ID: R08050321-001I</b>	Sample Matrix Spike Duplicate				Run: SUB-C102353				05/29/08 15:00
Thorium 230	22.8	pCi/L	0.20	102	70	130	10	30	
<b>Sample ID: LCS-18688</b>	Laboratory Control Sample				Run: SUB-C102353				05/29/08 15:00
Thorium 230	51.0	pCi/L	0.20	107	70	130			
<b>Sample ID: MB-18688</b>	Method Blank				Run: SUB-C102353				05/29/08 15:00
Thorium 230	-0.2	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R102565		
Sample ID: LCS-R102565	Laboratory Control Sample				Run: SUB-C102565		06/05/08 15:00		
Thorium 230	6.70	pCi/L	0.20	96	70	130			
Sample ID: R08050229-002H	Sample Matrix Spike				Run: SUB-C102565		06/05/08 15:00		
Thorium 230	16.6	pCi/L	0.20	103	70	130			
Sample ID: R08050229-002H	Sample Matrix Spike Duplicate				Run: SUB-C102565		06/05/08 15:00		
Thorium 230	14.3	pCi/L	0.20	89	70	130	15	30	
Sample ID: MB-R102565	Method Blank				Run: SUB-C102565		06/05/08 15:00		
Thorium 230	ND	pCi/L							U
Method: E909.0M							Batch: C_R104902		
Sample ID: C08050913-003IMS	Sample Matrix Spike				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1200	pCi/L		105	70	130			
Sample ID: C08050913-003IMSD	Sample Matrix Spike Duplicate				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1000	pCi/L		89	70	130	17	30	
Sample ID: MB-R104902	Method Blank				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1	pCi/L							U
Sample ID: LCS-R104902	Laboratory Control Sample				Run: SUB-C104902		07/03/08 09:50		
Lead 210	61	pCi/L		101	70	130			
Method: E909.0M							Batch: C_R105446		
Sample ID: C08050919-002HMS	Sample Matrix Spike				Run: SUB-C105446		06/25/08 11:25		
Lead 210	550	pCi/L		92	70	130			
Sample ID: C08050919-002HMSD	Sample Matrix Spike Duplicate				Run: SUB-C105446		06/25/08 11:25		
Lead 210	420	pCi/L		71	70	130	26	30	
Sample ID: R08050321-002H	Sample Duplicate				Run: SUB-C105446		06/25/08 11:25		
Lead 210	80	pCi/L					25	30	
Sample ID: MB-R105446	Method Blank				Run: SUB-C105446		06/25/08 11:25		
Lead 210	ND	pCi/L							U
Sample ID: LCS-R105446	Laboratory Control Sample				Run: SUB-C105446		06/25/08 11:25		
Lead 210	140	pCi/L		115	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/14/08

Work Order: R08050229

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R102444		
Sample ID: C08050737-001HMS	Sample Matrix Spike				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	51	pCi/L	1.0	112	70	130			
Sample ID: C08050737-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	48	pCi/L	1.0	107	70	130	5.0	30	
Sample ID: LCS-R102444	Laboratory Control Sample				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	58	pCi/L	1.0	133	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R102444	Method Blank				Run: SUB-C102444		06/03/08 17:45		
Polonium 210	-0.1	pCi/L							U
Method: RMO-3008							Batch: C_R103071		
Sample ID: R08050321-005I	Sample Matrix Spike				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	42	pCi/L	1.0	99	70	130			
Sample ID: R08050321-005I	Sample Matrix Spike Duplicate				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	52	pCi/L	1.0	124	70	130	21	30	
Sample ID: LCS-R103071	Laboratory Control Sample				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	110	pCi/L	1.0	121	70	130			
Sample ID: MB-R103071	Method Blank				Run: SUB-C103071		06/19/08 12:00		
Polonium 210	0.5	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESpec</b>		Project Name, PWS, Permit, Etc.		Sample Origin	EPA/State Compliance:		
Report Mail Address: <b>RESpec</b>		Contact Name: <b>Rene Tech Dewey Burdock</b>		State: <b>SD</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Invoice Address:		Contact Name: <b>Phone/Fax:</b>		Email:	Sampler: (Please Print) <b>Eric Lehtz</b>		
Special Report/Formats - ELI must be notified prior to sample submittal for the following:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:		
<input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/>		Number of Containers Sample Type: AWSVB O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by: <input type="checkbox"/> Cooler Dry: <input type="checkbox"/>			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED		
1. <b>DewBurd GW 681</b>		<b>5/18/08</b>	<b>11:18</b>	<b>W</b>	<b>SEE ATTACHED</b> Normal Turnaround (TAT) <b>RUSH</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: <b>Set 3 Dewey Burdock</b> <b>Set 10 Alameda</b>		
2. <b>DewBurd GW 679</b>		<b>5/18/08</b>	<b>15:00</b>	<b>W</b>			
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
Custody Record MUST be Signed		Requested by (print): <b>Eric Lehtz</b>	Date/Time: <b>5/19/08 0600</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Mark N. Nite</b>	Date/Time: <b>5/19/08 0600</b>	Signature: <b>[Signature]</b>
Sample Disposal: <b>Return to Client:</b>		Lab Disposal:		Received by (print): <b>Steve H. Land</b>		Date/Time: <b>5-19-08 1230</b>	Signature: <b>[Signature]</b>

LABORATORY USE ONLY

80805027-001  
2002



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Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





## ANALYTICAL SUMMARY REPORT

July 30, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050251

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 3 samples from RESPEC Inc on 5/20/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050251-001	DewBurd GW631	05/19/08 11:06	05/20/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08050251-002	DewBurd GW13	05/19/08 12:20	05/20/08	Aqueous	Same As Above
R08050251-003	DewBurd GW4002	05/19/08 13:00	05/20/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-001  
Client Sample ID: DewBurd GW631

Report Date: 07/30/08  
Collection Date: 05/19/08 11:06  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	164	mg/L		5		1	A2320 B	05/22/08 09:44/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/22/08 09:44/mb
Bicarbonate as HCO3	200	mg/L		5		1	A2320 B	05/22/08 09:44/mb
Calcium	375	mg/L		0.5		2	E200.7	06/04/08 18:19/eli-c
Chloride	10	mg/L		1		1	E300.0	05/20/08 16:30/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/20/08 16:30/jmh
Magnesium	110	mg/L		0.5		2	E200.7	06/04/08 18:19/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/21/08 17:42/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/20/08 16:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/20/08 16:30/jmh
Potassium	16.3	mg/L		0.5		2	E200.7	06/04/08 18:19/eli-c
Silica	3.5	mg/L		0.5		2	E200.7	06/04/08 18:19/eli-c
Sodium	107	mg/L	D	2		2	E200.7	06/04/08 18:19/eli-c
Sulfate	1250	mg/L	D	3		50	E300.0	05/20/08 16:14/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2530	umhos/cm		5.0		1	A2510 B	05/23/08 16:05/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	05/23/08 00:00/kh
pH	7.54	s.u.		0.01		1	A4500-H B	05/23/08 14:45/kh
Sodium Adsorption Ratio (SAR)	1.2	unitless		0.10		1	Calculation	07/29/08 15:22/ADM
Solids, Total Dissolved TDS @ 180 C	2000	mg/L		5		1	A2540 C	05/20/08 12:36/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/04/08 18:19/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/04/08 15:39/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/04/08 18:19/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/04/08 18:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/04/08 15:39/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/04/08 18:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/04/08 15:39/eli-c
Iron	0.39	mg/L		0.03		2	E200.7	06/04/08 18:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/04/08 15:39/eli-c
Manganese	0.33	mg/L		0.01		2	E200.7	06/04/08 18:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/04/08 15:39/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/04/08 18:19/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/04/08 18:19/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	06/03/08 15:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/04/08 15:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-001  
Client Sample ID: DewBurd GW631

Report Date: 07/30/08  
Collection Date: 05/19/08 11:06  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 15:39/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	06/04/08 15:39/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/04/08 18:19/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/04/08 18:19/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 21:41/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:18/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	60.7	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha precision (±)	7.9	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha MDC	6.5	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta	26.2	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta precision (±)	4.4	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta MDC	6.6	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Lead 210	0.5	pCi/L	U			1	E909.0M	06/27/08 08:45/eli-c
Lead 210 MDC	16.0	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Lead 210 precision (±)	9.6	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	22.1	pCi/L				1	E903.0	06/08/08 09:46/eli-c
Radium 226 precision (±)	1.0	pCi/L				1	E903.0	06/08/08 09:46/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	130	pCi/L		20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	27	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1.4	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	06/03/08 08:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050251-001  
**Client Sample ID:** DewBurd GW631

**Report Date:** 07/30/08  
**Collection Date:** 05/19/08 11:06  
**Date Received:** 05/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/03/08 08:59/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/03/08 08:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/29/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	4430	pCi/L		100		1	D5072-92	05/23/08 07:37/eli-c
Radon 222 precision (±)	112	pCi/L				1	D5072-92	05/23/08 07:37/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 17:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 17:08/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/27/08 21:15/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 14:38/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	05/27/08 21:15/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	06/06/08 17:08/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/27/08 21:15/eli-c
Copper	ND	mg/L		0.01		2	E200.7	05/27/08 21:15/eli-c
Iron	0.98	mg/L		0.03		2	E200.7	05/27/08 21:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 17:08/eli-c
Manganese	0.32	mg/L		0.01		2	E200.7	05/27/08 21:15/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 19:47/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	06/06/08 17:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/27/08 21:15/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 17:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 17:08/eli-c
Strontium	6.8	mg/L		0.1		2	E200.7	05/27/08 21:15/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 17:08/eli-c
Uranium	0.0028	mg/L		0.0003		1	E200.8	06/06/08 17:08/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	05/27/08 21:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.08	%				1	A1030 E	07/29/08 00:00/jmh
Anions	29.7	meq/L				1	A1030 E	07/29/08 00:00/jmh
Cations	32.8	meq/L				1	A1030 E	07/29/08 00:00/jmh
Solids, Total Dissolved Calculated	1980	mg/L				1	A1030 E	07/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	07/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-002  
Client Sample ID: DewBurd GW13

Report Date: 07/30/08  
Collection Date: 05/19/08 12:20  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	156	mg/L		5		1	A2320 B	05/22/08 09:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/22/08 09:59/mb
Bicarbonate as HCO3	190	mg/L		5		1	A2320 B	05/22/08 09:59/mb
Calcium	72.4	mg/L		0.5		2	E200.7	06/04/08 18:35/eli-c
Chloride	10	mg/L		1		1	E300.0	05/20/08 18:09/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/20/08 18:09/jmh
Magnesium	29.5	mg/L		0.5		2	E200.7	06/04/08 18:35/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/21/08 17:43/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/20/08 18:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/20/08 18:09/jmh
Potassium	11.5	mg/L		0.5		2	E200.7	06/04/08 18:35/eli-c
Silica	3.6	mg/L		0.5		2	E200.7	06/04/08 18:35/eli-c
Sodium	188	mg/L	D	2		2	E200.7	06/04/08 18:35/eli-c
Sulfate	442	mg/L	D	3		50	E300.0	05/20/08 17:19/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1420	umhos/cm		5.0		1	A2510 B	05/23/08 16:08/tb
Oxidation-Reduction Potential	260	mV				1	A2580 B	05/23/08 00:00/kh
pH	7.96	s.u.		0.01		1	A4500-H B	05/23/08 14:46/kh
Sodium Adsorption Ratio (SAR)	4.7	unitless		0.10		1	Calculation	07/29/08 15:22/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	05/20/08 12:36/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/04/08 18:35/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/04/08 15:46/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/04/08 18:35/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/04/08 18:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/04/08 15:46/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/04/08 18:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/04/08 15:46/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/04/08 18:35/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/04/08 15:46/eli-c
Manganese	0.20	mg/L		0.01		2	E200.7	06/04/08 18:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/04/08 15:46/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/04/08 18:35/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/04/08 18:35/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	06/03/08 15:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/04/08 15:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-002  
Client Sample ID: DewBurd GW13

Report Date: 07/30/08  
Collection Date: 05/19/08 12:20  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 15:46/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/04/08 15:46/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/04/08 18:35/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	06/04/08 18:35/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 21:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:20/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.2	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha precision (±)	2.2	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta	10.3	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta MDC	3.3	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Lead 210	4.1	pCi/L	U			1	E909.0M	06/27/08 08:45/eli-c
Lead 210 MDC	16.0	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Lead 210 precision (±)	9.6	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Polonium 210	-0.6	pCi/L	U	1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	1.6	pCi/L				1	E903.0	06/08/08 15:48/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/08/08 15:48/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.2	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	0.01	pCi/L	U			1	E903.0	06/03/08 08:59/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-002  
Client Sample ID: DewBurd GW13

Report Date: 07/30/08  
Collection Date: 05/19/08 12:20  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Radium 226 MDC	0.4	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	05/29/08 15:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	412	pCi/L		100			1	D5072-92	05/23/08 07:37/eli-c
Radon 222 precision (±)	70.5	pCi/L					1	D5072-92	05/23/08 07:37/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	06/06/08 17:15/eli-c
Arsenic	0.001	mg/L		0.001			1	E200.8	06/06/08 17:15/eli-c
Barium	ND	mg/L		0.1			2	E200.7	05/27/08 21:23/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	06/09/08 14:45/eli-c
Boron	ND	mg/L		0.1			2	E200.7	05/27/08 21:23/eli-c
Cadmium	ND	mg/L		0.001			1	E200.8	06/06/08 17:15/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	05/27/08 21:23/eli-c
Copper	ND	mg/L		0.01			2	E200.7	05/27/08 21:23/eli-c
Iron	4.56	mg/L		0.03			2	E200.7	05/27/08 21:23/eli-c
Lead	ND	mg/L		0.001			1	E200.8	06/06/08 17:15/eli-c
Manganese	0.20	mg/L		0.01			2	E200.7	05/27/08 21:23/eli-c
Mercury	ND	mg/L		0.0001			1	E245.1	06/04/08 19:50/eli-b
Molybdenum	ND	mg/L		0.01			1	E200.8	06/06/08 17:15/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	05/27/08 21:23/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	06/06/08 17:15/eli-c
Silver	ND	mg/L		0.005			1	E200.8	06/06/08 17:15/eli-c
Strontium	1.7	mg/L		0.1			2	E200.7	05/27/08 21:23/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	06/06/08 17:15/eli-c
Uranium	ND	mg/L		0.0003			1	E200.8	06/06/08 17:15/eli-c
Zinc	0.04	mg/L		0.01			2	E200.7	05/27/08 21:23/eli-c
DATA QUALITY									
A/C Balance (± 5)	6.97	%					1	A1030 E	07/29/08 00:00/jmh
Anions	12.6	meq/L					1	A1030 E	07/29/08 00:00/jmh
Cations	14.5	meq/L					1	A1030 E	07/29/08 00:00/jmh
Solids, Total Dissolved Calculated	857	mg/L					1	A1030 E	07/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02						1	A1030 E	07/29/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-003  
Client Sample ID: DewBurd GW4002

Report Date: 07/30/08  
Collection Date: 05/19/08 13:00  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	144	mg/L		5		1	A2320 B	05/22/08 10:02/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/22/08 10:02/mb
Bicarbonate as HCO3	176	mg/L		5		1	A2320 B	05/22/08 10:02/mb
Calcium	46.6	mg/L		0.5		2	E200.7	06/04/08 18:48/eli-c
Chloride	6	mg/L		1		1	E300.0	05/20/08 18:41/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/20/08 18:41/jmh
Magnesium	15.8	mg/L		0.5		2	E200.7	06/04/08 18:48/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/21/08 17:44/jmh
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	05/20/08 18:41/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/20/08 18:41/jmh
Potassium	7.1	mg/L		0.5		2	E200.7	06/04/08 18:48/eli-c
Silica	3.8	mg/L		0.5		2	E200.7	06/04/08 18:48/eli-c
Sodium	211	mg/L	D	2		2	E200.7	06/04/08 18:48/eli-c
Sulfate	450	mg/L	D	3		50	E300.0	05/20/08 18:25/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1340	umhos/cm		5.0		1	A2510 B	05/23/08 16:10/tb
Oxidation-Reduction Potential	250	mV				1	A2580 B	05/23/08 00:00/kh
pH	8.02	s.u.		0.01		1	A4500-H B	05/23/08 14:48/kh
Sodium Adsorption Ratio (SAR)	6.8	unitless		0.10		1	Calculation	07/29/08 15:22/ADM
Solids, Total Dissolved TDS @ 180 C	790	mg/L		5		1	A2540 C	05/20/08 12:36/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/04/08 18:48/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/04/08 15:53/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/04/08 18:48/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/04/08 18:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/04/08 15:53/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/04/08 18:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/04/08 15:53/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/04/08 18:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/04/08 15:53/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	06/04/08 18:48/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/04/08 15:53/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/04/08 18:48/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/04/08 18:48/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	06/03/08 15:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/04/08 15:53/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-003  
Client Sample ID: DewBurd GW4002

Report Date: 07/30/08  
Collection Date: 05/19/08 13:00  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/04/08 15:53/eli-c
Uranium	0.0023	mg/L		0.0003		1	E200.8	06/04/08 15:53/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/04/08 18:48/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/04/08 18:48/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 21:51/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:22/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	127	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha precision (±)	6.5	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Alpha MDC	2.6	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta	30.1	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	06/11/08 08:06/eli-c
Lead 210	-2.6	pCi/L	U			1	E909.0M	06/27/08 08:45/eli-c
Lead 210 MDC	16.0	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Lead 210 precision (±)	9.5	pCi/L				1	E909.0M	06/27/08 08:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/03/08 17:45/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	06/03/08 17:45/eli-c
Radium 226	52.3	pCi/L				1	E903.0	06/08/08 16:38/eli-c
Radium 226 precision (±)	1.9	pCi/L				1	E903.0	06/08/08 16:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	210	pCi/L		20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	30	pCi/L				1	E901.1	05/28/08 05:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.4	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	8.4	pCi/L				1	E903.0	06/03/08 08:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050251-003  
Client Sample ID: DewBurd GW4002

Report Date: 07/30/08  
Collection Date: 05/19/08 13:00  
Date Received: 05/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	0.9	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Radium 226 MDC	0.4	pCi/L					1	E903.0	06/03/08 08:59/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	05/29/08 15:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	8780	pCi/L		100			1	D5072-92	05/23/08 07:37/eli-c
Radon 222 precision (±)	143	pCi/L					1	D5072-92	05/23/08 07:37/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	06/06/08 17:21/eli-c
Arsenic	0.002	mg/L		0.001			1	E200.8	06/06/08 17:21/eli-c
Barium	ND	mg/L		0.1			2	E200.7	05/27/08 21:27/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	06/09/08 14:52/eli-c
Boron	ND	mg/L		0.1			2	E200.7	05/27/08 21:27/eli-c
Cadmium	ND	mg/L		0.001			1	E200.8	06/06/08 17:21/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	05/27/08 21:27/eli-c
Copper	ND	mg/L		0.01			2	E200.7	05/27/08 21:27/eli-c
Iron	2.29	mg/L		0.03			2	E200.7	05/27/08 21:27/eli-c
Lead	ND	mg/L		0.001			1	E200.8	06/06/08 17:21/eli-c
Manganese	0.08	mg/L		0.01			2	E200.7	05/27/08 21:27/eli-c
Mercury	ND	mg/L		0.0001			1	E245.1	06/04/08 19:52/eli-b
Molybdenum	ND	mg/L		0.01			1	E200.8	06/06/08 17:21/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	05/27/08 21:27/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	06/06/08 17:21/eli-c
Silver	ND	mg/L		0.005			1	E200.8	06/06/08 17:21/eli-c
Strontium	0.9	mg/L		0.1			2	E200.7	05/27/08 21:27/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	06/06/08 17:21/eli-c
Uranium	0.0025	mg/L		0.0003			1	E200.8	06/06/08 17:21/eli-c
Zinc	ND	mg/L		0.01			2	E200.7	05/27/08 21:27/eli-c
DATA QUALITY									
A/C Balance (± 5)	2.11	%					1	A1030 E	07/29/08 00:00/jmh
Anions	12.4	meq/L					1	A1030 E	07/29/08 00:00/jmh
Cations	13.0	meq/L					1	A1030 E	07/29/08 00:00/jmh
Solids, Total Dissolved Calculated	834	mg/L					1	A1030 E	07/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.940						1	A1030 E	07/29/08 00:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 07/30/08

Project: Edgemont

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080522A-ALK-SEL-W							
Sample ID: LCS1_080522A	Laboratory Control Sample				Run: PH_COND1-R_080522A		05/22/08 09:22		
Alkalinity, Total as CaCO <sub>3</sub>	944	mg/L	5.0	94	90	110			
Sample ID: MBLK1_080522A	Method Blank				Run: PH_COND1-R_080522A		05/22/08 09:26		
Alkalinity, Total as CaCO <sub>3</sub>	4	mg/L	3						
Sample ID: R08050266-003AMS	Sample Matrix Spike				Run: PH_COND1-R_080522A		05/22/08 10:29		
Alkalinity, Total as CaCO <sub>3</sub>	292	mg/L	5.0	115	80	120			
Sample ID: R08050266-003AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080522A		05/22/08 10:23		
Alkalinity, Total as CaCO <sub>3</sub>	290	mg/L	5.0	113	80	120	0.7	10	
Method: A2510 B		Batch: 080523_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:55		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:56		
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_080523	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:57		
Conductivity @ 25 C	5000	umhos/cm	5.0	100	90	110			
Sample ID: R08050321-001ADUP	Sample Duplicate				Run: PH_COND2-R_080523B		05/23/08 16:24		
Conductivity @ 25 C	1460	umhos/cm	5.0				2.8	10	
Method: A2540 C		Batch: 080520A-SLDS-TDS-W							
Sample ID: LCS1_080520A	Laboratory Control Sample				Run: BAL-4-R_080520A		05/20/08 09:30		
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080520A	Method Blank				Run: BAL-4-R_080520A		05/20/08 09:32		
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: R08040168-001ADUP	Sample Duplicate				Run: BAL-4-R_080520A		05/20/08 09:33		
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0				1.8	20	
Sample ID: R08050229-001AMS	Sample Matrix Spike				Run: BAL-4-R_080520A		05/20/08 10:05		
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	97	80	120			
Sample ID: R08050229-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080520A		05/20/08 10:07		
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	101	80	120	0.7	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080603A		
Sample ID: MBLK	Method Blank					Run: SUB-C102059			06/03/08 11:03
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample					Run: SUB-C102059			06/03/08 11:05
Selenium-IV	0.051	mg/L	0.0010	101	90	110			
Sample ID: C08050602-001EMS	Sample Matrix Spike					Run: SUB-C102059			06/03/08 11:14
Selenium-IV	0.051	mg/L	0.0010	101	85	115			
Sample ID: C08050602-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C102059			06/03/08 11:16
Selenium-IV	0.051	mg/L	0.0010	103	85	115	1.1	10	
Method: A3114 B							Batch: C_SE3114-080603B		
Sample ID: MBLK	Method Blank					Run: SUB-C102093			06/03/08 15:00
Selenium	ND	mg/L	6E-05						
Sample ID: 288-81-1	Laboratory Control Sample					Run: SUB-C102093			06/03/08 15:02
Selenium	0.051	mg/L	0.0010	101	90	110			
Sample ID: C08050602-001EMS	Sample Matrix Spike					Run: SUB-C102093			06/03/08 15:06
Selenium	0.049	mg/L	0.0010	98	85	115			
Sample ID: C08050602-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C102093			06/03/08 15:08
Selenium	0.050	mg/L	0.0010	99	85	115	1.3	10	
Method: A4500-H B							Batch: 080523_1_PH-W		
Sample ID: LCS_pH-1_080523	Laboratory Control Sample					Run: PH_COND2-R_080523A			05/23/08 14:21
pH	6.92	s.u.	0.010	101	98.55	101.45			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2008-05-21_2_NH3_01							
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080521A			05/21/08 14:30
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080521A			05/21/08 14:31
Nitrogen, Ammonia as N	0.27	mg/L	0.10	109	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080521A			05/21/08 14:32
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: R08050241-001CMS	Sample Matrix Spike					Run: TECHAA2-R_080521A			05/21/08 17:37
Nitrogen, Ammonia as N	0.24	mg/L	0.10	95	80	120			
Sample ID: R08050266-001CMS	Sample Matrix Spike					Run: TECHAA2-R_080521A			05/21/08 17:49
Nitrogen, Ammonia as N	0.24	mg/L	0.10	96	80	120			
Sample ID: R08050266-001CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080521A			05/21/08 17:50
Nitrogen, Ammonia as N	0.25	mg/L	0.10	101	80	120	4.9	10	
Method: D5072-92		Batch: C_R101703							
Sample ID: C08050968-002IDUP	Sample Duplicate					Run: SUB-C101703			05/23/08 07:37
Radon 222	141	pCi/L	100				12	30	
Sample ID: MB-R101703	Method Blank					Run: SUB-C101703			05/23/08 07:37
Radon 222	20	pCi/L							U
Sample ID: LCS-R101703	Laboratory Control Sample					Run: SUB-C101703			05/23/08 07:37
Radon 222	301	pCi/L	100	92	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18674		
<b>Sample ID: MB-18674</b>	Method Blank		Run: SUB-C101828				05/27/08 21:06		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.007	mg/L	0.001						
<b>Sample ID: LCS3-18674</b>	Laboratory Control Sample		Run: SUB-C101828				05/27/08 21:11		
Barium	0.53	mg/L	0.10	106	85	115			
Boron	0.51	mg/L	0.10	102	85	115			
Chromium	0.52	mg/L	0.050	104	85	115			
Copper	0.52	mg/L	0.010	104	85	115			
Iron	5.5	mg/L	0.030	111	85	115			
Manganese	2.6	mg/L	0.010	105	85	115			
Nickel	0.52	mg/L	0.050	104	85	115			
Strontium	0.54	mg/L	0.10	108	85	115			
Zinc	0.52	mg/L	0.010	103	85	115			
<b>Sample ID: C08050971-007B MS3</b>	Sample Matrix Spike		Run: SUB-C101828				05/27/08 23:08		
Barium	0.58	mg/L	0.10	105	70	130			
Boron	0.60	mg/L	0.10	106	70	130			
Chromium	0.54	mg/L	0.050	107	70	130			
Copper	0.53	mg/L	0.010	106	70	130			
Iron	5.6	mg/L	0.030	111	70	130			
Manganese	2.7	mg/L	0.010	106	70	130			
Nickel	0.54	mg/L	0.050	107	70	130			
Strontium	1.3	mg/L	0.10	101	70	130			
Zinc	0.53	mg/L	0.010	105	70	130			
<b>Sample ID: C08050971-007B MSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C101828				05/27/08 23:12		
Barium	0.58	mg/L	0.10	104	70	130	1.4	20	
Boron	0.59	mg/L	0.10	104	70	130	1.5	20	
Chromium	0.53	mg/L	0.050	106	70	130	1.3	20	
Copper	0.52	mg/L	0.010	104	70	130	1.9	20	
Iron	5.6	mg/L	0.030	111	70	130	0.2	20	
Manganese	2.6	mg/L	0.010	106	70	130	0.6	20	
Nickel	0.53	mg/L	0.050	106	70	130	1.1	20	
Strontium	1.3	mg/L	0.10	102	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_18674
Sample ID: C08050971-007B MSD3	Sample Matrix Spike Duplicate					Run: SUB-C101828			05/27/08 23:12
Zinc	0.52	mg/L	0.010	104	70	130	1.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102193		
Sample ID: MB-080604A	Method Blank			Run: SUB-C102193			06/04/08 15:38		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.03	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	0.02	mg/L	0.002						
Iron	0.1	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	0.002	mg/L	0.0003						
Molybdenum	0.003	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.02	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080604A							06/04/08 15:42		
Laboratory Fortified Blank			Run: SUB-C102193						
Silica	0.38	mg/L	0.10	94	85	125			
Aluminum	0.93	mg/L	0.10	93	85	125			
Barium	1.0	mg/L	0.10	103	85	125			
Boron	1.1	mg/L	0.10	103	85	125			
Calcium	53	mg/L	0.50	106	85	125			
Chromium	1.0	mg/L	0.050	102	85	125			
Iron	1.1	mg/L	0.030	99	85	125			
Magnesium	53	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	104	85	125			
Molybdenum	1.0	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	103	85	125			
Potassium	49	mg/L	0.50	98	85	125			
Sodium	49	mg/L	0.77	98	85	125			
Vanadium	1.1	mg/L	0.10	109	85	125			
Zinc	1.0	mg/L	0.010	104	85	125			
Sample ID: R08050251-002C							06/04/08 18:39		
Sample Matrix Spike			Run: SUB-C102193						
Aluminum	2.09	mg/L	0.10	103	70	130			
Barium	2.04	mg/L	0.10	99	70	130			
Boron	2.14	mg/L	0.10	102	70	130			
Chromium	2.10	mg/L	0.050	103	70	130			
Iron	2.16	mg/L	0.030	105	70	130			
Manganese	2.23	mg/L	0.010	99	70	130			
Molybdenum	2.01	mg/L	0.10	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102193		
Sample ID: R08050251-002C	Sample Matrix Spike			Run: SUB-C102193			06/04/08 18:39		
Nickel	2.08	mg/L	0.050	102	70	130			
Vanadium	2.08	mg/L	0.10	102	70	130			
Zinc	2.10	mg/L	0.010	103	70	130			
Calcium	177	mg/L	1.0	103	70	130			
Magnesium	135	mg/L	1.0	103	70	130			
Potassium	102	mg/L	1.0	89	70	130			
Silica	4.17	mg/L	0.10		70	130			A
Sodium	286	mg/L	1.5	97	70	130			
Sample ID: R08050251-002C	Sample Matrix Spike Duplicate			Run: SUB-C102193			06/04/08 18:43		
Aluminum	2.03	mg/L	0.10	99	70	130	3.1	20	
Barium	2.11	mg/L	0.10	103	70	130	3.6	20	
Boron	2.16	mg/L	0.10	104	70	130	1.3	20	
Chromium	2.13	mg/L	0.050	104	70	130	1.6	20	
Iron	2.21	mg/L	0.030	107	70	130	2.2	20	
Manganese	2.28	mg/L	0.010	102	70	130	2.4	20	
Molybdenum	2.08	mg/L	0.10	102	70	130	3.6	20	
Nickel	2.09	mg/L	0.050	103	70	130	0.4	20	
Vanadium	2.14	mg/L	0.10	105	70	130	2.8	20	
Zinc	2.13	mg/L	0.010	104	70	130	1.3	20	
Calcium	180	mg/L	1.0	105	70	130	1.1	20	
Magnesium	136	mg/L	1.0	105	70	130	1.2	20	
Potassium	102	mg/L	1.0	89	70	130	0.4	20	
Silica	4.21	mg/L	0.10		70	130	1.1	20	A
Sodium	282	mg/L	1.5	92	70	130	1.5	20	
Method: E200.8							Batch: C_18688		
Sample ID: C08050953-001FMS	Sample Matrix Spike			Run: SUB-C102315			06/07/08 18:31		
Uranium	0.0132	mg/L	0.00030	97	70	130			
Sample ID: C08050953-001FMSD	Sample Matrix Spike Duplicate			Run: SUB-C102315			06/07/08 18:36		
Uranium	0.0133	mg/L	0.00030	98	70	130	0.8	20	
Sample ID: C08051031-005IMS4	Post Digestion Spike			Run: SUB-C102315			06/07/08 22:50		
Uranium	0.0128	mg/L	0.00030	97	70	130			
Sample ID: C08051031-005IMSD4	Post Digestion Spike Duplicate			Run: SUB-C102315			06/07/08 22:55		
Uranium	0.0129	mg/L	0.00030	98	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18768		
<b>Sample ID: MB-18768</b>	Method Blank		Run: SUB-C102298				06/06/08 16:00		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0007	mg/L	5E-05						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	7E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	0.0001	mg/L	5E-05						
Thallium	0.0001	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18768</b>	Laboratory Control Sample		Run: SUB-C102298				06/06/08 16:07		
Antimony	0.580	mg/L	0.050	116	85	115			
Arsenic	0.562	mg/L	0.0010	112	85	115			
Cadmium	0.275	mg/L	0.010	110	85	115			
Lead	0.568	mg/L	0.050	114	85	115			
Molybdenum	0.544	mg/L	0.10	109	85	115			
Selenium	0.569	mg/L	0.0020	114	85	115			
Silver	0.0480	mg/L	0.010	96	85	115			
Thallium	0.564	mg/L	0.10	113	85	115			
<b>Sample ID: C08051073-001MMS3</b>	Sample Matrix Spike		Run: SUB-C102298				06/06/08 18:56		
Antimony	0.540	mg/L	0.050	108	70	130			
Arsenic	0.536	mg/L	0.0010	107	70	130			
Cadmium	0.263	mg/L	0.010	105	70	130			
Lead	0.529	mg/L	0.050	105	70	130			
Molybdenum	0.531	mg/L	0.10	103	70	130			
Selenium	0.527	mg/L	0.0020	104	70	130			
Silver	0.0433	mg/L	0.010	87	70	130			
Thallium	0.519	mg/L	0.10	104	70	130			
Uranium	0.557	mg/L	0.00032	110	70	130			
<b>Sample ID: C08051073-001MMSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C102298				06/06/08 19:23		
Antimony	0.539	mg/L	0.050	108	70	130	0.2	20	
Arsenic	0.535	mg/L	0.0010	106	70	130	0.2	20	
Cadmium	0.264	mg/L	0.010	106	70	130	0.4	20	
Lead	0.529	mg/L	0.050	105	70	130	0.1	20	
Molybdenum	0.529	mg/L	0.10	103	70	130	0.4	20	
Selenium	0.534	mg/L	0.0020	105	70	130	1.3	20	
Silver	0.0451	mg/L	0.010	90	70	130	4.0	20	
Thallium	0.522	mg/L	0.10	104	70	130	0.5	20	
Uranium	0.572	mg/L	0.00032	113	70	130	2.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18768		
Sample ID: LCS3-18768		Laboratory Control Sample			Run: SUB-C102315		06/07/08 12:11		
Arsenic	0.519	mg/L	0.0010	104	85	115			
Lead	0.509	mg/L	0.050	102	85	115			
Molybdenum	0.504	mg/L	0.10	101	85	115			
Selenium	0.519	mg/L	0.0020	104	85	115			
Uranium	0.519	mg/L	0.00032	104	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R102203		
Sample ID: LRB	Method Blank		Run: SUB-C102203				06/04/08 12:01		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C102203				06/04/08 12:07		
Arsenic	0.0502	mg/L	0.0010	100	85	115			
Cadmium	0.0502	mg/L	0.0010	100	85	115			
Copper	0.0509	mg/L	0.0010	102	85	115			
Lead	0.0503	mg/L	0.0010	101	85	115			
Mercury	0.00499	mg/L	0.0010	100	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Thorium 232	0.0495	mg/L	0.0010	99	85	115			
Uranium	0.0501	mg/L	0.00030	100	85	115			
Sample ID: C08050903-007GMS4	Post Digestion Spike		Run: SUB-C102203				06/04/08 15:26		
Arsenic	0.0518	mg/L	0.0010	101	70	130			
Cadmium	0.0475	mg/L	0.010	95	70	130			
Copper	0.0482	mg/L	0.010	95	70	130			
Lead	0.0498	mg/L	0.050	100	70	130			
Mercury	0.00459	mg/L	0.0010	92	70	130			
Silver	0.00192	mg/L	0.010	10	70	130			S
Thorium 232	0.0526	mg/L	0.0010	105	70	130			
Uranium	0.170	mg/L	0.00030	107	70	130			
Sample ID: C08050903-007GMSD4	Post Digestion Spike Duplicate		Run: SUB-C102203				06/04/08 15:32		
Arsenic	0.0525	mg/L	0.0010	102	70	130	1.3	20	
Cadmium	0.0480	mg/L	0.010	96	70	130	1.0	20	
Copper	0.0485	mg/L	0.010	95	70	130	0.7	20	
Lead	0.0507	mg/L	0.050	101	70	130	1.7	20	
Mercury	0.00480	mg/L	0.0010	96	70	130	4.6	20	
Silver	0.000603	mg/L	0.010	3	70	130	0.0	20	S
Thorium 232	0.0539	mg/L	0.0010	107	70	130	2.5	20	
Uranium	0.172	mg/L	0.00030	110	70	130	1.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: C_B_32786		
Sample ID: MB-32786	Method Blank				Run: SUB-C102258		06/04/08 17:57		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32786	Laboratory Fortified Blank				Run: SUB-C102258		06/04/08 18:05		
Mercury	0.0019	mg/L	0.0010	91	85	115			
Sample ID: B08052561-001DMS	Sample Matrix Spike				Run: SUB-C102258		06/04/08 18:14		
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08052561-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C102258		06/04/08 18:16		
Mercury	0.0021	mg/L	0.0010	100	70	130	7.0	30	
Sample ID: B08052499-002CMS	Sample Matrix Spike				Run: SUB-C102258		06/04/08 19:08		
Mercury	0.0017	mg/L	0.0010	87	70	130			
Sample ID: B08052499-002CMSD	Sample Matrix Spike Duplicate				Run: SUB-C102258		06/04/08 19:11		
Mercury	0.0016	mg/L	0.0010	79	70	130	9.1	30	
Method: E245.1							Analytical Run: SUB-C102258		
Sample ID: QCS	Initial Calibration Verification Standard						06/04/08 17:50		
Mercury	0.0021	mg/L	0.0010	103	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R34857
Sample ID: LFB0805201727-3	Laboratory Fortified Blank			Run: DIONEX_080520A			05/20/08 13:29		
Chloride	4.71	mg/L	0.50	94	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
Sample ID: LFB0805201727-4	Laboratory Fortified Blank			Run: DIONEX_080520A			05/20/08 13:46		
Chloride	4.66	mg/L	0.50	93	90	110			
Fluoride	1.80	mg/L	0.10	90	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
Sample ID: R08050251-002AMS	Sample Matrix Spike			Run: DIONEX_080520A			05/20/08 17:36		
Chloride	252	mg/L	5.4	91	80	120			
Fluoride	94.6	mg/L	0.56	87	80	120			
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1110	mg/L	3.4	89	80	120			
Sample ID: R08050251-002AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080520A			05/20/08 17:52		
Chloride	244	mg/L	5.4	87	80	120	3.5	10	
Fluoride	91.4	mg/L	0.56	84	80	120	3.5	10	
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120	2.8	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	3.3	10	
Sulfate	1100	mg/L	3.4	87	80	120	1.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0457		
Sample ID: MB-GrAB-0457	Method Blank				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	0.05	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: Th230-GrAB-0457	Laboratory Control Sample				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	140	pCi/L		100	70	130			
Sample ID: Cs137-GrAB-0457	Laboratory Control Sample				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	87	pCi/L		94	70	130			
Sample ID: C08050953-001EMS	Sample Matrix Spike				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	160	pCi/L		77	70	130			
Sample ID: C08050953-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102579			06/11/08 08:06	
Gross Alpha	150	pCi/L		75	70	130	1.7	17.5	
Sample ID: C08050953-001EMS	Sample Matrix Spike				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	100	pCi/L		93	70	130			
Sample ID: C08050953-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C102579			06/11/08 08:06	
Gross Beta	99	pCi/L		91	70	130	2.5	15.6	
Sample ID: C08050959-001EDUP	Sample Duplicate				Run: SUB-C102579			06/11/08 21:12	
Gross Alpha	370	pCi/L					14	22.1	
Gross Beta	160	pCi/L					41	27.5	R
- Duplicate RPD for Beta is outside of acceptance range. All other QC for the run is within limits. Batch is acceptable.									
Method: E901.1							Batch: C_R101877		
Sample ID: LCS-R101877	Laboratory Control Sample				Run: SUB-C101877			05/28/08 05:30	
Cesium 137	1140	pCi/L	20	82	70	130			
Sample ID: MB-R101877	Method Blank				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L							U
Sample ID: C08050919-001HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	6600	pCi/L	20				0.1	30	
Sample ID: C08051031-005HDUP	Sample Duplicate				Run: SUB-C101877			05/28/08 05:30	
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18688		
Sample ID: R08050251-001I	Sample Matrix Spike				Run: SUB-C102137		06/03/08 08:59		
Radium 226	77	pCi/L		98	70	130			
Sample ID: R08050251-001I	Sample Matrix Spike Duplicate				Run: SUB-C102137		06/03/08 08:59		
Radium 226	72	pCi/L		91	70	130	7.4	25.5	
Sample ID: MB-18688	Method Blank				Run: SUB-C102137		06/03/08 10:37		
Radium 226	-0.4	pCi/L							U
Sample ID: LCS-18688	Laboratory Control Sample				Run: SUB-C102137		06/03/08 10:37		
Radium 226	15	pCi/L		99	70	130			
Method: E903.0							Batch: C_RA226-2833		
Sample ID: C08050998-001AMS	Sample Matrix Spike				Run: SUB-C102378		06/07/08 20:14		
Radium 226	7.9	pCi/L		98	70	130			
Sample ID: C08050998-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102378		06/07/08 21:45		
Radium 226	7.8	pCi/L		97	70	130	0.7	25	
Sample ID: MB-RA226-2833	Method Blank				Run: SUB-C102378		06/07/08 23:15		
Radium 226	0.1	pCi/L							U
Sample ID: LCS-RA226-2833	Laboratory Control Sample				Run: SUB-C102378		06/08/08 11:16		
Radium 226	8.4	pCi/L		104	70	130			
Method: E903.0							Batch: C_RA226-2834		
Sample ID: C08050917-001AMS	Sample Matrix Spike				Run: SUB-C102415		06/08/08 16:51		
Radium 226	430	pCi/L		-30	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.									
Sample ID: C08050917-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102415		06/08/08 16:58		
Radium 226	430	pCi/L		53	70	130	1.5	17.2	S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.									
Sample ID: MB-RA226-2834	Method Blank				Run: SUB-C102415		06/09/08 13:54		
Radium 226	0.06	pCi/L							U
Sample ID: LCS-RA226-2834	Laboratory Control Sample				Run: SUB-C102415		06/09/08 15:24		
Radium 226	7.4	pCi/L		93	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_18688		
Sample ID: C08051031-001IMS	Sample Matrix Spike				Run: SUB-C102353		05/29/08 15:00		
Thorium 230	20.6	pCi/L	0.20	88	70	130			
Sample ID: C08051031-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C102353		05/29/08 15:00		
Thorium 230	22.8	pCi/L	0.20	102	70	130	10	30	
Sample ID: LCS-18688	Laboratory Control Sample				Run: SUB-C102353		05/29/08 15:00		
Thorium 230	51.0	pCi/L	0.20	107	70	130			
Sample ID: MB-18688	Method Blank				Run: SUB-C102353		05/29/08 15:00		
Thorium 230	-0.2	pCi/L							
Method: E907.0							Batch: C_R102575		
Sample ID: LCS-R102575	Laboratory Control Sample				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	6.60	pCi/L	0.20	94	70	130			
Sample ID: C08051031-004HMS	Sample Matrix Spike				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	15.5	pCi/L	0.20	96	70	130			
Sample ID: C08051031-004HMSD	Sample Matrix Spike Duplicate				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	13.9	pCi/L	0.20	85	70	130	11	30	
Sample ID: MB-R102575	Method Blank				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	ND	pCi/L							
Method: E909.0M							Batch: C_R104386		
Sample ID: C08050730-004FMS	Sample Matrix Spike				Run: SUB-C104386		06/27/08 08:45		
Lead 210	1000	pCi/L		172	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD are acceptable the batch is approved.									
Sample ID: C08050730-004FMSD	Sample Matrix Spike Duplicate				Run: SUB-C104386		06/27/08 08:45		
Lead 210	670	pCi/L		115	70	130	40	30	R
Sample ID: MB-R104386	Method Blank				Run: SUB-C104386		06/27/08 08:45		
Lead 210	-2	pCi/L					U		
Sample ID: LCS-R104386	Laboratory Control Sample				Run: SUB-C104386		06/27/08 08:45		
Lead 210	110	pCi/L		98	70	130			

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.  
U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050251

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R104902		
<b>Sample ID: R08050251-003I</b>	Sample Matrix Spike				Run: SUB-C104902			07/03/08 09:50	
Lead 210	1200	pCi/L		105	70	130			
<b>Sample ID: R08050251-003I</b>	Sample Matrix Spike Duplicate				Run: SUB-C104902			07/03/08 09:50	
Lead 210	1000	pCi/L		89	70	130	17	30	
<b>Sample ID: MB-R104902</b>	Method Blank				Run: SUB-C104902			07/03/08 09:50	
Lead 210	1	pCi/L							U
<b>Sample ID: LCS-R104902</b>	Laboratory Control Sample				Run: SUB-C104902			07/03/08 09:50	
Lead 210	61	pCi/L		101	70	130			
<b>Method: RMO-3008</b>							Batch: C_R102444		
<b>Sample ID: C08050737-001HMS</b>	Sample Matrix Spike				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	51	pCi/L	1.0	112	70	130			
<b>Sample ID: C08050737-001HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	48	pCi/L	1.0	107	70	130	5.0	30	
<b>Sample ID: LCS-R102444</b>	Laboratory Control Sample				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	58	pCi/L	1.0	133	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, and the RPD for the MS MSD pair are acceptable the batch is approved.									
<b>Sample ID: MB-R102444</b>	Method Blank				Run: SUB-C102444			06/03/08 17:45	
Polonium 210	-0.1	pCi/L							U
<b>Method: RMO-3008</b>							Batch: C_R103071		
<b>Sample ID: C08051031-005IMS</b>	Sample Matrix Spike				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	42	pCi/L	1.0	99	70	130			
<b>Sample ID: C08051031-005IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	52	pCi/L	1.0	124	70	130	21	30	
<b>Sample ID: LCS-R103071</b>	Laboratory Control Sample				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	110	pCi/L	1.0	121	70	130			
<b>Sample ID: MB-R103071</b>	Method Blank				Run: SUB-C103071			06/19/08 12:00	
Polonium 210	0.5	pCi/L							

### Qualifiers:

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ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration

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This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested in certain circumstances.

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08050321

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08051031

-The LLD for Pb-210 per RG 4.14 is 1 pCi/L. The method used here can achieve an LLD (MDC) of about 5 pCi/L based on a 1.0 L sample size, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08051031



# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-001  
Client Sample ID: DewBurd GW696

Report Date: 08/21/08  
Collection Date: 05/21/08 11:55  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	182	mg/L		5		1	A2320 B	05/27/08 09:50/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	05/27/08 09:50/mb
Bicarbonate as HCO <sub>3</sub>	222	mg/L		5		1	A2320 B	05/27/08 09:50/mb
Calcium	31.0	mg/L		0.5		2	E200.7	06/03/08 13:26/el-c
Chloride	12	mg/L		1		1	E300.0	05/23/08 00:52/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/23/08 00:52/jmh
Magnesium	10.9	mg/L		0.5		2	E200.7	06/03/08 13:26/el-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH <sub>3</sub> G	05/28/08 12:06/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/23/08 00:52/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/23/08 00:52/jmh
Potassium	9.2	mg/L		0.5		2	E200.7	06/03/08 13:26/el-c
Silica	4.7	mg/L		0.5		2	E200.7	06/03/08 13:26/el-c
Sodium	294	mg/L	D	2		2	E200.7	06/03/08 13:26/el-c
Sulfate	505	mg/L	D	3		50	E300.0	05/23/08 00:35/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1420	umhos/cm		5.0		1	A2510 B	05/23/08 16:21/tb
Oxidation-Reduction Potential	120	mV				1	A2580 B	05/23/08 16:00/kh
pH	8.35	s.u.		0.01		1	A4500-H B	05/23/08 14:52/kh
Sodium Adsorption Ratio (SAR)	12	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	05/22/08 15:35/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/03/08 13:26/el-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/06/08 20:58/el-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 13:26/el-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 13:26/el-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 20:58/el-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 13:26/el-c
Copper	ND	mg/L		0.01		1	E200.8	06/06/08 20:58/el-c
Iron	0.09	mg/L		0.03		2	E200.7	06/03/08 13:26/el-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 20:58/el-c
Manganese	0.07	mg/L		0.01		2	E200.7	06/03/08 13:26/el-c
Mercury	ND	mg/L		0.001		1	E200.8	06/06/08 20:58/el-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 13:26/el-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 13:26/el-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/03/08 15:25/el-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 20:58/el-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/06/08 20:58/el-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-001  
Client Sample ID: DewBurd GW696

Report Date: 08/21/08  
Collection Date: 05/21/08 11:55  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/06/08 20:58/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/03/08 13:26/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 13:26/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 22:07/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:33/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	14.3	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta	9.0	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta MDC	3.7	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Lead 210	-2.7	pCi/L	U			1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	29.8	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	17.7	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	06/05/08 17:45/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	06/05/08 17:45/eli-c
Radium 226	1.8	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/28/08 05:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	2.1	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	06/03/08 10:37/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/03/08 10:37/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-001  
Client Sample ID: DewBurd GW696

Report Date: 08/21/08  
Collection Date: 05/21/08 11:55  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	497	pCi/L		100		1	D5072-92	05/29/08 13:01/eli-c
Radon 222 precision (±)	138	pCi/L				1	D5072-92	05/29/08 13:01/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 18:09/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 18:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 18:16/eli-c
Beryllium	ND	mg/L	D	0.003		2	E200.7	06/03/08 18:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 18:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 18:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 18:16/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/03/08 18:16/eli-c
Cobalt	0.10	mg/L		0.03		2	E200.7	06/03/08 18:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 18:09/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	06/03/08 18:16/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 22:00/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 18:16/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 18:16/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 18:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 18:09/eli-c
Strontium	0.8	mg/L		0.1		2	E200.7	06/03/08 18:16/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 18:09/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/06/08 18:09/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 18:16/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.21	%				1	A1030 E	08/09/08 10:00/jmh
Anions	14.5	meq/L				1	A1030 E	08/09/08 10:00/jmh
Cations	15.5	meq/L				1	A1030 E	08/09/08 10:00/jmh
Solids, Total Dissolved Calculated	984	mg/L				1	A1030 E	08/09/08 10:00/jmh
TDS Balance (0.80 - 1.20)	0.940					1	A1030 E	08/09/08 10:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-002  
Client Sample ID: DewBurd GW680

Report Date: 08/21/08  
Collection Date: 05/21/08 12:50  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	254	mg/L		5		1	A2320 B	05/27/08 09:54/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	05/27/08 09:54/mb
Bicarbonate as HCO <sub>3</sub>	310	mg/L		5		1	A2320 B	05/27/08 09:54/mb
Calcium	406	mg/L		0.5		2	E200.7	06/03/08 13:43/eli-c
Chloride	12	mg/L		1		1	E300.0	05/23/08 01:25/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/23/08 01:25/jmh
Magnesium	133	mg/L		0.5		2	E200.7	06/03/08 13:43/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	05/28/08 12:07/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/23/08 01:25/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/23/08 01:25/jmh
Potassium	19.5	mg/L		0.5		2	E200.7	06/03/08 13:43/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	06/03/08 13:43/eli-c
Sodium	132	mg/L	D	2		2	E200.7	06/03/08 13:43/eli-c
Sulfate	1370	mg/L	D	3		50	E300.0	05/23/08 01:08/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2860	umhos/cm		5.0		1	A2510 B	05/23/08 16:25/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	05/23/08 16:00/kh
pH	7.08	s.u.		0.01		1	A4500-H B	05/23/08 14:54/kh
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	05/22/08 15:35/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/03/08 13:43/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/06/08 21:05/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 13:43/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/03/08 13:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 21:05/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 13:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/06/08 21:05/eli-c
Iron	0.21	mg/L		0.03		2	E200.7	06/03/08 13:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 21:05/eli-c
Manganese	0.48	mg/L		0.01		2	E200.7	06/03/08 13:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/06/08 21:05/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 13:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 13:43/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/03/08 15:27/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 21:05/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/06/08 21:05/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050321-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 08/21/08  
**Collection Date:** 05/21/08 12:50  
**Date Received:** 05/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0280	mg/L		0.0003		1	E200.8	06/06/08 21:05/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/03/08 13:43/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 13:43/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 22:13/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:35/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4500	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha precision (±)	64.8	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha MDC	6.9	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta	1530	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta precision (±)	18.0	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta MDC	8.7	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Lead 210	61.8	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	35.7	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	22.9	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	06/05/08 17:45/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	06/05/08 17:45/eli-c
Radium 226	1240	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Radium 226 precision (±)	6.1	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	21000	pCi/L		20		1	E901.1	05/28/08 05:30/eli-c
Gross Gamma precision (±)	250	pCi/L				1	E901.1	05/28/08 05:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	6.8	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.86	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	1.0	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/03/08 10:37/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-002  
Client Sample ID: DewBurd GW680

Report Date: 08/21/08  
Collection Date: 05/21/08 12:50  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	359000	pCi/L		100		1	D5072-92	05/29/08 13:01/eli-c
Radon 222 precision (±)	1160	pCi/L				1	D5072-92	05/29/08 13:01/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 18:16/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/06/08 18:16/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 18:24/eli-c
Beryllium	ND	mg/L	D	0.003		2	E200.7	06/03/08 18:24/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/03/08 18:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 18:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 18:24/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/03/08 18:24/eli-c
Cobalt	0.35	mg/L		0.03		2	E200.7	06/03/08 18:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 18:16/eli-c
Manganese	0.52	mg/L		0.01		2	E200.7	06/03/08 18:24/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 22:07/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 18:24/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 18:24/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 18:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 18:16/eli-c
Strontium	8.2	mg/L		0.1		2	E200.7	06/03/08 18:24/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 18:16/eli-c
Uranium	0.0273	mg/L		0.0003		1	E200.8	06/06/08 18:16/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	06/03/08 18:24/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.04	%				1	A1030 E	08/09/08 10:00/jmh
Anions	33.9	meq/L				1	A1030 E	08/09/08 10:00/jmh
Cations	37.5	meq/L				1	A1030 E	08/09/08 10:00/jmh
Solids, Total Dissolved Calculated	2240	mg/L				1	A1030 E	08/09/08 10:00/jmh
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	08/09/08 10:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-003  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 05/21/08 14:45  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	180	mg/L		5		1	A2320 B	05/27/08 10:01/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	05/27/08 10:01/mb
Bicarbonate as HCO <sub>3</sub>	219	mg/L		5		1	A2320 B	05/27/08 10:01/mb
Calcium	52.1	mg/L		0.5		2	E200.7	06/03/08 13:51/eli-c
Chloride	11	mg/L		1		1	E300.0	05/23/08 02:30/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/23/08 02:30/jmh
Magnesium	19.4	mg/L		0.5		2	E200.7	06/03/08 13:51/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	05/28/08 12:11/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/23/08 02:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/23/08 02:30/jmh
Potassium	8.8	mg/L		0.5		2	E200.7	06/03/08 13:51/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	06/03/08 13:51/eli-c
Sodium	254	mg/L	D	2		2	E200.7	06/03/08 13:51/eli-c
Sulfate	530	mg/L	D	3		50	E300.0	05/23/08 01:41/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1560	umhos/cm		5.0		1	A2510 B	05/23/08 16:26/tb
Oxidation-Reduction Potential	190	mV				1	A2580 B	05/23/08 16:00/kh
pH	7.91	s.u.		0.01		1	A4500-H B	05/23/08 14:55/kh
Sodium Adsorption Ratio (SAR)	7.6	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	05/22/08 15:36/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/03/08 13:51/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	06/06/08 21:12/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 13:51/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 13:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 21:12/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 13:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/06/08 21:12/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/03/08 13:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 21:12/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	06/03/08 13:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/06/08 21:12/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 13:51/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 13:51/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/03/08 15:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 21:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/06/08 21:12/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-003  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 05/21/08 14:45  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0029	mg/L		0.0003		1	E200.8	06/06/08 21:12/el-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/03/08 13:51/el-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 13:51/el-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 22:34/el-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:37/el-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/el-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	25.6	pCi/L				1	E900.0	06/08/08 04:27/el-c
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	06/08/08 04:27/el-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	06/08/08 04:27/el-c
Gross Beta	8.0	pCi/L				1	E900.0	06/08/08 04:27/el-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	06/08/08 04:27/el-c
Gross Beta MDC	3.7	pCi/L				1	E900.0	06/08/08 04:27/el-c
Lead 210	3.1	pCi/L	U			1	E909.0M	06/25/08 11:25/el-c
Lead 210 MDC	30.0	pCi/L				1	E909.0M	06/25/08 11:25/el-c
Lead 210 precision (±)	18.0	pCi/L				1	E909.0M	06/25/08 11:25/el-c
Polonium 210	-0.3	pCi/L	U	1.0		1	RMO-3008	06/05/08 17:45/el-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	06/05/08 17:45/el-c
Radium 226	3.7	pCi/L				1	E903.0	06/09/08 17:24/el-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/09/08 17:24/el-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/el-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/el-c
Gross Gamma	140	pCi/L		20		1	E901.1	05/28/08 05:30/el-c
Gross Gamma precision (±)	29	pCi/L				1	E901.1	05/28/08 05:30/el-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.7	pCi/L	U			1	E909.0M	07/03/08 09:50/el-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/el-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/el-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/el-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	06/19/08 12:00/el-c
Radium 226	-0.2	pCi/L	U			1	E903.0	06/03/08 10:37/el-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/03/08 10:37/el-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/03/08 10:37/el-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-003  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 05/21/08 14:45  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/29/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	2090	pCi/L		100		1	D5072-92	05/29/08 13:01/eli-c
Radon 222 precision (±)	155	pCi/L				1	D5072-92	05/29/08 13:01/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 18:22/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 18:22/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 18:29/eli-c
Beryllium	ND	mg/L	D	0.003		2	E200.7	06/03/08 18:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 18:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 18:22/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 18:29/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/03/08 18:29/eli-c
Cobalt	0.12	mg/L		0.03		2	E200.7	06/03/08 18:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 18:22/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	06/03/08 18:29/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 22:09/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 18:29/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 18:29/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 18:22/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 18:22/eli-c
Strontium	1.0	mg/L		0.1		2	E200.7	06/03/08 18:29/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 18:22/eli-c
Uranium	0.0029	mg/L		0.0003		1	E200.8	06/06/08 18:22/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 18:29/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	1.68	%				1	A1030 E	08/09/08 10:00/jmh
Anions	15.0	meq/L				1	A1030 E	08/09/08 10:00/jmh
Cations	15.5	meq/L				1	A1030 E	08/09/08 10:00/jmh
Solids, Total Dissolved Calculated	996	mg/L				1	A1030 E	08/09/08 10:00/jmh
TDS Balance (0.80 - 1.20)	0.920					1	A1030 E	08/09/08 10:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050321-004  
**Client Sample ID:** DewBurd GW694

**Report Date:** 08/21/08  
**Collection Date:** 05/21/08 15:54  
**Date Received:** 05/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	192	mg/L		5		1	A2320 B	05/27/08 10:05/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/27/08 10:05/mb
Bicarbonate as HCO3	234	mg/L		5		1	A2320 B	05/27/08 10:05/mb
Calcium	103	mg/L		0.5		2	E200.7	06/03/08 13:55/eli-c
Chloride	9	mg/L		1		1	E300.0	05/23/08 03:36/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	05/23/08 03:36/jmh
Magnesium	38.6	mg/L		0.5		2	E200.7	06/03/08 13:55/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	05/28/08 12:14/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/23/08 03:36/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/23/08 03:36/jmh
Potassium	13.1	mg/L		0.5		2	E200.7	06/03/08 13:55/eli-c
Silica	4.7	mg/L		0.5		2	E200.7	06/03/08 13:55/eli-c
Sodium	180	mg/L	D	2		2	E200.7	06/03/08 13:55/eli-c
Sulfate	493	mg/L	D	3		50	E300.0	05/23/08 02:47/jmh
HYSICAL PROPERTIES								
Conductivity @ 25 C	1550	umhos/cm		5.0		1	A2510 B	05/23/08 16:27/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	05/23/08 16:00/kh
pH	7.54	s.u.		0.01		1	A4500-H B	05/23/08 14:56/kh
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	970	mg/L		5		1	A2540 C	05/22/08 15:37/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/03/08 13:55/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 21:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 13:55/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 13:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 21:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 13:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/06/08 21:18/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/03/08 13:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 21:18/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	06/03/08 13:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/06/08 21:18/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 13:55/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 13:55/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/03/08 15:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 21:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/06/08 21:18/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-004  
Client Sample ID: DewBurd GW694

Report Date: 08/21/08  
Collection Date: 05/21/08 15:54  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0006	mg/L		0.0003		1	E200.8	06/06/08 21:18/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/03/08 13:55/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 13:55/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/07/08 22:39/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:39/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	10.6	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta	12.5	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Lead 210	-2.3	pCi/L	U			1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	29.0	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	17.2	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	0.6	pCi/L	U	10		1	RMO-3008	06/05/08 17:45/eli-c
Polonium 210 precision (±)	0.90	pCi/L				1	RMO-3008	06/05/08 17:45/eli-c
Radium 226	1.9	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/28/08 05:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1.4	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	06/03/08 10:37/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	05/29/08 15:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-004  
Client Sample ID: DewBurd GW694

Report Date: 08/21/08  
Collection Date: 05/21/08 15:54  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	619	pCi/L		100		1	D5072-92	05/29/08 13:01/eli-c
Radon 222 precision (±)	135	pCi/L				1	D5072-92	05/29/08 13:01/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 18:29/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/06/08 18:29/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 18:33/eli-c
Beryllium	ND	mg/L	D	0.003		2	E200.7	06/03/08 18:33/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 18:33/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 18:29/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 18:33/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/03/08 18:33/eli-c
Cobalt	0.16	mg/L		0.03		2	E200.7	06/03/08 18:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 18:29/eli-c
Manganese	0.17	mg/L		0.01		2	E200.7	06/03/08 18:33/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 22:16/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 18:33/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 18:33/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 18:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 18:29/eli-c
Strontium	3.0	mg/L		0.1		2	E200.7	06/03/08 18:33/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 18:29/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	06/06/08 18:29/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 18:33/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	6.92	%				1	A1030 E	08/09/08 10:00/jmh
Anions	14.4	meq/L				1	A1030 E	08/09/08 10:00/jmh
Cations	16.5	meq/L				1	A1030 E	08/09/08 10:00/jmh
Solids, Total Dissolved Calculated	965	mg/L				1	A1030 E	08/09/08 10:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	08/09/08 10:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-005  
Client Sample ID: DewBurd GW697

Report Date: 08/21/08  
Collection Date: 05/21/08 16:44  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	168	mg/L		5		1	A2320 B	05/27/08 10:07/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	05/27/08 10:07/mb
Bicarbonate as HCO <sub>3</sub>	205	mg/L		5		1	A2320 B	05/27/08 10:07/mb
Calcium	52.8	mg/L		0.5		2	E200.7	06/03/08 13:59/eli-c
Chloride	8	mg/L		1		1	E300.0	05/23/08 04:09/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/23/08 04:09/jmh
Magnesium	18.0	mg/L		0.5		2	E200.7	06/03/08 13:59/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH <sub>3</sub> G	05/28/08 12:16/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/23/08 04:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/23/08 04:09/jmh
Potassium	8.5	mg/L		0.5		2	E200.7	06/03/08 13:59/eli-c
Silica	4.6	mg/L		0.5		2	E200.7	06/03/08 13:59/eli-c
Sodium	216	mg/L	D	2		2	E200.7	06/03/08 13:59/eli-c
Sulfate	456	mg/L	D	3		50	E300.0	05/23/08 03:52/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1380	umhos/cm		5.0		1	A2510 B	05/23/08 16:28/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	05/23/08 16:00/kh
pH	7.90	s.u.		0.01		1	A4500-H B	05/23/08 14:57/kh
Sodium Adsorption Ratio (SAR)	6.5	unitless		0.10		1	Calculation	08/09/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	790	mg/L		5		1	A2540 C	05/22/08 15:37/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/03/08 13:59/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 21:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 13:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 13:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 21:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 13:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/06/08 21:25/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	06/03/08 13:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 21:25/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	06/03/08 13:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/06/08 21:25/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 13:59/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 13:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/03/08 15:34/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 21:25/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/06/08 21:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-005  
Client Sample ID: DewBurd GW697

Report Date: 08/21/08  
Collection Date: 05/21/08 16:44  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/06/08 21:25/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/03/08 13:59/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/03/08 13:59/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0007	mg/L		0.0003		1	E200.8	06/07/08 22:45/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/03/08 11:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/03/08 16:19/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4.1	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha precision (±)	2.0	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Alpha MDC	2.7	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta	5.4	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta precision (±)	2.0	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Gross Beta MDC	3.3	pCi/L				1	E900.0	06/08/08 04:27/eli-c
Lead 210	-4.3	pCi/L	U			1	E909.0M	06/25/08 11:25/eli-c
Lead 210 MDC	28.2	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Lead 210 precision (±)	16.7	pCi/L				1	E909.0M	06/25/08 11:25/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/05/08 17:45/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	06/05/08 17:45/eli-c
Radium 226	1.1	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/09/08 17:24/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/04/08 10:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/04/08 10:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/28/08 05:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U			1	E909.0M	07/03/08 09:50/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Lead 210 MDC	8.8	pCi/L				1	E909.0M	07/03/08 09:50/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	06/19/08 12:00/eli-c
Polonium 210 precision (±)	0.81	pCi/L				1	RMO-3008	06/19/08 12:00/eli-c
Radium 226	3.8	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/03/08 10:37/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	05/29/08 15:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050321-005  
Client Sample ID: DewBurd GW697

Report Date: 08/21/08  
Collection Date: 05/21/08 16:44  
Date Received: 05/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	570	pCi/L		100		1	D5072-92	05/29/08 13:01/eli-c
Radon 222 precision (±)	134	pCi/L				1	D5072-92	05/29/08 13:01/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/06/08 18:36/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/06/08 18:36/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/03/08 18:49/eli-c
Beryllium	ND	mg/L	D	0.003		2	E200.7	06/03/08 18:49/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/03/08 18:49/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/06/08 18:36/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/03/08 18:49/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/03/08 18:49/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	06/03/08 18:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/06/08 18:36/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	06/03/08 18:49/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/04/08 22:19/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/03/08 18:49/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/03/08 18:49/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/06/08 18:36/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/06/08 18:36/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	06/03/08 18:49/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/06/08 18:36/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/06/08 18:36/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	06/03/08 18:49/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.35	%				1	A1030 E	08/09/08 10:00/jmh
Anions	13.1	meq/L				1	A1030 E	08/09/08 10:00/jmh
Cations	13.7	meq/L				1	A1030 E	08/09/08 10:00/jmh
Solids, Total Dissolved Calculated	873	mg/L				1	A1030 E	08/09/08 10:00/jmh
TDS Balance (0.80 - 1.20)	0.910					1	A1030 E	08/09/08 10:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2320 B</b>		Batch: 080527A-ALK-SEL-W							
<b>Sample ID: LCS1_080527A</b>	Laboratory Control Sample				Run: PH_COND1-R_080527A		05/27/08 09:44		
Alkalinity, Total as CaCO <sub>3</sub>	968	mg/L	5.0	97	90	110			
<b>Sample ID: MBLK1_080527A</b>	Method Blank				Run: PH_COND1-R_080527A		05/27/08 09:46		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
<b>Method: A2510 B</b>		Batch: 080523_1_COND-PROBE-W							
<b>Sample ID: LCS1_COND-1_080523</b>	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:55		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
<b>Sample ID: LCS1-1_080523</b>	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:56		
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
<b>Sample ID: LCS2-1_080523</b>	Laboratory Control Sample				Run: PH_COND2-R_080523B		05/23/08 15:57		
Conductivity @ 25 C	5000	umhos/cm	5.0	100	90	110			
<b>Sample ID: R08050321-001ADUP</b>	Sample Duplicate				Run: PH_COND2-R_080523B		05/23/08 16:24		
Conductivity @ 25 C	1460	umhos/cm	5.0				2.8	10	
<b>Method: A2540 C</b>		Batch: 080522A-SLDS-TDS-W							
<b>Sample ID: LCS1_080522A</b>	Laboratory Control Sample				Run: BAL-4-R_080523A		05/22/08 15:25		
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	107	90	110			
<b>Sample ID: MBLK1_080522A</b>	Method Blank				Run: BAL-4-R_080523A		05/22/08 15:26		
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
<b>Sample ID: R08050307-001BMS</b>	Sample Matrix Spike				Run: BAL-4-R_080523A		05/23/08 00:00		
Solids, Total Dissolved TDS @ 180 C	2700	mg/L	5.0	120	80	120			
<b>Sample ID: R08050307-001BMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080523A		05/23/08 00:00		
Solids, Total Dissolved TDS @ 180 C	2700	mg/L	5.0	119	80	120	0.1	10	
<b>Sample ID: R08050321-005AMS</b>	Sample Matrix Spike				Run: BAL-4-R_080523A		05/22/08 15:38		
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	113	80	120			
<b>Sample ID: R08050321-005AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080523A		05/22/08 15:38		
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	109	80	120	0.8	10	

### Qualifiers:

- - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080803A		
Sample ID: MBLK Selenium-IV	Method Blank ND	mg/L	6E-05			Run: SUB-C102059			06/03/08 11:03
Sample ID: 288-81-1 Selenium-IV	Laboratory Control Sample 0.051	mg/L	0.0010	101	90	110			06/03/08 11:05
Sample ID: R08050321-005E Selenium-IV	Sample Matrix Spike 0.046	mg/L	0.0010	92	85	115			06/03/08 11:43
Sample ID: R08050321-005E Selenium-IV	Sample Matrix Spike Duplicate 0.047	mg/L	0.0010	94	85	115	1.7	10	06/03/08 11:45
Method: A3114 B							Batch: C_SE3114-080803B		
Sample ID: MBLK Selenium	Method Blank ND	mg/L	6E-05			Run: SUB-C102093			06/03/08 15:00
Sample ID: 288-81-1 Selenium	Laboratory Control Sample 0.051	mg/L	0.0010	101	90	110			06/03/08 15:02
Sample ID: R08050321-005E Selenium	Sample Matrix Spike 0.045	mg/L	0.0010	91	85	115			06/03/08 15:36
Sample ID: R08050321-005E Selenium	Sample Matrix Spike Duplicate 0.045	mg/L	0.0010	90	85	115	0.3	10	06/03/08 15:38
Method: A4500-H B							Batch: 080523_1_PH-W		
Sample ID: LCS_pH-1_080523 pH	Laboratory Control Sample 6.92	s.u.	0.010	101	98.55	101.45			05/23/08 14:21
Sample ID: R08050321-001ADUP pH	Sample Duplicate 8.34	s.u.	0.010			Run: PH_COND2-R_080523A	0.1	1.25	05/23/08 14:53

### Qualifiers:

- Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G					Batch: A2008-05-28_2_NH3_01				
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080528A				05/28/08 10:35
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080528A				05/28/08 10:36
Nitrogen, Ammonia as N	0.27	mg/L	0.10	107	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080528A				05/28/08 10:38
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	90	110			
Sample ID: R08050307-001CMS	Sample Matrix Spike				Run: TECHAA2-R_080528A				05/28/08 12:00
Nitrogen, Ammonia as N	0.23	mg/L	0.10	90	80	120			
Sample ID: R08050307-001CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080528A				05/28/08 12:02
Nitrogen, Ammonia as N	0.24	mg/L	0.10	96	80	120	5.6	10	
Sample ID: R08050321-003BMS	Sample Matrix Spike				Run: TECHAA2-R_080528A				05/28/08 12:12
Nitrogen, Ammonia as N	0.39	mg/L	0.10	98	80	120			
Sample ID: R08050321-003BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080528A				05/28/08 12:13
Nitrogen, Ammonia as N	0.40	mg/L	0.10	98	80	120	0.3	10	
Method: D5072-92					Batch: C_R101920				
Sample ID: R08050321-005G	Sample Duplicate				Run: SUB-C101920				05/29/08 13:01
Radon 222	525	pCi/L	100				8.2	30	
Sample ID: MB-R101920	Method Blank				Run: SUB-C101920				05/29/08 13:01
Radon 222	20	pCi/L						U	
Sample ID: LCS-R101920	Laboratory Control Sample				Run: SUB-C101920				05/29/08 13:01
Radon 222	301	pCi/L	100	93	70	130			

### Qualifiers:

L - Analyte reporting limit.  
U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7					Batch: C_18693				
Sample ID: MB-18693	Method Blank		Run: SUB-C102127				06/03/08 18:04		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.006	mg/L	0.001						
Sample ID: LCS3-18693	Laboratory Control Sample		Run: SUB-C102127				06/03/08 18:08		
Barium	0.526	mg/L	0.10	105	85	115			
Boron	0.548	mg/L	0.10	110	85	115			
Chromium	0.532	mg/L	0.050	106	85	115			
Copper	0.534	mg/L	0.010	107	85	115			
Iron	5.61	mg/L	0.030	112	85	115			
Manganese	2.67	mg/L	0.010	107	85	115			
Molybdenum	0.529	mg/L	0.10	106	85	115			
Nickel	0.525	mg/L	0.050	105	85	115			
Strontium	0.545	mg/L	0.10	109	85	115			
Zinc	0.539	mg/L	0.010	107	85	115			
Sample ID: R08050321-005D	Sample Matrix Spike		Run: SUB-C102127				06/03/08 18:53		
Barium	0.559	mg/L	0.10	107	70	130			
Boron	0.602	mg/L	0.10	107	70	130			
Chromium	0.533	mg/L	0.050	107	70	130			
Copper	0.547	mg/L	0.010	109	70	130			
Iron	5.53	mg/L	0.030	110	70	130			
Manganese	2.78	mg/L	0.010	109	70	130			
Molybdenum	0.536	mg/L	0.10	107	70	130			
Nickel	0.542	mg/L	0.050	108	70	130			
Strontium	1.74	mg/L	0.10	100	70	130			
Zinc	0.544	mg/L	0.010	107	70	130			
Sample ID: R08050321-005D	Sample Matrix Spike Duplicate		Run: SUB-C102127				06/03/08 18:57		
Barium	0.551	mg/L	0.10	105	70	130	1.5	20	
Boron	0.614	mg/L	0.10	109	70	130	2.0	20	
Chromium	0.531	mg/L	0.050	106	70	130	0.3	20	
Copper	0.539	mg/L	0.010	108	70	130	1.5	20	
Iron	5.50	mg/L	0.030	109	70	130	0.6	20	
Manganese	2.75	mg/L	0.010	107	70	130	1.1	20	
Molybdenum	0.539	mg/L	0.10	108	70	130	0.7	20	

### Qualifiers:

ND - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/21/08

Project: Edgemont

Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>									Batch: C_18693
<b>Sample ID: R08050321-005D</b>	<b>Sample Matrix Spike Duplicate</b>				<b>Run: SUB-C102127</b>			<b>06/03/08 18:57</b>	
Nickel	0.541	mg/L	0.050	108	70	130	0.2	20	
Strontium	1.72	mg/L	0.10	96	70	130	1.2	20	
Zinc	0.544	mg/L	0.010	107	70	130	0.1	20	
<b>Sample ID: R08050321-005D</b>	<b>Sample Matrix Spike</b>				<b>Run: SUB-C102628</b>			<b>06/12/08 21:43</b>	
Barium	0.536	mg/L	0.10	102	70	130			
Boron	0.573	mg/L	0.10	105	70	130			
Chromium	0.518	mg/L	0.050	104	70	130			
Copper	0.521	mg/L	0.010	104	70	130			
Iron	5.55	mg/L	0.030	110	70	130			
Manganese	2.65	mg/L	0.010	104	70	130			
Molybdenum	0.516	mg/L	0.10	103	70	130			
Nickel	0.507	mg/L	0.050	101	70	130			
Strontium	1.67	mg/L	0.10	99	70	130			
Zinc	0.523	mg/L	0.010	104	70	130			
<b>Sample ID: R08050321-005D</b>	<b>Sample Matrix Spike Duplicate</b>				<b>Run: SUB-C102628</b>			<b>06/12/08 21:47</b>	
Barium	0.550	mg/L	0.10	105	70	130	2.6	20	
Boron	0.584	mg/L	0.10	107	70	130	1.9	20	
Chromium	0.526	mg/L	0.050	105	70	130	1.5	20	
Copper	0.529	mg/L	0.010	106	70	130	1.5	20	
Iron	5.49	mg/L	0.030	108	70	130	1.1	20	
Manganese	2.69	mg/L	0.010	105	70	130	1.6	20	
Molybdenum	0.528	mg/L	0.10	106	70	130	2.3	20	
Nickel	0.517	mg/L	0.050	103	70	130	2.0	20	
Strontium	1.70	mg/L	0.10	106	70	130	2.0	20	
Zinc	0.533	mg/L	0.010	106	70	130	1.9	20	

### Qualifiers:

L - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>					Batch: C_R102127				
<b>Sample ID: MB-080603A</b>	<b>Method Blank</b>		<b>Run: SUB-C102127</b>			<b>06/03/08 12:29</b>			
Silica	ND	mg/L		0.02					
Aluminum	ND	mg/L		0.004					
Barium	ND	mg/L		0.006					
Boron	0.02	mg/L		0.008					
Calcium	ND	mg/L		0.1					
Chromium	ND	mg/L		0.002					
Iron	ND	mg/L		0.005					
Magnesium	ND	mg/L		0.04					
Manganese	ND	mg/L		0.0003					
Molybdenum	ND	mg/L		0.003					
Nickel	ND	mg/L		0.004					
Potassium	ND	mg/L		0.02					
Sodium	ND	mg/L		0.8					
Vanadium	0.03	mg/L		0.003					
Zinc	ND	mg/L		0.002					
<b>Sample ID: LFB-080603A</b>	<b>Laboratory Fortified Blank</b>		<b>Run: SUB-C102127</b>			<b>06/03/08 12:33</b>			
Silica	0.38	mg/L	0.10	94	85	125			
Aluminum	0.94	mg/L	0.10	94	85	125			
Barium	0.99	mg/L	0.10	99	85	125			
Boron	1.0	mg/L	0.10	99	85	125			
Calcium	53	mg/L	0.50	105	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	109	85	125			
Magnesium	53	mg/L	0.50	106	85	125			
Manganese	1.0	mg/L	0.010	101	85	125			
Molybdenum	0.97	mg/L	0.10	97	85	125			
Nickel	1.0	mg/L	0.050	101	85	125			
Potassium	46	mg/L	0.50	91	85	125			
Sodium	49	mg/L	0.77	99	85	125			
Vanadium	1.1	mg/L	0.10	107	85	125			
Zinc	1.0	mg/L	0.010	102	85	125			
<b>Sample ID: C08051031-001CMS2</b>	<b>Sample Matrix Spike</b>		<b>Run: SUB-C102127</b>			<b>06/03/08 13:35</b>			
Aluminum	1.98	mg/L	0.10	97	70	130			
Barium	2.02	mg/L	0.10	99	70	130			
Boron	2.11	mg/L	0.10	99	70	130			
Chromium	2.06	mg/L	0.050	101	70	130			
Iron	2.22	mg/L	0.030	105	70	130			
Manganese	2.12	mg/L	0.010	101	70	130			
Molybdenum	1.96	mg/L	0.10	96	70	130			
Nickel	2.04	mg/L	0.050	100	70	130			
Vanadium	2.16	mg/L	0.10	103	70	130			

### Qualifiers:

.L - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102127		
Sample ID: C08051031-001CMS2	Sample Matrix Spike		Run: SUB-C102127				06/03/08 13:35		
Zinc	2.10	mg/L	0.010	102	70	130			
Calcium	137	mg/L	1.0	104	70	130			
Magnesium	120	mg/L	1.0	107	70	130			
Potassium	101	mg/L	1.0	90	70	130			
Silica	5.53	mg/L	0.10		70	130			A
Sodium	386	mg/L	1.5	90	70	130			
Sample ID: C08051031-001CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C102127				06/03/08 13:39		
Aluminum	1.93	mg/L	0.10	95	70	130	2.6	20	
Barium	1.98	mg/L	0.10	96	70	130	2.1	20	
Boron	2.07	mg/L	0.10	97	70	130	2.0	20	
Chromium	2.01	mg/L	0.050	99	70	130	2.4	20	
Iron	2.21	mg/L	0.030	104	70	130	0.5	20	
Manganese	2.07	mg/L	0.010	98	70	130	2.3	20	
Molybdenum	1.91	mg/L	0.10	94	70	130	2.3	20	
Nickel	2.01	mg/L	0.050	98	70	130	1.7	20	
Vanadium	2.11	mg/L	0.10	101	70	130	2.5	20	
Zinc	2.02	mg/L	0.010	99	70	130	3.7	20	
Calcium	134	mg/L	1.0	101	70	130	2.4	20	
Magnesium	116	mg/L	1.0	103	70	130	3.1	20	
Potassium	99.6	mg/L	1.0	89	70	130	1.3	20	
Silica	5.40	mg/L	0.10		70	130	2.5	20	A
Sodium	381	mg/L	1.5	86	70	130	1.2	20	
Sample ID: C08051053-001AMS2	Sample Matrix Spike		Run: SUB-C102127				06/03/08 16:39		
Aluminum	0.997	mg/L	0.10	98	70	130			
Barium	1.04	mg/L	0.10	99	70	130			
Boron	1.02	mg/L	0.10	97	70	130			
Calcium	95.0	mg/L	0.50	100	70	130			
Chromium	1.03	mg/L	0.050	101	70	130			
Iron	1.05	mg/L	0.030	103	70	130			
Magnesium	79.8	mg/L	0.50	103	70	130			
Manganese	1.03	mg/L	0.010	101	70	130			
Molybdenum	0.867	mg/L	0.10	85	70	130			
Nickel	1.01	mg/L	0.050	99	70	130			
Potassium	48.0	mg/L	0.50	87	70	130			
Sodium	77.3	mg/L	0.77	95	70	130			
Vanadium	1.14	mg/L	0.10	105	70	130			
Zinc	1.03	mg/L	0.010	100	70	130			
Sample ID: C08051053-001AMS2	Sample Matrix Spike Duplicate		Run: SUB-C102127				06/03/08 16:43		
Aluminum	1.01	mg/L	0.10	99	70	130	1.3	20	
Barium	1.05	mg/L	0.10	100	70	130	1.2	20	

### Qualifiers:

L - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102127		
Sample ID: C08051053-001AMSD2	Sample Matrix Spike Duplicate			Run: SUB-C102127			06/03/08 16:43		
Boron	1.03	mg/L	0.10	98	70	130	0.4	20	
Calcium	93.8	mg/L	0.50	98	70	130	1.2	20	
Chromium	1.04	mg/L	0.050	101	70	130	0.6	20	
Iron	1.08	mg/L	0.030	106	70	130	2.6	20	
Magnesium	80.2	mg/L	0.50	103	70	130	0.5	20	
Manganese	1.03	mg/L	0.010	100	70	130	0.4	20	
Molybdenum	0.924	mg/L	0.10	91	70	130	6.4	20	
Nickel	1.01	mg/L	0.050	99	70	130	0.1	20	
Potassium	48.6	mg/L	0.50	88	70	130	1.1	20	
Sodium	78.1	mg/L	0.77	97	70	130	1.0	20	
Vanadium	1.12	mg/L	0.10	103	70	130	1.8	20	
Zinc	1.03	mg/L	0.010	100	70	130	0.2	20	
Method: E200.8							Batch: C_18688		
Sample ID: C08050953-001FMS	Sample Matrix Spike			Run: SUB-C102315			06/07/08 18:31		
Uranium	0.0132	mg/L	0.00030	97	70	130			
Sample ID: C08050953-001FMSD	Sample Matrix Spike Duplicate			Run: SUB-C102315			06/07/08 18:36		
uranium	0.0133	mg/L	0.00030	98	70	130	0.8	20	
Sample ID: R08050321-005I	Post Digestion Spike			Run: SUB-C102315			06/07/08 22:50		
Uranium	0.0128	mg/L	0.00030	97	70	130			
Sample ID: R08050321-005I	Post Digestion Spike Duplicate			Run: SUB-C102315			06/07/08 22:55		
Uranium	0.0129	mg/L	0.00030	98	70	130	0.7	20	

### Qualifiers:

- - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18768		
<b>Sample ID: MB-18768</b>	Method Blank		Run: SUB-C102298				06/06/08 16:00		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0007	mg/L	5E-05						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	0.0001	mg/L	5E-05						
Thallium	0.0001	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18768</b>	Laboratory Control Sample		Run: SUB-C102298				06/06/08 16:07		
Antimony	0.580	mg/L	0.050	116	85	115			
Arsenic	0.562	mg/L	0.0010	112	85	115			
Cadmium	0.275	mg/L	0.010	110	85	115			
Lead	0.568	mg/L	0.050	114	85	115			
Selenium	0.569	mg/L	0.0020	114	85	115			
Silver	0.0480	mg/L	0.010	96	85	115			
Thallium	0.564	mg/L	0.10	113	85	115			
<b>Sample ID: C08051073-001MMS3</b>	Sample Matrix Spike		Run: SUB-C102298				06/06/08 18:56		
Antimony	0.540	mg/L	0.050	108	70	130			
Arsenic	0.536	mg/L	0.0010	107	70	130			
Cadmium	0.263	mg/L	0.010	105	70	130			
Lead	0.529	mg/L	0.050	105	70	130			
Selenium	0.527	mg/L	0.0020	104	70	130			
Silver	0.0433	mg/L	0.010	87	70	130			
Thallium	0.519	mg/L	0.10	104	70	130			
Uranium	0.557	mg/L	0.00032	110	70	130			
<b>Sample ID: C08051073-001MMSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C102298				06/06/08 19:23		
Antimony	0.539	mg/L	0.050	108	70	130	0.2	20	
Arsenic	0.535	mg/L	0.0010	106	70	130	0.2	20	
Cadmium	0.264	mg/L	0.010	106	70	130	0.4	20	
Lead	0.529	mg/L	0.050	105	70	130	0.1	20	
Selenium	0.534	mg/L	0.0020	105	70	130	1.3	20	
Silver	0.0451	mg/L	0.010	90	70	130	4.0	20	
Thallium	0.522	mg/L	0.10	104	70	130	0.5	20	
Uranium	0.572	mg/L	0.00032	113	70	130	2.6	20	
<b>Sample ID: LCS3-18768</b>	Laboratory Control Sample		Run: SUB-C102315				06/07/08 12:11		
Arsenic	0.519	mg/L	0.0010	104	85	115			
Lead	0.509	mg/L	0.050	102	85	115			
Selenium	0.519	mg/L	0.0020	104	85	115			
Uranium	0.519	mg/L	0.00032	104	85	115			

### Qualifiers:

L - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R102298		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C102298				06/06/08 13:52		
Arsenic	9E-05	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	8E-05	mg/L	4E-05						
Thorium 232	0.0002	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C102298				06/06/08 13:58		
Arsenic	0.0543	mg/L	0.0010	108	85	115			
Cadmium	0.0527	mg/L	0.0010	105	85	115			
Copper	0.0539	mg/L	0.0010	108	85	115			
Lead	0.0537	mg/L	0.0010	107	85	115			
Mercury	0.00538	mg/L	0.0010	108	85	115			
Silver	0.0209	mg/L	0.0010	104	85	115			
Thorium 232	0.0540	mg/L	0.0010	108	85	115			
Uranium	0.0538	mg/L	0.00030	108	85	115			
<b>Sample ID: C08051031-005CMS4</b>	Post Digestion Spike		Run: SUB-C102298				06/06/08 21:32		
Arsenic	0.0538	mg/L	0.0010	104	70	130			
Cadmium	0.0483	mg/L	0.010	97	70	130			
Copper	0.0485	mg/L	0.010	96	70	130			
Lead	0.0532	mg/L	0.050	106	70	130			
Mercury	0.00536	mg/L	0.0010	107	70	130			
Silver	0.0128	mg/L	0.010	64	70	130			S
Thorium 232	0.0547	mg/L	0.0010	109	70	130			
Uranium	0.0552	mg/L	0.00030	110	70	130			
<b>Sample ID: C08051031-005CMS4</b>	Post Digestion Spike Duplicate		Run: SUB-C102298				06/06/08 21:39		
Arsenic	0.0524	mg/L	0.0010	102	70	130	2.5	20	
Cadmium	0.0487	mg/L	0.010	97	70	130	0.8	20	
Copper	0.0486	mg/L	0.010	96	70	130	0.2	20	
Lead	0.0526	mg/L	0.050	105	70	130	1.1	20	
Mercury	0.00539	mg/L	0.0010	108	70	130	0.6	20	
Silver	0.0133	mg/L	0.010	67	70	130	3.8	20	S
Thorium 232	0.0550	mg/L	0.0010	110	70	130	0.5	20	
Uranium	0.0548	mg/L	0.00030	109	70	130	0.7	20	

### Qualifiers:

L - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: C_B_32817		
Sample ID: MB-32817	Method Blank				Run: SUB-C102258		06/04/08 21:47		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32817	Laboratory Fortified Blank				Run: SUB-C102258		06/04/08 21:49		
Mercury	0.0019	mg/L	0.0010	97	85	115			
Sample ID: R08050321-001D	Sample Matrix Spike				Run: SUB-C102258		06/04/08 22:02		
Mercury	0.0020	mg/L	0.0010	98	70	130			
Sample ID: R08050321-001D	Sample Matrix Spike Duplicate				Run: SUB-C102258		06/04/08 22:05		
Mercury	0.0021	mg/L	0.0010	103	70	130	5.5	30	
Method: E245.1							Analytical Run: SUB-C102258		
Sample ID: QCS	Initial Calibration Verification Standard						06/04/08 17:50		
Mercury	0.0021	mg/L	0.0010	103	90	110			

### Qualifiers:

- - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R34940		
Sample ID: LFB0805225816-3	Laboratory Fortified Blank			Run: DIONEX_080522A			05/22/08 18:18		
Chloride	4.63	mg/L	0.50	93	90	110			
Fluoride	1.78	mg/L	0.10	89	90	110			S
Nitrogen, Nitrate as N	2.30	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.37	mg/L	0.10	95	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
Sample ID: LFB0805225816-4	Laboratory Fortified Blank			Run: DIONEX_080522A			05/22/08 18:34		
Chloride	4.76	mg/L	0.50	95	90	110			
Fluoride	1.84	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.36	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
Sample ID: R08050285-001AMS	Sample Matrix Spike			Run: DIONEX_080522A			05/22/08 22:57		
Chloride	596	mg/L	5.4	98	80	120			
Fluoride	93.8	mg/L	0.56	87	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	92	80	120			
Nitrogen, Nitrite as N	123	mg/L	2.9	95	80	120			
Sulfate	964	mg/L	3.4	87	80	120			
Sample ID: R08050285-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080522A			05/22/08 23:13		
Chloride	576	mg/L	5.4	90	80	120	3.4	10	
Fluoride	90.6	mg/L	0.56	84	80	120	3.5	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	88	80	120	4.0	10	
Nitrogen, Nitrite as N	119	mg/L	2.9	91	80	120	3.6	10	
Sulfate	934	mg/L	3.4	83	80	120	3.2	10	
Sample ID: R08050321-004AMS	Sample Matrix Spike			Run: DIONEX_080522A			05/23/08 03:03		
Chloride	247	mg/L	5.4	90	80	120			
Fluoride	92.8	mg/L	0.56	86	80	120			
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120			
Nitrogen, Nitrite as N	122	mg/L	2.9	98	80	120			
Sulfate	1140	mg/L	3.4	86	80	120			
Sample ID: R08050321-004AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080522A			05/23/08 03:19		
Chloride	238	mg/L	5.4	86	80	120	3.7	10	
Fluoride	89.0	mg/L	0.56	82	80	120	4.2	10	
Nitrogen, Nitrate as N	113	mg/L	1.3	91	80	120	4.9	10	
Nitrogen, Nitrite as N	117	mg/L	2.9	94	80	120	4.1	10	
Sulfate	1120	mg/L	3.4	83	80	120	1.4	10	

### Qualifiers:

L - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0455		
Sample ID: MB-GrAB-0455	Method Blank				Run: SUB-C102338		06/07/08 04:24		
Gross Alpha	0.6	pCi/L							U
Gross Beta	-0.6	pCi/L							U
Sample ID: Th230-GrAB-0455	Laboratory Control Sample				Run: SUB-C102338		06/07/08 04:24		
Gross Alpha	150	pCi/L		110	70	130			
Sample ID: Cs137-GrAB-0455	Laboratory Control Sample				Run: SUB-C102338		06/07/08 04:24		
Gross Beta	88	pCi/L		94	70	130			
Sample ID: C08050619-001AMS	Sample Matrix Spike				Run: SUB-C102338		06/07/08 04:24		
Gross Alpha	92	pCi/L		65	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C08050619-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102338		06/07/08 04:24		
Gross Alpha	87	pCi/L		62	70	130	5.7	20.1	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C08050619-001AMS	Sample Matrix Spike				Run: SUB-C102338		06/07/08 04:24		
Gross Beta	94	pCi/L		98	70	130			
Sample ID: C08050619-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102338		06/07/08 04:24		
Gross Beta	91	pCi/L		95	70	130	2.8	15.9	
<b>Method: E901.1</b>							Batch: C_R101877		
Sample ID: LCS-R101877	Laboratory Control Sample				Run: SUB-C101877		05/28/08 05:30		
Cesium 137	1140	pCi/L	20	82	70	130			
Sample ID: MB-R101877	Method Blank				Run: SUB-C101877		05/28/08 05:30		
Gross Gamma	ND	pCi/L							U
Sample ID: R08050321-005H	Sample Duplicate				Run: SUB-C101877		05/28/08 05:30		
Gross Gamma	ND	pCi/L	20				0.0	30	U

### Qualifiers:

- - Analyte reporting limit.  
S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18688		
Sample ID: C08050913-001IMS	Sample Matrix Spike				Run: SUB-C102137				06/03/08 08:59
Radium 226	77	pCi/L		98	70	130			
Sample ID: C08050913-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C102137				06/03/08 08:59
Radium 226	72	pCi/L		91	70	130	7.4	25.5	
Sample ID: MB-18688	Method Blank				Run: SUB-C102137				06/03/08 10:37
Radium 226	-0.4	pCi/L							U
Sample ID: LCS-18688	Laboratory Control Sample				Run: SUB-C102137				06/03/08 10:37
Radium 226	15	pCi/L		99	70	130			
Method: E903.0							Batch: C_RA226-2839		
Sample ID: C08051073-001AMS	Sample Matrix Spike				Run: SUB-C102434				06/09/08 17:25
Radium 226	6.7	pCi/L		83	70	130			
Sample ID: C08051073-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102434				06/09/08 17:25
Radium 226	6.9	pCi/L		85	70	130	2.8	23.9	
Sample ID: MB-RA226-2839	Method Blank				Run: SUB-C102434				06/10/08 09:17
Radium 226	-0.08	pCi/L							U
Sample ID: LCS-RA226-2839	Laboratory Control Sample				Run: SUB-C102434				06/10/08 09:17
Radium 226	7.1	pCi/L		90	70	130			
Method: E907.0							Batch: C_18688		
Sample ID: R08050321-001I	Sample Matrix Spike				Run: SUB-C102353				05/29/08 15:00
Thorium 230	20.6	pCi/L	0.20	88	70	130			
Sample ID: R08050321-001I	Sample Matrix Spike Duplicate				Run: SUB-C102353				05/29/08 15:00
Thorium 230	22.8	pCi/L	0.20	102	70	130	10	30	
Sample ID: LCS-18688	Laboratory Control Sample				Run: SUB-C102353				05/29/08 15:00
Thorium 230	51.0	pCi/L	0.20	107	70	130			
Sample ID: MB-18688	Method Blank				Run: SUB-C102353				05/29/08 15:00
Thorium 230	-0.2	pCi/L							U

### Qualifiers:

L - Analyte reporting limit.  
U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_R102575		
<b>Sample ID: LCS-R102575</b>	Laboratory Control Sample				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	6.60	pCi/L	0.20	94	70	130			
<b>Sample ID: R08050321-004H</b>	Sample Matrix Spike				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	15.5	pCi/L	0.20	96	70	130			
<b>Sample ID: R08050321-004H</b>	Sample Matrix Spike Duplicate				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	13.9	pCi/L	0.20	85	70	130	11	30	
<b>Sample ID: MB-R102575</b>	Method Blank				Run: SUB-C102575		06/04/08 10:00		
Thorium 230	ND	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_R104902		
<b>Sample ID: C08050913-003IMS</b>	Sample Matrix Spike				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1200	pCi/L		105	70	130			
<b>Sample ID: C08050913-003IMS D</b>	Sample Matrix Spike Duplicate				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1000	pCi/L		89	70	130	17	30	
<b>Sample ID: MB-R104902</b>	Method Blank				Run: SUB-C104902		07/03/08 09:50		
Lead 210	1	pCi/L							U
<b>Sample ID: LCS-R104902</b>	Laboratory Control Sample				Run: SUB-C104902		07/03/08 09:50		
Lead 210	61	pCi/L		101	70	130			
<b>Method: E909.0M</b>							Batch: C_R105446		
<b>Sample ID: C08050919-002HMS</b>	Sample Matrix Spike				Run: SUB-C105446		06/25/08 11:25		
Lead 210	550	pCi/L		92	70	130			
<b>Sample ID: C08050919-002HMS D</b>	Sample Matrix Spike Duplicate				Run: SUB-C105446		06/25/08 11:25		
Lead 210	420	pCi/L		71	70	130	26	30	
<b>Sample ID: R08050321-002H</b>	Sample Duplicate				Run: SUB-C105446		06/25/08 11:25		
Lead 210	80	pCi/L					25	30	
<b>Sample ID: MB-R105446</b>	Method Blank				Run: SUB-C105446		06/25/08 11:25		
Lead 210	ND	pCi/L							U
<b>Sample ID: LCS-R105446</b>	Laboratory Control Sample				Run: SUB-C105446		06/25/08 11:25		
Lead 210	140	pCi/L		115	70	130			

### Qualifiers:

- - Analyte reporting limit.

ND - Not detected at the reporting limit.

U Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08050321

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b> Batch: C_R102463									
<b>Sample ID: R08050321-001H</b>	Sample Matrix Spike				Run: SUB-C102463				06/05/08 17:45
Polonium 210	85	pCi/L	1.0	98	70	130			
<b>Sample ID: R08050321-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C102463				06/05/08 17:45
Polonium 210	87	pCi/L	1.0	100	70	130	1.6	30	
<b>Sample ID: LCS-R102463</b>	Laboratory Control Sample				Run: SUB-C102463				06/05/08 17:45
Polonium 210	42	pCi/L	1.0	96	70	130			
<b>Sample ID: MB-R102463</b>	Method Blank				Run: SUB-C102463				06/05/08 17:45
Polonium 210	ND	pCi/L							U
<b>Method: RMO-3008</b> Batch: C_R103071									
<b>Sample ID: R08050321-005I</b>	Sample Matrix Spike				Run: SUB-C103071				06/19/08 12:00
Polonium 210	42	pCi/L	1.0	99	70	130			
<b>Sample ID: R08050321-005I</b>	Sample Matrix Spike Duplicate				Run: SUB-C103071				06/19/08 12:00
Polonium 210	52	pCi/L	1.0	124	70	130	21	30	
<b>Sample ID: LCS-R103071</b>	Laboratory Control Sample				Run: SUB-C103071				06/19/08 12:00
Polonium 210	110	pCi/L	1.0	121	70	130			
<b>Sample ID: MB-R103071</b>	Method Blank				Run: SUB-C103071				06/19/08 12:00
Polonium 210	0.5	pCi/L							U

### Qualifiers:

- - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 1

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>Power Tech Dewey Burdock</b>		Sample Origin State: <b>SD</b>		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Cory Foreman</b>		Email: <b>cforeman@respec.com</b>		Sampler: (Please Print) <b>Eric Krantz</b>	
Invoice Address:		Invoice Contact & Phone: <b>cory.foreman@respec.com</b>		Purchase Order:		Quote/Bottle Order:	
Special Report/Formats - ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/>		ANALYSIS REQUESTED  <b>As per note</b>		SEE ATTACHED  <b>R U S H</b>		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page  Comments: <b>All groundwater</b>	
Number of Containers Sample Type: A W S V B O Vegetation Bioassay Other		MATRIX		Shipped by:		Receipt Temp <b>5.2 °C</b>	
1 Dew Burd GW 696		W		On Ice <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal Y N	
2 Dew Burd GW 680		W		Intact Y N		Signature Match Y N	
3 Dew Burd GW 695		W		Signature Match Y N		LABORATORY USE ONLY	
4 Dew Burd GW 694		W		Signature Match Y N		Set 30/08-15-3	
5 Dew Burd GW 697		W		Signature Match Y N		Set 29/08-11c	
6		W		Signature Match Y N		Set 26/07-32-13	
7				Signature Match Y N		Set 28/08-15-02	
8				Signature Match Y N		Set 19/08-32-12	
9				Signature Match Y N			
10				Signature Match Y N			
Custody Record MUST be Signed		Signature: <b>Eric Krantz</b> Date/Time: <b>5/22/08 0920</b>		Signature: <b>Steve Foreman</b> Date/Time: <b>5-22-08 9:20</b>		Signature: <b>Eric Krantz</b> Date/Time: <b>5-22-08 9:20</b>	
Sample Disposal: <b>Return to Client:</b>		Lab Disposal:		Received by Laboratory: <b>Steve Foreman</b> Date/Time: <b>5-22-08 9:20</b>		Signature: <b>Steve Foreman</b> Date/Time: <b>5-22-08 9:20</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.enervlab.com](http://www.enervlab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

July 30, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08050406 Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 6 samples from RESPEC Inc on 5/29/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050406-001	DewBurd GW698	05/28/08 12:35	05/29/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08050406-002	DewBurd GW698	05/28/08 12:45	05/29/08	Aqueous	Same As Above
R08050406-003	DewBurd GW3026	05/28/08 15:15	05/29/08	Aqueous	Same As Above
R08050406-004	DewBurd GW622	05/28/08 18:26	05/29/08	Aqueous	Same As Above
R08050406-005	DewBurd GW615	05/28/08 19:20	05/29/08	Aqueous	Same As Above
R08050406-006	DewBurd GW689	05/28/08 22:25	05/29/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By

Dewey-Burdock TR  
June 2011

2.7-H-928

Appendix 2.7-H



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-001  
Client Sample ID: DewBurd GW698

Report Date: 07/30/08  
Collection Date: 05/28/08 12:35  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	114	mg/L		5		1	A2320 B	06/02/08 11:18/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:18/mb
Bicarbonate as HCO3	139	mg/L		5		1	A2320 B	06/02/08 11:18/mb
Calcium	382	mg/L		0.5		2	E200.7	06/16/08 17:03/eli-c
Chloride	9	mg/L		1		1	E300.0	05/29/08 14:09/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/29/08 14:09/jmh
Magnesium	137	mg/L		0.5		2	E200.7	06/16/08 17:03/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:00/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 14:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 14:09/jmh
Potassium	15.5	mg/L		0.5		2	E200.7	06/16/08 17:03/eli-c
Silica	5.2	mg/L		0.5		2	E200.7	06/16/08 17:03/eli-c
Sodium	88	mg/L	D	2		2	E200.7	06/16/08 17:03/eli-c
Sulfate	1270	mg/L	D	3		50	E300.0	05/29/08 13:20/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2280	umhos/cm		5.0		1	A2510 B	05/29/08 15:14/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	06/04/08 00:00/jmh
pH	6.78	s.u.		0.01		1	A4500-H B	05/29/08 14:20/tb
Sodium Adsorption Ratio (SAR)	0.98	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	05/30/08 11:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:03/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 02:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:03/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/16/08 17:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 02:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:03/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 02:25/eli-c
Iron	1.69	mg/L		0.03		2	E200.7	06/16/08 17:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 02:25/eli-c
Manganese	2.31	mg/L		0.01		1	E200.8	06/24/08 12:31/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 02:25/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:03/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:03/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 12:31/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-001  
Client Sample ID: DewBurd GW698

Report Date: 07/30/08  
Collection Date: 05/28/08 12:35  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 02:25/eli-c
Uranium	0.101	mg/L		0.0003		1	E200.8	06/23/08 02:25/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:03/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:03/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0038	mg/L		0.0003		1	E200.8	06/26/08 00:28/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:13/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1210	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha precision (±)	33.2	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha MDC	6.1	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta	380	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta precision (±)	9.9	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta MDC	8.5	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Lead 210	5.5	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	413	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	3.7	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	4100	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	2.6	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	1.4	pCi/L		1.0		1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	14.0	pCi/L				1	E903.0	06/17/08 09:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-001  
Client Sample ID: DewBurd GW698

Report Date: 07/30/08  
Collection Date: 05/28/08 12:35  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	1.3	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.7	pCi/L		0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	25600	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	164	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 02:14/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/09/08 02:14/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/09/08 02:14/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 02:14/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/05/08 21:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 02:14/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 02:14/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 02:14/eli-c
Iron	4.60	mg/L		0.03		2	E200.7	06/05/08 21:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/09/08 02:14/eli-c
Manganese	2.32	mg/L		0.01		1	E200.8	06/09/08 02:14/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:01/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 02:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 02:14/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 02:14/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 18:54/eli-c
Strontium	4.8	mg/L		0.1		1	E200.8	06/09/08 02:14/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 02:14/eli-c
Uranium	0.116	mg/L		0.0003		1	E200.8	06/09/08 02:14/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/09/08 02:14/eli-c
DATA QUALITY								
A/C Balance (± 5)	9.13	%				1	A1030 E	07/18/08 00:00/jmh
Anions	28.9	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	34.8	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	1980	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.09					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-002  
Client Sample ID: DewBurd GW698

Report Date: 07/30/08  
Collection Date: 05/28/08 12:45  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	118	mg/L		5		1	A2320 B	06/02/08 11:23/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:23/mb
Bicarbonate as HCO3	144	mg/L		5		1	A2320 B	06/02/08 11:23/mb
Calcium	375	mg/L		0.5		2	E200.7	06/16/08 17:15/eli-c
Chloride	9	mg/L		1		1	E300.0	05/29/08 14:42/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	05/29/08 14:42/jmh
Magnesium	135	mg/L		0.5		2	E200.7	06/16/08 17:15/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:04/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 14:42/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 14:42/jmh
Potassium	15.4	mg/L		0.5		2	E200.7	06/16/08 17:15/eli-c
Silica	5.1	mg/L		0.5		2	E200.7	06/16/08 17:15/eli-c
Sodium	87	mg/L	D	2		2	E200.7	06/16/08 17:15/eli-c
Sulfate	1360	mg/L	D	3		50	E300.0	05/29/08 14:25/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2460	umhos/cm		5.0		1	A2510 B	05/29/08 15:15/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	06/04/08 00:00/jmh
pH	6.75	s.u.		0.01		1	A4500-H B	05/29/08 14:21/tb
Sodium Adsorption Ratio (SAR)	0.98	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	05/30/08 11:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:15/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 02:31/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:15/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/16/08 17:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 02:31/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 02:31/eli-c
Iron	1.56	mg/L		0.03		2	E200.7	06/16/08 17:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 02:31/eli-c
Manganese	2.23	mg/L		0.01		1	E200.8	06/23/08 02:31/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 02:31/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:15/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:15/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 12:38/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-002  
Client Sample ID: DewBurd GW698

Report Date: 07/30/08  
Collection Date: 05/28/08 12:45  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 02:31/eli-c
Uranium	0.103	mg/L		0.0003		1	E200.8	06/23/08 02:31/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:15/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:15/eli-c
METALS - SUSPENDED								
Uranium	0.0032	mg/L		0.0003		1	E200.8	06/26/08 00:35/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:19/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1390	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha precision (±)	35.6	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha MDC	6.1	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta	383	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta precision (±)	9.9	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta MDC	8.5	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Lead 210	9.4	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	412	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	3.7	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	3500	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	06/04/08 12:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	9.0	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	0.88	pCi/L				1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	13.5	pCi/L				1	E903.0	06/17/08 09:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050406-002  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/30/08  
**Collection Date:** 05/28/08 12:45  
**Date Received:** 05/29/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	22400	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	153	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 02:21/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	06/09/08 02:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/09/08 02:21/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 02:21/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/05/08 22:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 02:21/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 02:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 02:21/eli-c
Iron	4.88	mg/L		0.03		2	E200.7	06/05/08 22:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/09/08 02:21/eli-c
Manganese	2.45	mg/L		0.01		1	E200.8	06/09/08 02:21/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:03/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 02:21/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 02:21/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 02:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 19:28/eli-c
Strontium	5.0	mg/L		0.1		1	E200.8	06/09/08 02:21/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 02:21/eli-c
Uranium	0.119	mg/L		0.0003		1	E200.8	06/09/08 02:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/09/08 02:21/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.02	%				1	A1030 E	07/18/08 00:00/jmh
Anions	30.9	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	34.2	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	2060	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	07/18/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-003  
Client Sample ID: DewBurd GW3026

Report Date: 07/30/08  
Collection Date: 05/28/08 15:15  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	06/02/08 11:25/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:25/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	06/02/08 11:25/mb
Calcium	407	mg/L		0.5		2	E200.7	06/16/08 17:23/eli-c
Chloride	15	mg/L		1		1	E300.0	05/29/08 15:15/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/29/08 15:15/jmh
Magnesium	105	mg/L		0.5		2	E200.7	06/16/08 17:23/eli-c
Nitrogen, Ammonia as N	0.7	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:05/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 15:15/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 15:15/jmh
Potassium	25.3	mg/L		0.5		2	E200.7	06/16/08 17:23/eli-c
Silica	2.3	mg/L		0.5		2	E200.7	06/16/08 17:23/eli-c
Sodium	209	mg/L	D	2		2	E200.7	06/16/08 17:23/eli-c
Sulfate	1480	mg/L	D	3		50	E300.0	05/29/08 14:58/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2610	umhos/cm		5.0		1	A2510 B	05/29/08 15:17/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	06/04/08 00:00/jmh
pH	6.95	s.u.		0.01		1	A4500-H B	05/29/08 14:21/tb
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	2400	mg/L		5		1	A2540 C	05/30/08 11:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:23/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/23/08 02:58/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:23/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/16/08 17:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 02:58/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:23/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 02:58/eli-c
Iron	0.23	mg/L		0.03		2	E200.7	06/16/08 17:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 02:58/eli-c
Manganese	0.82	mg/L		0.01		1	E200.8	06/23/08 02:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 02:58/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:23/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:23/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:25/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:05/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050406-003  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 07/30/08  
**Collection Date:** 05/28/08 15:15  
**Date Received:** 05/29/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 02:58/eli-c
Uranium	0.0281	mg/L		0.0003		1	E200.8	06/23/08 02:58/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:23/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:23/eli-c
METALS - SUSPENDED								
Uranium	0.0013	mg/L		0.0003		1	E200.8	06/26/08 00:41/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:21/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	92.4	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha precision (±)	10.5	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha MDC	6.9	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta	28.3	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta precision (±)	5.6	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta MDC	8.6	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Lead 210	-0.7	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	9.6	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/04/08 12:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.0	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	1.2	pCi/L				1	E903.0	06/17/08 09:14/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050406-003  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 07/30/08  
**Collection Date:** 05/28/08 15:15  
**Date Received:** 05/29/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	213	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	37.0	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 02:48/eli-c
Arsenic	0.028	mg/L		0.001		1	E200.8	06/09/08 02:48/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/09/08 02:48/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 02:48/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/05/08 22:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 02:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 02:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 02:48/eli-c
Iron	11.1	mg/L		0.03		2	E200.7	06/05/08 22:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/09/08 02:48/eli-c
Manganese	0.87	mg/L		0.01		1	E200.8	06/09/08 02:48/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:06/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 02:48/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 02:48/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 02:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 19:34/eli-c
Strontium	7.0	mg/L		0.1		1	E200.8	06/09/08 02:48/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 02:48/eli-c
Uranium	0.0322	mg/L		0.0003		1	E200.8	06/09/08 02:48/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	06/09/08 02:48/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.90	%				1	A1030 E	07/18/08 00:00/jmh
Anions	34.5	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	38.8	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	2340	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	07/18/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-004  
Client Sample ID: DewBurd GW622

Report Date: 07/30/08  
Collection Date: 05/28/08 18:26  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	178	mg/L		5		1	A2320 B	06/02/08 11:27/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:27/mb
Bicarbonate as HCO3	217	mg/L		5		1	A2320 B	06/02/08 11:27/mb
Calcium	97.5	mg/L		0.5		2	E200.7	06/16/08 17:27/eli-c
Chloride	10	mg/L		1		1	E300.0	05/29/08 15:47/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/29/08 15:47/jmh
Magnesium	32.7	mg/L		0.5		2	E200.7	06/16/08 17:27/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:06/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 15:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 15:47/jmh
Potassium	10.6	mg/L		0.5		2	E200.7	06/16/08 17:27/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	06/16/08 17:27/eli-c
Sodium	182	mg/L	D	2		2	E200.7	06/16/08 17:27/eli-c
Sulfate	493	mg/L	D	3		50	E300.0	05/29/08 15:31/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1220	umhos/cm		5.0		1	A2510 B	05/29/08 15:18/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.52	s.u.		0.01		1	A4500-H B	05/29/08 14:23/tb
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	05/30/08 12:00/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:27/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 03:05/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:27/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 17:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 03:05/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 03:05/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 17:27/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	06/23/08 03:05/eli-c
Manganese	0.20	mg/L		0.01		2	E200.7	06/16/08 17:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 03:05/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:27/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:27/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:12/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-004  
Client Sample ID: DewBurd GW622

Report Date: 07/30/08  
Collection Date: 05/28/08 18:26  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 03:05/eli-c
Uranium	0.0056	mg/L		0.0003		1	E200.8	06/23/08 03:05/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:27/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:27/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0005	mg/L		0.0003		1	E200.8	06/26/08 00:48/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:23/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	32.6	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta	11.9	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Gross Beta MDC	3.2	pCi/L				1	E900.0	06/26/08 11:24/eli-c
Lead 210	1.2	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	-0.3	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	3.2	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	150	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	46	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.9	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	2.5	pCi/L		1.0		1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	1.0	pCi/L				1	E903.0	06/17/08 09:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-004  
Client Sample ID: DewBurd GW622

Report Date: 07/30/08  
Collection Date: 05/28/08 18:26  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	804	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	43.3	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 02:55/eli-c
Arsenic	0.006	mg/L		0.001		1	E200.8	06/09/08 02:55/eli-c
Barium	0.2	mg/L		0.1		1	E200.8	06/09/08 02:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 02:55/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/05/08 22:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 02:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 02:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 02:55/eli-c
Iron	10.7	mg/L		0.03		2	E200.7	06/05/08 22:48/eli-c
Lead	0.023	mg/L		0.001		1	E200.8	06/09/08 02:55/eli-c
Manganese	0.25	mg/L		0.01		1	E200.8	06/09/08 02:55/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:13/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 02:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 02:55/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 02:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 19:41/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	06/09/08 02:55/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 02:55/eli-c
Uranium	0.0068	mg/L		0.0003		1	E200.8	06/09/08 02:55/eli-c
Zinc	0.25	mg/L		0.01		1	E200.8	06/09/08 02:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.53	%				1	A1030 E	07/18/08 00:00/jmh
Anions	14.1	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	15.8	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	944	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	07/18/08 00:00/jmh

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-005  
Client Sample ID: DewBurd GW615

Report Date: 07/30/08  
Collection Date: 05/28/08 19:20  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	138	mg/L		5		1	A2320 B	06/02/08 11:30/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:30/mb
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	06/02/08 11:30/mb
Calcium	79.2	mg/L		0.5		2	E200.7	06/16/08 17:31/eli-c
Chloride	5	mg/L		1		1	E300.0	05/29/08 16:20/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/29/08 16:20/jmh
Magnesium	23.2	mg/L		0.5		2	E200.7	06/16/08 17:31/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:07/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 16:20/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 16:20/jmh
Potassium	9.0	mg/L		0.5		2	E200.7	06/16/08 17:31/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	06/16/08 17:31/eli-c
Sodium	134	mg/L	D	2		2	E200.7	06/16/08 17:31/eli-c
Sulfate	399	mg/L	D	3		50	E300.0	05/29/08 16:04/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1050	umhos/cm		5.0		1	A2510 B	05/29/08 15:20/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.16	s.u.		0.01		1	A4500-H B	05/29/08 14:25/tb
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	710	mg/L		5		1	A2540 C	05/30/08 12:01/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:31/eli-c
Arsenic	0.013	mg/L		0.001		1	E200.8	06/23/08 03:12/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:31/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 17:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 03:12/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 03:12/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	06/16/08 17:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 03:12/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	06/23/08 03:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 03:12/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:31/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:31/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:19/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-005  
Client Sample ID: DewBurd GW615

Report Date: 07/30/08  
Collection Date: 05/28/08 19:20  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 03:12/eli-c
Uranium	0.0024	mg/L		0.0003		1	E200.8	06/23/08 03:12/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:31/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:31/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 00:55/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:25/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	15.3	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Alpha precision (±)	2.5	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Alpha MDC	2.1	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta	3.7	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta precision (±)	1.8	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta MDC	2.8	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Lead 210	3.8	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	2.0	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	170	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	46	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1.5	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	06/17/08 09:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-005  
Client Sample ID: DewBurd GW615

Report Date: 07/30/08  
Collection Date: 05/28/08 19:20  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1070	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	45.9	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 03:02/eli-c
Arsenic	0.024	mg/L		0.001		1	E200.8	06/09/08 03:02/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/09/08 03:02/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 03:02/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/05/08 22:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 03:02/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 03:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 03:02/eli-c
Iron	1.40	mg/L		0.03		2	E200.7	06/05/08 22:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/09/08 03:02/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	06/09/08 03:02/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:15/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 03:02/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 03:02/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 03:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 19:48/eli-c
Strontium	1.4	mg/L		0.1		1	E200.8	06/09/08 03:02/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 03:02/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	06/09/08 03:02/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/09/08 03:02/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.00	%				1	A1030 E	07/18/08 00:00/jmh
Anions	11.2	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	11.9	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	745	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-006  
Client Sample ID: DewBurd GW689

Report Date: 07/30/08  
Collection Date: 05/28/08 22:25  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	148	mg/L		5		1	A2320 B	06/02/08 11:40/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:40/mb
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	06/02/08 11:40/mb
Calcium	49.2	mg/L		0.5		2	E200.7	06/16/08 17:35/eli-c
Chloride	5	mg/L		1		1	E300.0	05/29/08 17:59/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/29/08 17:59/jmh
Magnesium	16.4	mg/L		0.5		2	E200.7	06/16/08 17:35/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:09/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/29/08 17:59/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/29/08 17:59/jmh
Potassium	8.1	mg/L		0.5		2	E200.7	06/16/08 17:35/eli-c
Silica	4.6	mg/L		0.5		2	E200.7	06/16/08 17:35/eli-c
Sodium	184	mg/L	D	2		2	E200.7	06/16/08 17:35/eli-c
Sulfate	400	mg/L	D	3		50	E300.0	05/29/08 17:10/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1010	umhos/cm		5.0		1	A2510 B	05/29/08 15:23/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.80	s.u.		0.01		1	A4500-H B	05/29/08 14:26/tb
Sodium Adsorption Ratio (SAR)	5.8	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	730	mg/L		5		1	A2540 C	05/30/08 12:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 17:35/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	06/23/08 03:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 17:35/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 17:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 03:19/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 17:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 03:19/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 17:35/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 03:19/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	06/16/08 17:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 03:19/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 17:35/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 17:35/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:26/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-006  
Client Sample ID: DewBurd GW689

Report Date: 07/30/08  
Collection Date: 05/28/08 22:25  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 03:19/eli-c
Uranium	0.0043	mg/L		0.0003		1	E200.8	06/23/08 03:19/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 17:35/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 17:35/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0004	mg/L		0.0003		1	E200.8	06/26/08 01:01/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	34.9	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Alpha MDC	2.2	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta	12.2	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta precision (±)	1.9	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	06/27/08 00:01/eli-c
Lead 210	6.3	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	-0.4	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	5.7	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	06/16/08 22:01/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	150	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	40	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-2	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	0.5	pCi/L	U			1	E903.0	06/17/08 09:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050406-006  
Client Sample ID: DewBurd GW689

Report Date: 07/30/08  
Collection Date: 05/28/08 22:25  
Date Received: 05/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:14/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1390	pCi/L		100		1	D5072-92	05/31/08 02:56/eli-c
Radon 222 precision (±)	48.3	pCi/L				1	D5072-92	05/31/08 02:56/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/09/08 03:08/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	06/09/08 03:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/09/08 03:08/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/09/08 03:08/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/05/08 22:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/09/08 03:08/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/09/08 03:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/09/08 03:08/eli-c
Iron	1.33	mg/L		0.03		2	E200.7	06/05/08 22:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/09/08 03:08/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	06/09/08 03:08/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:17/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/09/08 03:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/09/08 03:08/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/09/08 03:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 19:55/eli-c
Strontium	1.0	mg/L		0.1		1	E200.8	06/09/08 03:08/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/09/08 03:08/eli-c
Uranium	0.0117	mg/L		0.0003		1	E200.8	06/09/08 03:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/09/08 03:08/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.36	%				1	A1030 E	07/18/08 00:00/jmh
Anions	11.5	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	12.0	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	764	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080602A-ALK-SEL-W							
Sample ID: LCS1_080602A	Laboratory Control Sample				Run: PH_COND1-R_080602A		06/02/08 10:56		
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_080602A	Method Blank				Run: PH_COND1-R_080602A		06/02/08 12:28		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050406-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080602A		06/02/08 11:35		
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	98	80	120			
Sample ID: R08050406-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080602A		06/02/08 11:38		
Alkalinity, Total as CaCO <sub>3</sub>	244	mg/L	5.0	100	80	120	0.8	10	
Method: A2510 B		Batch: 080529_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080529	Laboratory Control Sample				Run: PH_COND2-R_080529C		05/29/08 15:04		
Conductivity @ 25 C	1390	umhos/cm	5.0	98	90	110			
Sample ID: LCS1-1_080529	Laboratory Control Sample				Run: PH_COND2-R_080529C		05/29/08 15:02		
Conductivity @ 25 C	153	umhos/cm	5.0	102	90	110			
Sample ID: LCS2-1_080529	Laboratory Control Sample				Run: PH_COND2-R_080529C		05/29/08 15:01		
Conductivity @ 25 C	4890	umhos/cm	5.0	98	90	110			
Sample ID: R08050406-005ADUP	Sample Duplicate				Run: PH_COND2-R_080529C		05/29/08 15:22		
Conductivity @ 25 C	1040	umhos/cm	5.0				1.0	10	
Method: A2540 C		Batch: 080530A-SLDS-TDS-W							
Sample ID: LCS1_080530A	Laboratory Control Sample				Run: BAL-4-R_080530A		05/30/08 11:44		
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_080530A	Method Blank				Run: BAL-4-R_080530A		05/30/08 11:45		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08050406-003AMS	Sample Matrix Spike				Run: BAL-4-R_080530A		05/30/08 11:59		
Solids, Total Dissolved TDS @ 180 C	2700	mg/L	5.0	147	80	120			S
Sample ID: R08050406-003AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080530A		05/30/08 12:00		
Solids, Total Dissolved TDS @ 180 C	2700	mg/L	5.0	135	80	120	0.9	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080604-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080604B		06/04/08 00:00		
Oxidation-Reduction Potential	470	mV		100	95	105			
Sample ID: R08050406-001F	Sample Duplicate				Run: PH_COND1-R_080604B		06/04/08 00:00		
Oxidation-Reduction Potential	210	mV					3.2	10	
Method: A3114 B							Batch: C_SE3114-080620A		
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C102993		06/20/08 10:11		
Selenium-IV	0.049	mg/L	0.0010	99	90	110			
Sample ID: R08050356-001A	Sample Matrix Spike				Run: SUB-C102993		06/20/08 10:45		
Selenium-IV	0.069	mg/L	0.0010	137	85	115			S
Sample ID: R08050356-001A	Sample Matrix Spike Duplicate				Run: SUB-C102993		06/20/08 10:48		
Selenium-IV	0.075	mg/L	0.0010	151	85	115	9.3	10	S
Method: A3114 B							Batch: C_SE3114-080620C		
Sample ID: MBLK	Method Blank				Run: SUB-C103018		06/20/08 15:10		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C103018		06/20/08 15:14		
Selenium	0.049	mg/L	0.0010	99	90	110			
Sample ID: R08050356-001A	Sample Matrix Spike				Run: SUB-C103018		06/20/08 15:48		
Selenium	0.073	mg/L	0.0010	146	85	115			S
Sample ID: R08050356-001A	Sample Matrix Spike Duplicate				Run: SUB-C103018		06/20/08 15:50		
Selenium	0.073	mg/L	0.0010	145	85	115	0.0	10	S
Method: A4500-H B							Batch: 080529_1-PH-W		
Sample ID: LCS_pH-1_080529	Laboratory Control Sample				Run: PH_COND2-R_080529A		05/29/08 14:07		
pH	6.92	s.u.	0.010	101	98.55	101.45			
Sample ID: R08050406-003ADUP	Sample Duplicate				Run: PH_COND2-R_080529A		05/29/08 14:24		
pH	6.99	s.u.	0.010				0.6	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>							Batch: A2008-06-03_2_NH3_01		
<b>Sample ID: MBLK-2</b>	Method Blank					Run: TECHAA2-R_080603A			06/03/08 11:58
Nitrogen, Ammonia as N	ND	mg/L	0.01						
<b>Sample ID: LFB-3</b>	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:01
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
<b>Sample ID: LFB-4</b>	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:14
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
<b>Sample ID: R08050406-001BMSD</b>	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080603A			06/03/08 13:03
Nitrogen, Ammonia as N	0.45	mg/L	0.10	110	80	120			
<b>Sample ID: R08050419-001BMS</b>	Sample Matrix Spike					Run: TECHAA2-R_080603A			06/03/08 13:13
Nitrogen, Ammonia as N	0.48	mg/L	0.10	104	80	120			
<b>Sample ID: R08050419-001BMSD</b>	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080603A			06/03/08 13:14
Nitrogen, Ammonia as N	0.45	mg/L	0.10	90	80	120	7.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102753		
Sample ID: MB-080616A	Method Blank		Run: SUB-C102753				06/16/08 15:33		
Silica	ND	mg/L	0.02						
Aluminum	0.01	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.005	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	0.002	mg/L	0.002						
Sample ID: LFB-080616A	Laboratory Fortified Blank		Run: SUB-C102753				06/16/08 15:37		
Silica	0.37	mg/L	0.10	92	85	125			
Aluminum	0.99	mg/L	0.10	98	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.00	mg/L	0.10	98	85	125			
Calcium	53	mg/L	0.50	105	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	111	85	125			
Magnesium	52	mg/L	0.50	104	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	0.98	mg/L	0.10	98	85	125			
Nickel	1.0	mg/L	0.050	100	85	125			
Potassium	46	mg/L	0.50	91	85	125			
Sodium	51	mg/L	0.77	102	85	125			
Vanadium	1.0	mg/L	0.10	104	85	125			
Zinc	1.0	mg/L	0.010	100	85	125			
Sample ID: C08060096-002CMS2	Sample Matrix Spike		Run: SUB-C102753				06/16/08 18:08		
Aluminum	1.95	mg/L	0.10	98	70	130			
Barium	2.08	mg/L	0.10	104	70	130			
Boron	2.10	mg/L	0.10	102	70	130			
Chromium	2.09	mg/L	0.050	104	70	130			
Iron	2.14	mg/L	0.030	106	70	130			
Manganese	2.13	mg/L	0.010	103	70	130			
Molybdenum	2.00	mg/L	0.10	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102753		
Sample ID: C08060096-002CMS2	Sample Matrix Spike		Run: SUB-C102753				06/16/08 18:08		
Nickel	2.06	mg/L	0.050	103	70	130			
Vanadium	2.12	mg/L	0.10	104	70	130			
Zinc	2.10	mg/L	0.010	104	70	130			
Calcium	141	mg/L	1.0	102	70	130			
Magnesium	117	mg/L	1.0	104	70	130			
Potassium	98.4	mg/L	1.0	92	70	130			
Silica	4.58	mg/L	0.10		70	130			A
Sodium	372	mg/L	1.5	95	70	130			
Sample ID: C08060096-002CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C102753				06/16/08 18:12		
Aluminum	1.98	mg/L	0.10	99	70	130	1.6	20	
Barium	2.12	mg/L	0.10	106	70	130	2.0	20	
Boron	2.16	mg/L	0.10	105	70	130	2.9	20	
Chromium	2.13	mg/L	0.050	106	70	130	1.9	20	
Iron	2.16	mg/L	0.030	108	70	130	1.2	20	
Manganese	2.17	mg/L	0.010	105	70	130	1.9	20	
Molybdenum	2.06	mg/L	0.10	103	70	130	3.2	20	
Nickel	2.12	mg/L	0.050	106	70	130	2.4	20	
Vanadium	2.21	mg/L	0.10	108	70	130	4.1	20	
Zinc	2.15	mg/L	0.010	106	70	130	2.4	20	
Calcium	145	mg/L	1.0	106	70	130	2.7	20	
Magnesium	121	mg/L	1.0	107	70	130	2.7	20	
Potassium	99.1	mg/L	1.0	92	70	130	0.7	20	
Silica	4.65	mg/L	0.10		70	130	1.3	20	A
Sodium	369	mg/L	1.5	92	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103038		
Sample ID: LRB	Method Blank		Run: SUB-C103038				06/22/08 13:02		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Thorium 232	8E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C103038				06/22/08 14:35		
Arsenic	0.0517	mg/L	0.0010	103	85	115			
Cadmium	0.0524	mg/L	0.0010	105	85	115			
Copper	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0527	mg/L	0.0010	105	85	115			
Manganese	0.0530	mg/L	0.0010	106	85	115			
Mercury	0.00507	mg/L	0.0010	101	85	115			
Thorium 232	0.0520	mg/L	0.0010	104	85	115			
Uranium	0.0525	mg/L	0.00030	105	85	115			
Sample ID: R08050419-003C	Post Digestion Spike		Run: SUB-C103038				06/22/08 19:53		
Arsenic	0.0536	mg/L	0.0010	106	70	130			
Cadmium	0.0507	mg/L	0.010	101	70	130			
Copper	0.0505	mg/L	0.010	100	70	130			
Lead	0.0543	mg/L	0.050	109	70	130			
Manganese	0.136	mg/L	0.010	100	70	130			
Mercury	0.00517	mg/L	0.0010	103	70	130			
Thorium 232	0.0561	mg/L	0.0010	112	70	130			
Uranium	0.0558	mg/L	0.00030	111	70	130			
Sample ID: R08050419-003C	Post Digestion Spike Duplicate		Run: SUB-C103038				06/22/08 20:00		
Arsenic	0.0548	mg/L	0.0010	108	70	130	2.2	20	
Cadmium	0.0519	mg/L	0.010	104	70	130	2.3	20	
Copper	0.0510	mg/L	0.010	101	70	130	0.8	20	
Lead	0.0549	mg/L	0.050	110	70	130	1.2	20	
Manganese	0.138	mg/L	0.010	103	70	130	0.9	20	
Mercury	0.00531	mg/L	0.0010	106	70	130	2.7	20	
Thorium 232	0.0571	mg/L	0.0010	114	70	130	1.8	20	
Uranium	0.0567	mg/L	0.00030	113	70	130	1.7	20	
Sample ID: C08060423-001BMS	Sample Matrix Spike		Run: SUB-C103038				06/23/08 02:04		
Arsenic	0.0502	mg/L	0.0010	91	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103038		
Sample ID: C08060423-001BMS	Sample Matrix Spike			Run: SUB-C103038			06/23/08 02:04		
Cadmium	0.0433	mg/L	0.0010	87	70	130			
Copper	0.0491	mg/L	0.0010	95	70	130			
Lead	0.0532	mg/L	0.0010	105	70	130			
Manganese	0.0789	mg/L	0.0010	93	70	130			
Mercury	0.00506	mg/L	0.0010	101	70	130			
Thorium 232	0.0551	mg/L	0.0010	109	70	130			
Uranium	0.0552	mg/L	0.00030	110	70	130			
Sample ID: C08060423-001BMSD	Sample Matrix Spike Duplicate			Run: SUB-C103038			06/23/08 02:11		
Arsenic	0.0527	mg/L	0.0010	96	70	130	4.9	20	
Cadmium	0.0451	mg/L	0.0010	90	70	130	4.1	20	
Copper	0.0526	mg/L	0.0010	102	70	130	6.9	20	
Lead	0.0559	mg/L	0.0010	110	70	130	4.9	20	
Manganese	0.0827	mg/L	0.0010	101	70	130	4.7	20	
Mercury	0.00530	mg/L	0.0010	106	70	130	4.7	20	
Thorium 232	0.0588	mg/L	0.0010	117	70	130	6.5	20	
Uranium	0.0583	mg/L	0.00030	116	70	130	5.5	20	
Method: E200.8							Batch: C_R103200		
Sample ID: LRB	Method Blank			Run: SUB-C103200			06/24/08 11:37		
Manganese	ND	mg/L	5E-05						
Silver	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C103200			06/24/08 11:44		
Manganese	0.0499	mg/L	0.0010	100	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Sample ID: C08060096-004CMS4	Post Digestion Spike			Run: SUB-C103200			06/24/08 13:59		
Manganese	1.01	mg/L	0.010		70	130			A
Silver	0.0131	mg/L	0.010	66	70	130			S
Sample ID: C08060096-004CMSD4	Post Digestion Spike Duplicate			Run: SUB-C103200			06/24/08 14:26		
Manganese	0.994	mg/L	0.010		70	130	1.9	20	A
Silver	0.0127	mg/L	0.010	63	70	130	3.6	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: C_B_33012		
Sample ID: B08060960-003CMS	Sample Matrix Spike				Run: SUB-C102832		06/17/08 09:36		
Mercury	0.0019	mg/L	0.0010	90	70	130			
Sample ID: B08060960-003CMSD	Sample Matrix Spike Duplicate				Run: SUB-C102832		06/17/08 09:39		
Mercury	0.0020	mg/L	0.0010	95	70	130	4.7	30	
Sample ID: MB-33012	Method Blank				Run: SUB-C102832		06/17/08 09:25		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33012	Laboratory Fortified Blank				Run: SUB-C102832		06/17/08 09:28		
Mercury	0.0017	mg/L	0.0010	86	85	115			
Sample ID: B08060966-003BMS	Sample Matrix Spike				Run: SUB-C102832		06/17/08 11:27		
Mercury	0.0017	mg/L	0.0010	86	70	130			
Sample ID: B08060966-003BMSD	Sample Matrix Spike Duplicate				Run: SUB-C102832		06/17/08 11:29		
Mercury	0.0017	mg/L	0.0010	83	70	130	3.6	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R35055
Sample ID: LFB0805292120-1	Laboratory Fortified Blank			Run: DIONEX_080530A			05/29/08 12:14		
Chloride	4.69	mg/L	0.50	94	90	110			
Fluoride	1.81	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.25	mg/L	0.10	90	90	110			
Nitrogen, Nitrite as N	2.34	mg/L	0.10	94	90	110			
Sulfate	13.5	mg/L	1.0	90	90	110			
Sample ID: LFB0805292120-4	Laboratory Fortified Blank			Run: DIONEX_080530A			05/29/08 13:03		
Chloride	4.87	mg/L	0.50	97	90	110			
Fluoride	1.84	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
Sulfate	13.9	mg/L	1.0	93	90	110			
Sample ID: R08050406-001AMS	Sample Matrix Spike			Run: DIONEX_080530A			05/29/08 13:36		
Chloride	252	mg/L	5.4	86	80	120			
Fluoride	92.0	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120			
Nitrogen, Nitrite as N	121	mg/L	2.9	97	80	120			
Sulfate	1920	mg/L	3.4	88	80	120			
Sample ID: R08050406-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080530A			05/29/08 13:53		
Chloride	247	mg/L	5.4	84	80	120	2.2	10	
Fluoride	89.8	mg/L	0.56	83	80	120	2.4	10	
Nitrogen, Nitrate as N	113	mg/L	1.3	91	80	120	2.7	10	
Nitrogen, Nitrite as N	118	mg/L	2.9	94	80	120	2.5	10	
Sulfate	1890	mg/L	3.4	83	80	120	1.9	10	
Sample ID: R08050406-006AMS	Sample Matrix Spike			Run: DIONEX_080530A			05/29/08 17:26		
Chloride	237	mg/L	5.4	86	80	120			
Fluoride	92.5	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120			
Nitrogen, Nitrite as N	121	mg/L	2.9	97	80	120			
Sulfate	1010	mg/L	3.4	82	80	120			
Sample ID: R08050406-006AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080530A			05/29/08 17:42		
Chloride	238	mg/L	5.4	86	80	120	0.5	10	
Fluoride	93.0	mg/L	0.56	86	80	120	0.5	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	93	80	120	0.4	10	
Nitrogen, Nitrite as N	122	mg/L	2.9	97	80	120	0.5	10	
Sulfate	1000	mg/L	3.4	81	80	120	1.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0465		
Sample ID: MB-GrAB-0465	Method Blank					Run: SUB-C103416			06/26/08 11:24
Gross Alpha	0.5	pCi/L							
Gross Beta	-2	pCi/L							
Sample ID: UNAT-GrAB-0465	Laboratory Control Sample					Run: SUB-C103416			06/26/08 11:24
Gross Alpha	150	pCi/L		106	70	130			
Sample ID: C08060007-003EMS	Sample Matrix Spike					Run: SUB-C103416			06/26/08 11:24
Gross Alpha	240	pCi/L		98	70	130			
Sample ID: C08060007-003EMSD	Sample Matrix Spike Duplicate					Run: SUB-C103416			06/26/08 11:24
Gross Alpha	230	pCi/L		90	70	130	4.7	15.3	
Method: E903.0							Batch: C_18760		
Sample ID: C08051260-001IMS	Sample Matrix Spike					Run: SUB-C102780			06/17/08 09:14
Radium 226	34	pCi/L		108	70	130			
Sample ID: C08051260-001IMSD	Sample Matrix Spike Duplicate					Run: SUB-C102780			06/17/08 09:14
Radium 226	32	pCi/L		97	70	130	6.8	21.5	
Sample ID: MB-18760	Method Blank					Run: SUB-C102780			06/17/08 10:48
Radium 226	-2	pCi/L							U
Sample ID: LCS-18760	Laboratory Control Sample					Run: SUB-C102780			06/17/08 10:48
Radium 226	17	pCi/L		111	70	130			
Method: E907.0							Batch: C_18760		
Sample ID: R08050419-002I	Sample Matrix Spike					Run: SUB-C103470			06/13/08 13:30
Thorium 230	22.2	pCi/L	0.20	95	70	130			
Sample ID: R08050419-002I	Sample Matrix Spike Duplicate					Run: SUB-C103470			06/13/08 13:30
Thorium 230	22.6	pCi/L	0.20	98	70	130	1.8	30	
Method: E907.0							Batch: C_R103514		
Sample ID: C08060096-003HMS	Sample Matrix Spike					Run: SUB-C103514			06/16/08 13:30
Thorium 230	12.4	pCi/L	0.20	102	70	130			
Sample ID: C08060096-003HMSD	Sample Matrix Spike Duplicate					Run: SUB-C103514			06/16/08 13:30
Thorium 230	11.0	pCi/L	0.20	90	70	130	12	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 07/30/08

Project: Edgemont

Work Order: R08050406

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_18760		
<b>Sample ID: C08051260-002IMS</b>	Sample Matrix Spike				Run: SUB-C103520		06/11/08 06:30		
Lead 210	3000	pCi/L		127	70	130			
<b>Sample ID: C08051260-002IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103520		06/11/08 06:30		
Lead 210	2100	pCi/L		89	70	130	35	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
<b>Method: RMO-3008</b>							Batch: C_18760		
<b>Sample ID: C08060130-004FMS</b>	Sample Matrix Spike				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	51	pCi/L	1.0	117	70	130			
<b>Sample ID: C08060130-004FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	48	pCi/L	1.0	109	70	130	6.9	30	
<b>Method: RMO-3008</b>							Batch: C_R103750		
<b>Sample ID: R08050356-004K</b>	Sample Matrix Spike				Run: SUB-C103750		07/01/08 14:30		
Polonium 210	180	pCi/L	1.0	109	70	130			
<b>Sample ID: R08050356-004K</b>	Sample Matrix Spike Duplicate				Run: SUB-C103750		07/01/08 14:30		
Polonium 210	170	pCi/L	1.0	101	70	130	8.2	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>Power Tech Darryl Funder</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Cory Foreman @ respec.com</b>		Phone/Fax:	Sampler: (Please Print) <b>Eric KANE</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - EI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP State: _____ <input type="checkbox"/> Other: _____  <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by:	
				Cooler Date:	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	Contact EI prior to RUSH sample submittal for charges and scheduling - See instruction Page  Comments: <b>All GW</b>
1 DewBurck GW 698		5-28-08	12:35	W	
2 DewBurck GW 698		5-28-08	12:45	W	
3 DewBurck GW 3024		5-28-08	15:15	W	
4 DewBurck GW 622		5-28-08	18:26	W	
5 DewBurck GW 615		5-28-08	19:20	W	
6 DewBurck GW 689		5-28-08	22:25	W	
7					
8					
9					
10					
Custody Record Must be Signed		Relinquished by (print): <b>Eric Kane</b>	Date/Time: <b>5/29/08 0515</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Eric Kane</b>
Sample Disposal: Return to Client		Lab Disposal:		Received by (print): <b>Eric Kane</b>	Date/Time: <b>5/29/08 0515</b>



## ANALYTICAL SUMMARY REPORT

July 30, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050419

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 5/30/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050419-001	DewBurd GW7002	05/29/08 10:44	05/30/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08050419-002	DewBurd GW7	05/29/08 11:10	05/30/08	Aqueous	Same As Above
R08050419-003	DewBurd GW8	05/29/08 11:41	05/30/08	Aqueous	Same As Above
R08050419-004	DewBurd GW628	05/29/08 15:02	05/30/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
Linda Larson



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050419-001  
**Client Sample ID:** DewBurd GW7002

**Report Date:** 07/30/08  
**Collection Date:** 05/29/08 10:44  
**Date Received:** 05/30/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	254	mg/L		5		1	A2320 B	06/02/08 11:43/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:43/mb
Bicarbonate as HCO3	310	mg/L		5		1	A2320 B	06/02/08 11:43/mb
Calcium	264	mg/L		0.5		2	E200.7	06/16/08 19:25/eli-c
Chloride	9	mg/L		1		1	E300.0	05/31/08 21:14/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	05/31/08 21:14/jmh
Magnesium	103	mg/L		0.5		2	E200.7	06/16/08 19:25/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:12/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/31/08 21:14/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/31/08 21:14/jmh
Potassium	21.7	mg/L		0.5		2	E200.7	06/16/08 19:25/eli-c
Silica	3.4	mg/L		0.5		2	E200.7	06/16/08 19:25/eli-c
Sodium	197	mg/L	D	2		2	E200.7	06/16/08 19:25/eli-c
Sulfate	1020	mg/L	D	3		50	E300.0	05/31/08 20:58/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2480	umhos/cm		5.0		1	A2510 B	06/02/08 15:03/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.36	s.u.		0.01		1	A4500-H B	06/02/08 15:40/tb
Sodium Adsorption Ratio (SAR)	2.6	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	05/30/08 12:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 19:25/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/22/08 19:12/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 19:25/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 19:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/22/08 19:12/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 19:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/22/08 19:12/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	06/16/08 19:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/22/08 19:12/eli-c
Manganese	0.41	mg/L		0.01		2	E200.7	06/16/08 19:25/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/22/08 19:12/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 19:25/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 19:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/22/08 19:12/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-001  
Client Sample ID: DewBurd GW7002

Report Date: 07/30/08  
Collection Date: 05/29/08 10:44  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL	DF			
METALS - DISSOLVED									
Thorium 232	ND	mg/L		0.005			1	E200.8	06/22/08 19:12/eli-c
Uranium	0.0005	mg/L		0.0003			1	E200.8	06/22/08 19:12/eli-c
Vanadium	ND	mg/L		0.1			2	E200.7	06/16/08 19:25/eli-c
Zinc	ND	mg/L		0.01			2	E200.7	06/16/08 19:25/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	06/26/08 01:08/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	06/20/08 11:02/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	29.5	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	6.5	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	7.4	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta	28.4	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	5.1	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	7.7	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Lead 210	-0.6	pCi/L	U				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L					1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.5	pCi/L					1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	0.1	pCi/L	U	1.0			1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L					1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	8.0	pCi/L					1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	06/30/08 17:02/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	06/30/08 17:02/eli-c
Gross Gamma	0.0	pCi/L	U	20			1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/04/08 12:00/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	-1.1	pCi/L	U				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.5	pCi/L					1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L					1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	0.2	pCi/L	U	1.0			1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.43	pCi/L					1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	0.0	pCi/L	U				1	E903.0	06/17/08 09:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-001  
Client Sample ID: DewBurd GW7002

Report Date: 07/30/08  
Collection Date: 05/29/08 10:44  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1270	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	109	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/13/08 20:31/eli-c
Arsenic	0.004	mg/L	D	0.002		1	E200.8	06/13/08 20:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/13/08 20:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/13/08 20:31/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 20:28/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/13/08 20:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/13/08 20:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/13/08 20:31/eli-c
Iron	1.32	mg/L		0.03		2	E200.7	06/13/08 20:28/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/13/08 20:31/eli-c
Manganese	0.40	mg/L		0.01		1	E200.8	06/13/08 20:31/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	06/13/08 20:31/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:41/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/13/08 20:31/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/13/08 20:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/13/08 20:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 14:58/eli-c
Strontium	7.7	mg/L		0.1		1	E200.8	06/13/08 20:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/13/08 20:31/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	06/13/08 20:31/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/13/08 20:31/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.56	%				1	A1030 E	07/30/08 00:00/jmh
Anions	26.5	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	30.9	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	1780	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-002  
Client Sample ID: DewBurd GW7

Report Date: 07/30/08  
Collection Date: 05/29/08 11:10  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	170	mg/L		5		1	A2320 B	06/02/08 11:45/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:45/mb
Bicarbonate as HCO3	207	mg/L		5		1	A2320 B	06/02/08 11:45/mb
Calcium	42.1	mg/L		0.5		2	E200.7	06/16/08 19:29/eli-c
Chloride	11	mg/L		1		1	E300.0	05/31/08 21:47/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/31/08 21:47/jmh
Magnesium	18.2	mg/L		0.5		2	E200.7	06/16/08 19:29/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:16/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/31/08 21:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/31/08 21:47/jmh
Potassium	11.0	mg/L		0.5		2	E200.7	06/16/08 19:29/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	06/16/08 19:29/eli-c
Sodium	300	mg/L	D	2		2	E200.7	06/16/08 19:29/eli-c
Sulfate	514	mg/L	D	3		50	E300.0	05/31/08 21:31/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1650	umhos/cm		5.0		1	A2510 B	06/02/08 15:04/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	06/04/08 00:00/jmh
pH	8.17	s.u.		0.01		1	A4500-H B	06/02/08 15:42/tb
Sodium Adsorption Ratio (SAR)	9.7	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	05/30/08 12:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 19:29/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/22/08 19:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 19:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 19:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/22/08 19:19/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 19:29/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/22/08 19:19/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 19:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/22/08 19:19/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	06/22/08 19:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/22/08 19:19/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 19:29/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 19:29/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/22/08 19:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-002  
Client Sample ID: DewBurd GW7

Report Date: 07/30/08  
Collection Date: 05/29/08 11:10  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/22/08 19:19/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/22/08 19:19/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 19:29/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 19:29/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 01:15/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:05/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	3.3	pCi/L	U			1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.2	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	9.6	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	0.5	pCi/L	U			1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.5	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	0.9	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/30/08 17:02/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	06/30/08 17:02/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-7.4	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.4	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	06/17/08 09:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-002  
Client Sample ID: DewBurd GW7

Report Date: 07/30/08  
Collection Date: 05/29/08 11:10  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	06/13/08 13:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	451	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	98.8	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/13/08 20:38/eli-c
Arsenic	0.003	mg/L	D	0.002		1	E200.8	06/13/08 20:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/13/08 20:38/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/13/08 20:38/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 20:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/13/08 20:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/13/08 20:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/13/08 20:38/eli-c
Iron	0.41	mg/L		0.03		2	E200.7	06/13/08 20:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/13/08 20:38/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	06/13/08 20:38/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	06/13/08 20:38/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:43/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/13/08 20:38/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/13/08 20:38/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/13/08 20:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 15:12/eli-c
Strontium	1.1	mg/L		0.1		1	E200.8	06/13/08 20:38/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/13/08 20:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/13/08 20:38/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/13/08 20:38/eli-c
DATA QUALITY								
A/C Balance (± 5)	8.11	%				1	A1030 E	07/30/08 00:00/jmh
Anions	14.4	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	17.0	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	1010	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-003  
Client Sample ID: DewBurd GW8

Report Date: 07/30/08  
Collection Date: 05/29/08 11:41  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	164	mg/L		5		1	A2320 B	06/02/08 11:48/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:48/mb
Bicarbonate as HCO3	200	mg/L		5		1	A2320 B	06/02/08 11:48/mb
Calcium	58.9	mg/L		0.5		2	E200.7	06/16/08 19:33/eli-c
Chloride	11	mg/L		1		1	E300.0	05/31/08 22:20/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/31/08 22:20/jmh
Magnesium	26.3	mg/L		0.5		2	E200.7	06/16/08 19:33/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:17/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/31/08 22:20/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/31/08 22:20/jmh
Potassium	13.7	mg/L		0.5		2	E200.7	06/16/08 19:33/eli-c
Silica	3.5	mg/L		0.5		2	E200.7	06/16/08 19:33/eli-c
Sodium	240	mg/L	D	2		2	E200.7	06/16/08 19:33/eli-c
Sulfate	514	mg/L	D	3		50	E300.0	05/31/08 22:04/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1560	umhos/cm		5.0		1	A2510 B	06/02/08 15:05/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.97	s.u.		0.01		1	A4500-H B	06/02/08 15:43/tb
Sodium Adsorption Ratio (SAR)	6.5	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	05/30/08 12:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 19:33/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	06/27/08 02:31/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 19:33/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 19:33/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/22/08 19:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 19:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/27/08 02:31/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 19:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/22/08 19:26/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	06/16/08 19:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/22/08 19:26/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 19:33/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 19:33/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/22/08 19:26/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-003  
Client Sample ID: DewBurd GW8

Report Date: 07/30/08  
Collection Date: 05/29/08 11:41  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/22/08 19:26/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/22/08 19:26/eli-c
Vanadium	0.1	mg/L		0.1		2	E200.7	06/16/08 19:33/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 19:33/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 01:22/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:07/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	3.2	pCi/L	U			1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	16.2	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	0.8	pCi/L	U			1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.5	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	1.2	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/30/08 17:02/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	06/30/08 17:02/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	4.9	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.33	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	06/17/08 09:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-003  
Client Sample ID: DewBurd GW8

Report Date: 07/30/08  
Collection Date: 05/29/08 11:41  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	514	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	99.3	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/13/08 20:45/eli-c
Arsenic	0.003	mg/L	D	0.002		1	E200.8	06/13/08 20:45/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/13/08 20:45/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/13/08 20:45/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 20:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/13/08 20:45/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/13/08 20:45/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/13/08 20:45/eli-c
Iron	0.23	mg/L		0.03		2	E200.7	06/13/08 20:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/13/08 20:45/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	06/13/08 20:45/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	06/13/08 20:45/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:45/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/13/08 20:45/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/13/08 20:45/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/13/08 20:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 16:32/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	06/13/08 20:45/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/13/08 20:45/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/13/08 20:45/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/13/08 20:45/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.33	%				1	A1030 E	07/30/08 00:00/jmh
Anions	14.3	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	15.9	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	973	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050419-004  
**Client Sample ID:** DewBurd GW628

**Report Date:** 07/30/08  
**Collection Date:** 05/29/08 15:02  
**Date Received:** 05/30/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	06/02/08 11:51/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:51/mb
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	06/02/08 11:51/mb
Calcium	40.1	mg/L		0.5		2	E200.7	06/16/08 19:57/eli-c
Chloride	42	mg/L	D	5		50	E300.0	05/31/08 22:37/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/31/08 22:53/jmh
Magnesium	17.5	mg/L		0.5		2	E200.7	06/16/08 19:57/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:18/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/31/08 22:53/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/31/08 22:53/jmh
Potassium	8.2	mg/L		0.5		2	E200.7	06/16/08 19:57/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	06/16/08 19:57/eli-c
Sodium	307	mg/L	D	2		2	E200.7	06/16/08 19:57/eli-c
Sulfate	515	mg/L	D	3		50	E300.0	05/31/08 22:37/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1640	umhos/cm		5.0		1	A2510 B	06/02/08 15:07/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	06/04/08 00:00/jmh
pH	8.21	s.u.		0.01		1	A4500-H B	06/02/08 15:44/tb
Sodium Adsorption Ratio (SAR)	10	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	980	mg/L		5		1	A2540 C	05/30/08 12:05/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 19:57/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	06/23/08 02:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 19:57/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/16/08 19:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 02:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 19:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 02:18/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 19:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 02:18/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	06/16/08 19:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 02:18/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 19:57/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 19:57/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:11/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 12:25/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-004  
Client Sample ID: DewBurd GW628

Report Date: 07/30/08  
Collection Date: 05/29/08 15:02  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 02:18/eli-c
Uranium	0.0027	mg/L		0.0003		1	E200.8	06/23/08 02:18/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 19:57/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 19:57/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 01:28/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:09/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	39.0	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	4.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	11.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	0.1	pCi/L	U			1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.5	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	-0.5	pCi/L	U	1.0		1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	0.20	pCi/L				1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	6.1	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/30/08 17:02/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	06/30/08 17:02/eli-c
Gross Gamma	260	pCi/L		20		1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	52	pCi/L				1	E901.1	06/04/08 12:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.5	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	17.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	06/17/08 09:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050419-004  
Client Sample ID: DewBurd GW628

Report Date: 07/30/08  
Collection Date: 05/29/08 15:02  
Date Received: 05/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	5040	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	144	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/13/08 20:51/eli-c
Arsenic	0.004	mg/L	D	0.002		1	E200.8	06/13/08 20:51/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/13/08 20:51/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/13/08 20:51/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	06/13/08 20:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/13/08 20:51/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/13/08 20:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/13/08 20:51/eli-c
Iron	0.66	mg/L		0.03		1	E200.7	06/13/08 20:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/13/08 20:51/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	06/13/08 20:51/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	06/13/08 20:51/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/17/08 11:48/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/13/08 20:51/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/13/08 20:51/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/13/08 20:51/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 16:39/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	06/13/08 20:51/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/13/08 20:51/eli-c
Uranium	0.0029	mg/L		0.0003		1	E200.8	06/13/08 20:51/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/13/08 20:51/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.86	%				1	A1030 E	07/30/08 00:00/jmh
Anions	15.2	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	17.0	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	1040	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080602A-ALK-SEL-W							
Sample ID: LCS1_080602A	Laboratory Control Sample					Run: PH_COND1-R_080602A			06/02/08 10:56
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_080602A	Method Blank					Run: PH_COND1-R_080602A			06/02/08 12:28
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050406-005AMS	Sample Matrix Spike					Run: PH_COND1-R_080602A			06/02/08 11:35
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	98	80	120			
Sample ID: R08050406-005AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080602A			06/02/08 11:38
Alkalinity, Total as CaCO <sub>3</sub>	244	mg/L	5.0	100	80	120	0.8	10	
Method: A2510 B		Batch: 080602_2_COND-PROBE-W							
Sample ID: LCS_COND-1_080602	Laboratory Control Sample					Run: PH_COND2-R_080602A			06/02/08 14:54
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: LCS1-1_080602	Laboratory Control Sample					Run: PH_COND2-R_080602A			06/02/08 14:55
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080602	Laboratory Control Sample					Run: PH_COND2-R_080602A			06/02/08 14:57
Conductivity @ 25 C	4900	umhos/cm	5.0	98	90	110			
Sample ID: MBLK-1_080602	Method Blank					Run: PH_COND2-R_080602A			06/02/08 14:59
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08050427-004A	Sample Duplicate					Run: PH_COND2-R_080602A			06/02/08 15:13
Conductivity @ 25 C	1640	umhos/cm	5.0				3.6	10	
Method: A2540 C		Batch: 080530A-SLDS-TDS-W							
Sample ID: LCS1_080530A	Laboratory Control Sample					Run: BAL-4-R_080530A			05/30/08 11:44
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_080530A	Method Blank					Run: BAL-4-R_080530A			05/30/08 11:45
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08050419-004AMS	Sample Matrix Spike					Run: BAL-4-R_080530A			05/30/08 12:05
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	107	80	120			
Sample ID: R08050419-004AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080530A			05/30/08 12:07
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	108	80	120	0.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080604-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080604B		06/04/08 00:00		
Oxidation-Reduction Potential	470	mV		100	95	105			
Method: A3114 B							Analytical Run: SUB-C102993		
Sample ID: 288-92-2	Initial Calibration Verification Standard						06/20/08 09:57		
Selenium-IV	0.053	mg/L	0.0010	105	90	110			
Method: A3114 B							Batch: C_SE3114-080620A		
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C102993		06/20/08 10:11		
Selenium-IV	0.049	mg/L	0.0010	99	90	110			
Sample ID: C08060097-001HMS	Sample Matrix Spike				Run: SUB-C102993		06/20/08 11:18		
Selenium-IV	0.046	mg/L	0.0010	93	85	115			
Sample ID: C08060097-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C102993		06/20/08 11:20		
Selenium-IV	0.048	mg/L	0.0010	96	85	115	3.3	10	
Method: A3114 B							Batch: C_SE3114-080620C		
Sample ID: MBLK	Method Blank				Run: SUB-C103018		06/20/08 15:10		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C103018		06/20/08 15:14		
Selenium	0.049	mg/L	0.0010	99	90	110			
Sample ID: C08060097-001HMS	Sample Matrix Spike				Run: SUB-C103018		06/20/08 16:20		
Selenium	0.044	mg/L	0.0010	87	85	115			
Sample ID: C08060097-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C103018		06/20/08 16:22		
Selenium	0.044	mg/L	0.0010	89	85	115	1.8	10	
Method: A4500-H B							Batch: 080602_1_PH-W		
Sample ID: LCS_pH-1_080602	Laboratory Control Sample				Run: PH_COND2-R_080602B		06/02/08 15:39		
pH	6.93	s.u.	0.010	101	98.55	101.45			
Sample ID: R08060006-001ADUP	Sample Duplicate				Run: PH_COND2-R_080602B		06/02/08 15:55		
pH	7.56	s.u.	0.010				0.1	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G					Batch: A2008-06-03_2_NH3_01				
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080603A			06/03/08 11:58
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:01
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:14
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: R08050419-001BMS	Sample Matrix Spike					Run: TECHAA2-R_080603A			06/03/08 13:13
Nitrogen, Ammonia as N	0.48	mg/L	0.10	104	80	120			
Sample ID: R08050419-001BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080603A			06/03/08 13:14
Nitrogen, Ammonia as N	0.45	mg/L	0.10	90	80	120	7.5	10	
Method: D5072-92					Batch: C_R102221				
Sample ID: C08060087-001IDUP	Sample Duplicate					Run: SUB-C102221			06/04/08 12:40
Radon 222	68200	pCi/L	100				6.5	30	
Sample ID: MB-R102221	Method Blank					Run: SUB-C102221			06/04/08 12:40
Radon 222	9	pCi/L						U	
Sample ID: LCS-R102221	Laboratory Control Sample					Run: SUB-C102221			06/04/08 12:40
Radon 222	302	pCi/L	100	96	70	130			
Method: E200.7					Batch: C_18769				
Sample ID: MB-18769	Method Blank					Run: SUB-C102679			06/13/08 20:20
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-18769	Laboratory Control Sample					Run: SUB-C102679			06/13/08 20:24
Boron	0.500	mg/L	0.10	100	85	115			
Iron	2.62	mg/L	0.030	105	85	115			
Sample ID: R08050419-004D	Sample Matrix Spike					Run: SUB-C102679			06/13/08 20:49
Boron	0.649	mg/L	0.10	102	70	130			
Iron	3.32	mg/L	0.030	107	70	130			
Sample ID: R08050419-004D	Sample Matrix Spike Duplicate					Run: SUB-C102679			06/13/08 20:53
Boron	0.667	mg/L	0.10	106	70	130	2.7	20	
Iron	3.44	mg/L	0.030	111	70	130	3.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R102753		
<b>Sample ID: MB-080616A</b>	Method Blank		Run: SUB-C102753				06/16/08 15:33		
Silica	ND	mg/L	0.02						
Aluminum	0.01	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.005	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	0.002	mg/L	0.002						
<b>Sample ID: LFB-080616A</b>	Laboratory Fortified Blank		Run: SUB-C102753				06/16/08 15:37		
Silica	0.37	mg/L	0.10	92	85	125			
Aluminum	0.99	mg/L	0.10	98	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.00	mg/L	0.10	98	85	125			
Calcium	53	mg/L	0.50	105	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	111	85	125			
Magnesium	52	mg/L	0.50	104	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	0.98	mg/L	0.10	98	85	125			
Nickel	1.0	mg/L	0.050	100	85	125			
Potassium	46	mg/L	0.50	91	85	125			
Sodium	51	mg/L	0.77	102	85	125			
Vanadium	1.0	mg/L	0.10	104	85	125			
Zinc	1.0	mg/L	0.010	100	85	125			
<b>Sample ID: R08050419-003C</b>	Sample Matrix Spike		Run: SUB-C102753				06/16/08 19:37		
Aluminum	1.95	mg/L	0.10	98	70	130			
Barium	2.05	mg/L	0.10	103	70	130			
Boron	2.11	mg/L	0.10	103	70	130			
Chromium	2.11	mg/L	0.050	105	70	130			
Iron	2.22	mg/L	0.030	110	70	130			
Manganese	2.15	mg/L	0.010	103	70	130			
Molybdenum	2.02	mg/L	0.10	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R102753		
<b>Sample ID: R08050419-003C</b>	Sample Matrix Spike			Run: SUB-C102753			06/16/08 19:37		
Nickel	2.10	mg/L	0.050	105	70	130			
Vanadium	2.31	mg/L	0.10	110	70	130			
Zinc	2.14	mg/L	0.010	107	70	130			
Calcium	165	mg/L	1.0	106	70	130			
Magnesium	136	mg/L	1.0	109	70	130			
Potassium	103	mg/L	1.0	89	70	130			
Silica	4.18	mg/L	0.10		70	130			A
Sodium	335	mg/L	1.5	95	70	130			
<b>Sample ID: R08050419-003C</b>	Sample Matrix Spike Duplicate			Run: SUB-C102753			06/16/08 19:41		
Aluminum	1.93	mg/L	0.10	97	70	130	1.1	20	
Barium	2.03	mg/L	0.10	101	70	130	1.4	20	
Boron	2.10	mg/L	0.10	102	70	130	0.8	20	
Chromium	2.07	mg/L	0.050	103	70	130	1.9	20	
Iron	2.17	mg/L	0.030	107	70	130	2.2	20	
Manganese	2.13	mg/L	0.010	102	70	130	1.0	20	
Molybdenum	2.00	mg/L	0.10	100	70	130	1.0	20	
Nickel	2.05	mg/L	0.050	102	70	130	2.6	20	
Vanadium	2.23	mg/L	0.10	106	70	130	3.8	20	
Zinc	2.09	mg/L	0.010	105	70	130	2.1	20	
Calcium	165	mg/L	1.0	106	70	130	0.0	20	
Magnesium	133	mg/L	1.0	107	70	130	2.1	20	
Potassium	104	mg/L	1.0	91	70	130	1.8	20	
Silica	4.12	mg/L	0.10		70	130	1.2	20	A
Sodium	336	mg/L	1.5	95	70	130	0.2	20	
<b>Method: E200.8</b>							Batch: C_18760		
<b>Sample ID: MB-18760</b>	Method Blank			Run: SUB-C103038			06/23/08 10:40		
Uranium	0.0003	mg/L	2E-05						
<b>Sample ID: LCS1-18760</b>	Laboratory Control Sample			Run: SUB-C103038			06/23/08 10:47		
Uranium	0.0487	mg/L	0.00030	92	80	120			
The LCS was not spiked for thorium.									
<b>Sample ID: C08060097-005KMS4</b>	Post Digestion Spike			Run: SUB-C103038			06/23/08 11:47		
Uranium	0.0124	mg/L	0.00030	99	70	130			
<b>Sample ID: C08060097-005KMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C103038			06/23/08 11:54		
Uranium	0.0124	mg/L	0.00030	99	70	130	0.0	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 07/30/08

Project: Edgemont

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18769		
<b>Sample ID: MB-18769</b>	Method Blank		Run: SUB-C102666				06/13/08 20:04		
Antimony	0.0003	mg/L	0.0002						
Arsenic	0.001	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	0.002	mg/L	5E-05						
Copper	0.003	mg/L	0.0002						
Lead	2E-05	mg/L							
Manganese	ND	mg/L	3E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	6E-05						
Selenium	0.0002	mg/L	0.0002						
Silver	6E-05	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	4E-05						
Uranium	ND	mg/L	3E-05						
Zinc	ND	mg/L	0.0003						
<b>Sample ID: LCS3-18769</b>							Run: SUB-C102666		
Laboratory Control Sample							06/13/08 20:11		
Antimony	0.518	mg/L	0.050	103	85	115			
Arsenic	0.503	mg/L	0.0010	100	85	115			
Barium	0.507	mg/L	0.10	101	85	115			
Beryllium	0.252	mg/L	0.010	101	85	115			
Cadmium	0.244	mg/L	0.010	98	85	115			
Chromium	0.491	mg/L	0.050	98	85	115			
Copper	0.493	mg/L	0.010	98	85	115			
Lead	0.496	mg/L	0.050	99	85	115			
Manganese	2.55	mg/L	0.010	102	85	115			
Molybdenum	0.498	mg/L	0.10	100	85	115			
Nickel	0.487	mg/L	0.050	97	85	115			
Selenium	0.497	mg/L	0.0020	99	85	115			
Strontium	0.497	mg/L	0.10	99	85	115			
Thallium	0.495	mg/L	0.10	99	85	115			
Uranium	0.512	mg/L	0.00032	102	85	115			
Zinc	0.477	mg/L	0.010	95	85	115			
<b>Sample ID: R08050419-004D</b>							Run: SUB-C102666		
Sample Matrix Spike							06/13/08 20:58		
Antimony	0.536	mg/L	0.050	107	70	130			
Arsenic	0.518	mg/L	0.0010	103	70	130			
Barium	0.527	mg/L	0.10	104	70	130			
Beryllium	0.253	mg/L	0.010	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18769		
<b>Sample ID: R08050419-004D</b>	Sample Matrix Spike			Run: SUB-C102666			06/13/08 20:58		
Cadmium	0.248	mg/L	0.010	99	70	130			
Chromium	0.498	mg/L	0.050	99	70	130			
Copper	0.504	mg/L	0.010	100	70	130			
Lead	0.503	mg/L	0.050	101	70	130			
Manganese	2.67	mg/L	0.010	104	70	130			
Molybdenum	0.511	mg/L	0.10	102	70	130			
Nickel	0.492	mg/L	0.050	98	70	130			
Selenium	0.504	mg/L	0.0020	101	70	130			
Silver	0.0351	mg/L	0.010	70	70	130			
Strontium	1.39	mg/L	0.10	96	70	130			
Thallium	0.499	mg/L	0.10	100	70	130			
Uranium	0.525	mg/L	0.00032	104	70	130			
Zinc	0.493	mg/L	0.010	97	70	130			
<b>Sample ID: R08050419-004D</b>	Sample Matrix Spike Duplicate			Run: SUB-C102666			06/13/08 21:25		
Antimony	0.557	mg/L	0.050	111	70	130	3.8	20	
Arsenic	0.518	mg/L	0.0010	103	70	130	0.0	20	
Barium	0.557	mg/L	0.10	110	70	130	5.6	20	
Beryllium	0.233	mg/L	0.010	93	70	130	7.9	20	
Cadmium	0.253	mg/L	0.010	101	70	130	1.8	20	
Chromium	0.492	mg/L	0.050	98	70	130	1.1	20	
Copper	0.509	mg/L	0.010	101	70	130	1.0	20	
Lead	0.517	mg/L	0.050	103	70	130	2.8	20	
Manganese	2.65	mg/L	0.010	103	70	130	0.8	20	
Molybdenum	0.522	mg/L	0.10	104	70	130	2.1	20	
Nickel	0.508	mg/L	0.050	101	70	130	3.3	20	
Selenium	0.504	mg/L	0.0020	101	70	130	0.0	20	
Silver	0.0378	mg/L	0.010	76	70	130	7.5	20	
Strontium	1.42	mg/L	0.10	102	70	130	2.1	20	
Thallium	0.511	mg/L	0.10	102	70	130	2.4	20	
Uranium	0.538	mg/L	0.00032	107	70	130	2.5	20	
Zinc	0.500	mg/L	0.010	98	70	130	1.2	20	
<b>Sample ID: MB-18769</b>	Method Blank			Run: SUB-C102823			06/17/08 14:38		
Antimony	0.0008	mg/L	0.0002						
Arsenic	0.001	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Chromium	0.003	mg/L	5E-05						
Copper	0.0005	mg/L	0.0002						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18769		
<b>Sample ID: MB-18769</b>	Method Blank		Run: SUB-C102823				06/17/08 14:38		
Lead	ND	mg/L	5E-05						
Manganese	8E-05	mg/L	3E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	0.0001	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Silver	6E-05	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.003	mg/L	0.0003						
<b>Sample ID: LCS3-18769</b>							Run: SUB-C102823		
Laboratory Control Sample							06/17/08 14:45		
Antimony	0.569	mg/L	0.050	114	85	115			
Arsenic	0.539	mg/L	0.0010	107	85	115			
Barium	0.543	mg/L	0.10	109	85	115			
Beryllium	0.287	mg/L	0.010	115	85	115			
Cadmium	0.267	mg/L	0.010	107	85	115			
Chromium	0.522	mg/L	0.050	104	85	115			
Copper	0.505	mg/L	0.010	101	85	115			
Lead	0.538	mg/L	0.050	108	85	115			
Manganese	2.65	mg/L	0.010	106	85	115			
Molybdenum	0.532	mg/L	0.10	106	85	115			
Nickel	0.507	mg/L	0.050	101	85	115			
Selenium	0.519	mg/L	0.0010	104	85	115			
Silver	0.0477	mg/L	0.010	95	85	115			
Strontium	0.519	mg/L	0.10	104	85	115			
Thallium	0.539	mg/L	0.10	108	85	115			
Uranium	0.576	mg/L	0.00030	115	85	115			
Zinc	0.494	mg/L	0.010	98	85	115			
<b>Sample ID: R08050419-004D</b>							Run: SUB-C102823		
Sample Matrix Spike							06/17/08 16:46		
Antimony	0.568	mg/L	0.050	113	70	130			
Arsenic	0.524	mg/L	0.0010	104	70	130			
Barium	0.566	mg/L	0.10	111	70	130			
Beryllium	0.258	mg/L	0.010	103	70	130			
Cadmium	0.251	mg/L	0.010	101	70	130			
Chromium	0.506	mg/L	0.050	100	70	130			
Copper	0.491	mg/L	0.010	97	70	130			
Lead	0.556	mg/L	0.050	111	70	130			
Manganese	2.60	mg/L	0.010	101	70	130			
Molybdenum	0.568	mg/L	0.10	113	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18769		
Sample ID: R08050419-004D	Sample Matrix Spike			Run: SUB-C102823			06/17/08 16:46		
Nickel	0.500	mg/L	0.050	100	70	130			
Selenium	0.483	mg/L	0.0010	97	70	130			
Silver	0.0452	mg/L	0.010	90	70	130			
Strontium	1.48	mg/L	0.10	112	70	130			
Thallium	0.558	mg/L	0.10	112	70	130			
Uranium	0.623	mg/L	0.00030	124	70	130			
Zinc	0.460	mg/L	0.010	90	70	130			
Sample ID: R08050419-004D	Sample Matrix Spike Duplicate			Run: SUB-C102823			06/17/08 16:52		
Antimony	0.580	mg/L	0.050	116	70	130	2.2	20	
Arsenic	0.530	mg/L	0.0010	106	70	130	1.2	20	
Barium	0.582	mg/L	0.10	115	70	130	2.9	20	
Beryllium	0.264	mg/L	0.010	106	70	130	2.3	20	
Cadmium	0.255	mg/L	0.010	102	70	130	1.4	20	
Chromium	0.517	mg/L	0.050	103	70	130	2.1	20	
Copper	0.496	mg/L	0.010	98	70	130	1.1	20	
Lead	0.571	mg/L	0.050	114	70	130	2.7	20	
Manganese	2.70	mg/L	0.010	105	70	130	3.4	20	
Molybdenum	0.579	mg/L	0.10	115	70	130	1.9	20	
Nickel	0.504	mg/L	0.050	100	70	130	0.8	20	
Selenium	0.489	mg/L	0.0010	98	70	130	1.3	20	
Silver	0.0464	mg/L	0.010	93	70	130	2.5	20	
Strontium	1.49	mg/L	0.10	114	70	130	0.7	20	
Thallium	0.573	mg/L	0.10	115	70	130	2.6	20	
Uranium	0.635	mg/L	0.00030	126	70	130	1.9	20	
Zinc	0.467	mg/L	0.010	91	70	130	1.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R103038		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C103038				06/22/08 13:02		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	8E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C103038				06/22/08 13:09		
Silver	0.0196	mg/L	0.0010	98	85	115			
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C103038				06/22/08 14:35		
Arsenic	0.0517	mg/L	0.0010	103	85	115			
Cadmium	0.0524	mg/L	0.0010	105	85	115			
Copper	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0527	mg/L	0.0010	105	85	115			
Manganese	0.0530	mg/L	0.0010	106	85	115			
Mercury	0.00507	mg/L	0.0010	101	85	115			
Thorium 232	0.0520	mg/L	0.0010	104	85	115			
Uranium	0.0525	mg/L	0.00030	105	85	115			
<b>Sample ID: R08050419-003C</b>	Post Digestion Spike		Run: SUB-C103038				06/22/08 19:53		
Arsenic	0.0536	mg/L	0.0010	106	70	130			
Cadmium	0.0507	mg/L	0.010	101	70	130			
Copper	0.0505	mg/L	0.010	100	70	130			
Lead	0.0543	mg/L	0.050	109	70	130			
Manganese	0.136	mg/L	0.010	100	70	130			
Mercury	0.00517	mg/L	0.0010	103	70	130			
Silver	0.0119	mg/L	0.010	60	70	130			S
Thorium 232	0.0561	mg/L	0.0010	112	70	130			
Uranium	0.0558	mg/L	0.00030	111	70	130			
<b>Sample ID: R08050419-003C</b>	Post Digestion Spike Duplicate		Run: SUB-C103038				06/22/08 20:00		
Arsenic	0.0548	mg/L	0.0010	108	70	130	2.2	20	
Cadmium	0.0519	mg/L	0.010	104	70	130	2.3	20	
Copper	0.0510	mg/L	0.010	101	70	130	0.8	20	
Lead	0.0549	mg/L	0.050	110	70	130	1.2	20	
Manganese	0.138	mg/L	0.010	103	70	130	0.9	20	
Mercury	0.00531	mg/L	0.0010	106	70	130	2.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103038		
Sample ID: R08050419-003C	Post Digestion Spike Duplicate			Run: SUB-C103038			06/22/08 20:00		
Silver	0.0124	mg/L	0.010	62	70	130	4.3	20	S
Thorium 232	0.0571	mg/L	0.0010	114	70	130	1.8	20	
Uranium	0.0567	mg/L	0.00030	113	70	130	1.7	20	
Sample ID: C08060423-001BMS	Sample Matrix Spike			Run: SUB-C103038			06/23/08 02:04		
Arsenic	0.0502	mg/L	0.0010	91	70	130			
Cadmium	0.0433	mg/L	0.0010	87	70	130			
Copper	0.0491	mg/L	0.0010	95	70	130			
Lead	0.0532	mg/L	0.0010	105	70	130			
Manganese	0.0789	mg/L	0.0010	93	70	130			
Mercury	0.00506	mg/L	0.0010	101	70	130			
Silver	0.0155	mg/L	0.0010	77	70	130			
Thorium 232	0.0551	mg/L	0.0010	109	70	130			
Uranium	0.0552	mg/L	0.00030	110	70	130			
Sample ID: C08060423-001BMSD	Sample Matrix Spike Duplicate			Run: SUB-C103038			06/23/08 02:11		
Arsenic	0.0527	mg/L	0.0010	96	70	130	4.9	20	
Cadmium	0.0451	mg/L	0.0010	90	70	130	4.1	20	
Copper	0.0526	mg/L	0.0010	102	70	130	6.9	20	
Lead	0.0559	mg/L	0.0010	110	70	130	4.9	20	
Manganese	0.0827	mg/L	0.0010	101	70	130	4.7	20	
Mercury	0.00530	mg/L	0.0010	106	70	130	4.7	20	
Silver	0.0165	mg/L	0.0010	83	70	130	6.4	20	
Thorium 232	0.0588	mg/L	0.0010	117	70	130	6.5	20	
Uranium	0.0583	mg/L	0.00030	116	70	130	5.5	20	
Sample ID: C08060096-001CMS4	Post Digestion Spike			Run: SUB-C103038			06/23/08 03:46		
Arsenic	0.0530	mg/L	0.0010	104	70	130			
Cadmium	0.0504	mg/L	0.010	101	70	130			
Copper	0.0519	mg/L	0.010	102	70	130			
Lead	0.0541	mg/L	0.050	108	70	130			
Manganese	0.110	mg/L	0.010	100	70	130			
Mercury	0.00540	mg/L	0.0010	108	70	130			
Silver	0.0124	mg/L	0.010	62	70	130			S
Thorium 232	0.0559	mg/L	0.0010	112	70	130			
Uranium	0.0622	mg/L	0.00030	112	70	130			
Sample ID: C08060096-001CMSD4	Post Digestion Spike Duplicate			Run: SUB-C103038			06/23/08 03:52		
Arsenic	0.0519	mg/L	0.0010	101	70	130	2.1	20	
Cadmium	0.0486	mg/L	0.010	97	70	130	3.6	20	
Copper	0.0504	mg/L	0.010	99	70	130	2.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103038		
Sample ID: C08060096-001CMSD4	Post Digestion Spike Duplicate			Run: SUB-C103038			06/23/08 03:52		
Lead	0.0527	mg/L	0.050	105	70	130	2.7	20	
Manganese	0.108	mg/L	0.010	97	70	130	1.6	20	
Mercury	0.00516	mg/L	0.0010	103	70	130	4.5	20	
Silver	0.0139	mg/L	0.010	70	70	130	12	20	
Thorium 232	0.0541	mg/L	0.0010	108	70	130	3.3	20	
Uranium	0.0595	mg/L	0.00030	107	70	130	4.4	20	
Method: E200.8							Batch: C_R103200		
Sample ID: LRB	Method Blank			Run: SUB-C103200			06/24/08 11:37		
Silver	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C103200			06/24/08 11:44		
Silver	0.0200	mg/L	0.0010	100	85	115			
Sample ID: C08060096-004CMS4	Post Digestion Spike			Run: SUB-C103200			06/24/08 13:59		
Silver	0.0131	mg/L	0.010	66	70	130			S
Sample ID: C08060096-004CMSD4	Post Digestion Spike Duplicate			Run: SUB-C103200			06/24/08 14:26		
Silver	0.0127	mg/L	0.010	63	70	130	3.6	20	S
Method: E200.8							Analytical Run: SUB-C103282		
Sample ID: METHOD BLANK	Initial Calibration Blank, Instrument Blank						06/25/08 11:35		
Uranium	3.5E-06	mg/L	0.0050		0	0			
Sample ID: METHOD BLANK	Initial Calibration Blank, Instrument Blank						06/25/08 16:49		
Uranium	5.2E-06	mg/L	0.0050		0	0			
Sample ID: METHOD BLANK	Initial Calibration Blank, Instrument Blank						06/25/08 23:17		
Uranium	7.1E-06	mg/L	0.0050		0	0			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R103319		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C103319		06/26/08 12:05		
Arsenic	ND	mg/L	6E-05						
Copper	ND	mg/L	7E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C103319		06/26/08 12:12		
Arsenic	0.0490	mg/L	0.0010	98	85	115			
Copper	0.0500	mg/L	0.0010	100	85	115			
<b>Sample ID: C08060581-003AMS</b>	Sample Matrix Spike				Run: SUB-C103319		06/26/08 19:39		
Copper	0.107	mg/L	0.010	100	70	130			
<b>Sample ID: C08060581-003AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103319		06/26/08 19:46		
Copper	0.104	mg/L	0.010	95	70	130	2.4	20	
<b>Sample ID: C08060558-002AMS4</b>	Post Digestion Spike				Run: SUB-C103319		06/27/08 03:52		
Arsenic	0.255	mg/L	0.0010	94	70	130			
Copper	0.235	mg/L	0.010	90	70	130			
<b>Sample ID: C08060558-002AMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C103319		06/27/08 03:59		
Arsenic	0.270	mg/L	0.0010	100	70	130	5.4	20	
Copper	0.246	mg/L	0.010	94	70	130	4.6	20	
<b>Method: E245.1</b>							Batch: C_B_33012		
<b>Sample ID: MB-33012</b>	Method Blank				Run: SUB-C102832		06/17/08 09:25		
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-33012</b>	Laboratory Fortified Blank				Run: SUB-C102832		06/17/08 09:28		
Mercury	0.0017	mg/L	0.0010	86	85	115			
<b>Sample ID: B08060966-003BMS</b>	Sample Matrix Spike				Run: SUB-C102832		06/17/08 11:27		
Mercury	0.0017	mg/L	0.0010	86	70	130			
<b>Sample ID: B08060966-003BMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102832		06/17/08 11:29		
Mercury	0.0017	mg/L	0.0010	83	70	130	3.6	30	
<b>Method: E245.1</b>							Analytical Run: SUB-C102832		
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard						06/17/08 09:18		
Mercury	0.0018	mg/L	0.0010	92	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R35068		
Sample ID: LFB0805311606-3	Laboratory Fortified Blank			Run: DIONEX_080531A			05/31/08 19:36		
Chloride	4.62	mg/L	0.50	92	90	110			
Fluoride	1.83	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
Sample ID: LFB0805311606-4	Laboratory Fortified Blank			Run: DIONEX_080531A			05/31/08 19:52		
Chloride	4.57	mg/L	0.50	91	90	110			
Fluoride	1.81	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
Sample ID: R08050407-001BMS	Sample Matrix Spike			Run: DIONEX_080531A			05/31/08 20:25		
Chloride	27.0	mg/L	0.50		80	120			A
Fluoride	2.01	mg/L	0.10	90	80	120			
Nitrogen, Nitrate as N	10.5	mg/L	0.10	73	80	120			SE
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	80	120			
Sulfate	47.9	mg/L	1.0	74	80	120			S
Sample ID: R08050407-001BMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080531A			05/31/08 20:42		
Chloride	26.9	mg/L	0.50		80	120	0.1	10	A
Fluoride	2.00	mg/L	0.10	90	80	120	0.5	10	
Nitrogen, Nitrate as N	10.5	mg/L	0.10	73	80	120	0.1	10	SE
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	80	120	0.4	10	
Sulfate	47.8	mg/L	1.0	74	80	120	0.0	10	S
Sample ID: R08050427-002AMS	Sample Matrix Spike			Run: DIONEX_080531A			06/01/08 00:32		
Chloride	241	mg/L	5.4	87	80	120			
Fluoride	92.5	mg/L	0.56	86	80	120			
Nitrogen, Nitrate as N	117	mg/L	1.3	94	80	120			
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120			
Sulfate	1100	mg/L	3.4	85	80	120			
Sample ID: R08050427-002AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080531A			06/01/08 00:48		
Chloride	241	mg/L	5.4	87	80	120	0.3	10	
Fluoride	92.2	mg/L	0.56	85	80	120	0.3	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	93	80	120	0.2	10	
Nitrogen, Nitrite as N	122	mg/L	2.9	98	80	120	0.6	10	
Sulfate	1110	mg/L	3.4	85	80	120	0.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

E - Estimated value. Result exceeds the instrument upper quantitation limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0466		
Sample ID: MB-GrAB-0466	Method Blank				Run: SUB-C103442			06/27/08 13:26	
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-0.5	pCi/L							U
Sample ID: C08060305-001AMS	Sample Matrix Spike				Run: SUB-C103442			06/27/08 13:26	
Gross Alpha	150	pCi/L		105	70	130			
Sample ID: C08060305-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C103442			06/27/08 13:26	
Gross Alpha	130	pCi/L		97	70	130	8.2	16.6	
Sample ID: UNAT-GrAB-0466	Laboratory Control Sample				Run: SUB-C103442			06/27/08 13:27	
Gross Alpha	130	pCi/L		97	70	130			
Sample ID: Cs137-GrAB-0466	Laboratory Control Sample				Run: SUB-C103442			06/27/08 13:26	
Gross Beta	110	pCi/L		113	70	130			
Sample ID: C08060305-001AMS	Sample Matrix Spike				Run: SUB-C103442			06/27/08 13:26	
Gross Beta	110	pCi/L		120	70	130			
Sample ID: C08060305-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C103442			06/27/08 13:27	
Gross Beta	110	pCi/L		115	70	130	5.0	15.8	
Method: E901.1							Batch: C_R102468		
Sample ID: LCS-R102468	Laboratory Control Sample				Run: SUB-C102468			06/04/08 12:00	
Americium 241	690	pCi/L	20	85	70	130			
Cesium 137	1000	pCi/L	20	73	70	130			
Potassium 40	6700	pCi/L	20	100	70	130			
Sample ID: MB-R102468	Method Blank				Run: SUB-C102468			06/04/08 12:00	
Gross Gamma	ND	pCi/L							U
Sample ID: R08050419-004H	Sample Duplicate				Run: SUB-C102468			06/04/08 12:00	
Gross Gamma	230	pCi/L	20				15	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_18760
Sample ID: C08051260-001IMS	Sample Matrix Spike					Run: SUB-C102780			06/17/08 09:14
Radium 226	34	pCi/L		108	70	130			
Sample ID: C08051260-001IMSD	Sample Matrix Spike Duplicate					Run: SUB-C102780			06/17/08 09:14
Radium 226	32	pCi/L		97	70	130	6.8	21.5	
Sample ID: MB-18760	Method Blank					Run: SUB-C102780			06/17/08 10:48
Radium 226	-2	pCi/L							U
Sample ID: LCS-18760	Laboratory Control Sample					Run: SUB-C102780			06/17/08 10:48
Radium 226	17	pCi/L		111	70	130			
Method: E903.0									Batch: C_RA226-2856
Sample ID: MB-RA226-2856	Method Blank					Run: SUB-C102973			06/19/08 04:13
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2856	Laboratory Control Sample					Run: SUB-C102973			06/19/08 04:13
Radium 226	6.7	pCi/L		87	70	130			
Sample ID: TAP-WATER-MS	Sample Matrix Spike					Run: SUB-C102973			06/19/08 04:13
Radium 226	6.9	pCi/L		87	70	130			
Sample ID: TAP-WATER-MSD	Sample Matrix Spike Duplicate					Run: SUB-C102973			06/19/08 04:13
Radium 226	6.2	pCi/L		78	70	130	11	24.5	
Method: E907.0									Batch: C_18760
Sample ID: R08050419-002I	Sample Matrix Spike					Run: SUB-C103470			06/13/08 13:30
Thorium 230	22.2	pCi/L	0.20	95	70	130			
Sample ID: R08050419-002I	Sample Matrix Spike Duplicate					Run: SUB-C103470			06/13/08 13:30
Thorium 230	22.6	pCi/L	0.20	98	70	130	1.8	30	
Sample ID: LCS-18760	Laboratory Control Sample					Run: SUB-C103470			06/13/08 13:30
Thorium 230	51.6	pCi/L	0.20	106	70	130			
Sample ID: MB-18760	Method Blank					Run: SUB-C103470			06/13/08 13:30
Thorium 230	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0547		
Sample ID: C08060097-005IDUP	Sample Duplicate				Run: SUB-C103919			06/30/08 17:02	
Thorium 230	0.140	pCi/L					21	273.4	U
- No LCS, however the tracer recoveries were acceptable for all samples. The batch is approved.									
Sample ID: MB-RA-TH-ISO-0547	Method Blank				Run: SUB-C103919			06/30/08 21:28	
Thorium 230	0.03	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_18760		
Sample ID: C08051260-002IMS	Sample Matrix Spike				Run: SUB-C103520			06/11/08 06:30	
Lead 210	3000	pCi/L		127	70	130			
Sample ID: C08051260-002IMSD	Sample Matrix Spike Duplicate				Run: SUB-C103520			06/11/08 06:30	
Lead 210	2100	pCi/L		89	70	130	35	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R103520	Method Blank				Run: SUB-C103520			06/11/08 06:30	
Lead 210	ND	pCi/L							U
Sample ID: LCS-R103520	Laboratory Control Sample				Run: SUB-C103520			06/11/08 06:30	
Lead 210	230	pCi/L		98	70	130			
<b>Method: E909.0M</b>							Batch: C_R104574		
Sample ID: C08060289-003FMS	Sample Matrix Spike				Run: SUB-C104574			06/25/08 09:15	
Lead 210	310	pCi/L		106	70	130			
Sample ID: C08060289-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C104574			06/25/08 09:15	
Lead 210	450	pCi/L		152	70	130	35	30	SR
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MS are acceptable the batch is approved.									
Sample ID: MB-R104574	Method Blank				Run: SUB-C104574			06/25/08 09:15	
Lead 210	-0.3	pCi/L							U
Sample ID: LCS-R104574	Laboratory Control Sample				Run: SUB-C104574			06/25/08 09:15	
Lead 210	47	pCi/L		80	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050419

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b>							Batch: C_18760		
<b>Sample ID: C08060130-004FMS</b>	Sample Matrix Spike				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	51	pCi/L	1.0	117	70	130			
<b>Sample ID: C08060130-004FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	48	pCi/L	1.0	109	70	130	6.9	30	
<b>Sample ID: LCS-18760</b>	Laboratory Control Sample				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	97	pCi/L	1.0	112	70	130			
<b>Sample ID: MB-18760</b>	Method Blank				Run: SUB-C103721		06/25/08 17:27		
Polonium 210	-0.1	pCi/L							U
<b>Method: RMO-3008</b>							Batch: C_R103090		
<b>Sample ID: C08060097-005JMS</b>	Sample Matrix Spike				Run: SUB-C103090		06/17/08 12:00		
Polonium 210	110	pCi/L	1.0	127	70	130			
<b>Sample ID: C08060097-005JMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C103090		06/17/08 12:00		
Polonium 210	130	pCi/L	1.0	148	70	130	15	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: LCS-R103090</b>	Laboratory Control Sample				Run: SUB-C103090		06/17/08 12:00		
Polonium 210	49	pCi/L	1.0	112	70	130			
<b>Sample ID: MB-R103090</b>	Method Blank				Run: SUB-C103090		06/17/08 12:00		
Polonium 210	0.6	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name:

Report Mail Address:

Invoice Address:

Project Name, PWS, Permit, Etc.

Contact Name:

Invoice Contact & Phone:

Sample Origin

State: SD

Purchase Order:

EPA/State Compliance:

Sampler: (Please Print)

Quota/Bottle Order:

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/MMWTP
- ☐ State: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data)
- ☐ Format: \_\_\_\_\_
- ☐ LEVEL IV
- ☐ NELAC

Number of Containers  
Sample Type: AWSVB O  
Air Water Soils/Solids  
Vegetation Bioassay Other

ANALYSIS REQUESTED

SEE ATTACHED  
Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page

Comments:

Receipt Temp  
On Ice: 6.1 °C  
Yes ☒ No ☐

Cooler R/Off

Shipped by:

Custody Seal

Intact

Signature

Match

LABORATORY USE ONLY

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED	SEE ATTACHED Normal Turnaround (TAT)	RUSH	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Receipt Temp On Ice: <u>6.1</u> °C Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Cooler R/Off	Shipped by:	Custody Seal	Intact	Signature	Match
1 Dew Burd GW 7002	5-29-08	10:44	N											
2 Dew Burd GW 7	5-29-08	11:10	N											
3 Dew Burd GW 8	5-29-08	11:41	N											
4 Dew Burd GW 62X	5-29-08	15:02	N											
5														
6														
7														
8														
9														
10														

Custody Record MUST be Signed

Relinquished by (print):

Date/Time:

Signature:

Received by Laboratory:

Date/Time:

Signature:

Relinquished by (print):

Date/Time:

Signature:

Received by Laboratory:

Date/Time:

Signature:



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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

July 30, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08050427

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 5/31/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08050427-001	DewBurd GW18	05/30/08 11:12	05/31/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08050427-002	DewBurd GW42	05/30/08 11:55	05/31/08	Aqueous	Same As Above
R08050427-003	DewBurd GW2	05/30/08 15:21	05/31/08	Aqueous	Same As Above
R08050427-004	DewBurd GW650	05/30/08 16:30	05/31/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: \_\_\_\_\_

Linda Larson



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-001  
Client Sample ID: DewBurd GW18

Report Date: 07/30/08  
Collection Date: 05/30/08 11:12  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	180	mg/L		5			1	A2320 B	06/02/08 11:53/mb
Carbonate as CO3	ND	mg/L		5			1	A2320 B	06/02/08 11:53/mb
Bicarbonate as HCO3	219	mg/L		5			1	A2320 B	06/02/08 11:53/mb
Calcium	38.0	mg/L		0.5			2	E200.7	06/16/08 18:00/eli-c
Chloride	12	mg/L		1			1	E300.0	05/31/08 23:59/jmh
Fluoride	0.4	mg/L		0.1			1	E300.0	05/31/08 23:59/jmh
Magnesium	13.4	mg/L		0.5			2	E200.7	06/16/08 18:00/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1			1	A4500-NH3 G	06/03/08 13:21/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1			1	E300.0	05/31/08 23:59/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1			1	E300.0	05/31/08 23:59/jmh
Potassium	6.9	mg/L		0.5			2	E200.7	06/16/08 18:00/eli-c
Silica	4.2	mg/L		0.5			2	E200.7	06/16/08 18:00/eli-c
Sodium	291	mg/L	D	2			2	E200.7	06/16/08 18:00/eli-c
Sulfate	492	mg/L	D	3			50	E300.0	05/31/08 23:09/jmh
PHYSICAL PROPERTIES									
Conductivity @ 25 C	1470	umhos/cm		5.0			1	A2510 B	06/02/08 15:08/tb
Oxidation-Reduction Potential	200	mV					1	A2580 B	06/04/08 00:00/jmh
pH	8.10	s.u.		0.01			1	A4500-H B	06/02/08 15:49/tb
Sodium Adsorption Ratio (SAR)	10	unitless		0.10			1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5			1	A2540 C	06/05/08 14:40/mb
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1			2	E200.7	06/16/08 18:00/eli-c
Arsenic	0.001	mg/L		0.001			1	E200.8	06/23/08 03:39/eli-c
Barium	ND	mg/L		0.1			2	E200.7	06/16/08 18:00/eli-c
Boron	ND	mg/L		0.1			2	E200.7	06/16/08 18:00/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	06/23/08 03:39/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	06/16/08 18:00/eli-c
Copper	ND	mg/L		0.01			1	E200.8	06/23/08 03:39/eli-c
Iron	ND	mg/L		0.03			2	E200.7	06/16/08 18:00/eli-c
Lead	ND	mg/L		0.001			1	E200.8	06/23/08 03:39/eli-c
Manganese	0.06	mg/L		0.01			1	E200.8	06/23/08 03:39/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	06/23/08 03:39/eli-c
Molybdenum	ND	mg/L		0.1			2	E200.7	06/16/08 18:00/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	06/16/08 18:00/eli-c
Selenium	ND	mg/L		0.001			1	A3114 B	06/20/08 15:38/eli-c
Silver	ND	mg/L		0.005			1	E200.8	06/24/08 13:32/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 1 of 12



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050427-001  
**Client Sample ID:** DewBurd GW18

**Report Date:** 07/30/08  
**Collection Date:** 05/30/08 11:12  
**Date Received:** 05/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 03:39/eli-c
Uranium	0.0059	mg/L		0.0003		1	E200.8	06/23/08 03:39/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 18:00/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 18:00/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 02:01/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	27.5	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	4.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	-1	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	2.6	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/17/08 16:05/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	29.6	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 precision (±)	5.7	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 MDC	8.7	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Polonium 210	1.7	pCi/L		1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.93	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	1.1	pCi/L				1	E903.0	06/19/08 09:39/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-001  
Client Sample ID: DewBurd GW18

Report Date: 07/30/08  
Collection Date: 05/30/08 11:12  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/16/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/16/08 14:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1210	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	92.1	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/14/08 02:37/eli-c
Arsenic	0.003	mg/L	D	0.002		1	E200.8	06/14/08 02:37/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/14/08 02:37/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/14/08 02:37/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 21:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/14/08 02:37/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/14/08 02:37/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/14/08 02:37/eli-c
Iron	1.11	mg/L		0.03		2	E200.7	06/13/08 21:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/14/08 02:37/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	06/14/08 02:37/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/12/08 10:36/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/14/08 02:37/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/14/08 02:37/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/14/08 02:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 22:44/eli-c
Strontium	0.7	mg/L		0.1		1	E200.8	06/14/08 02:37/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/14/08 02:37/eli-c
Uranium	0.0062	mg/L		0.0003		1	E200.8	06/14/08 02:37/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/14/08 02:37/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.45	%				1	A1030 E	07/18/08 00:00/jmh
Anions	14.2	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	15.8	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	973	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 3 of 12



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-002  
Client Sample ID: DewBurd GW42

Report Date: 07/30/08  
Collection Date: 05/30/08 11:55  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	176	mg/L		5		1	A2320 B	06/02/08 11:56/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	06/02/08 11:56/mb
Bicarbonate as HCO <sub>3</sub>	215	mg/L		5		1	A2320 B	06/02/08 11:56/mb
Calcium	39.4	mg/L		0.5		2	E200.7	06/16/08 18:04/eli-c
Chloride	11	mg/L		1		1	E300.0	06/01/08 01:04/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/01/08 01:04/jmh
Magnesium	13.5	mg/L		0.5		2	E200.7	06/16/08 18:04/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH <sub>3</sub> G	06/03/08 13:23/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/01/08 01:04/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/01/08 01:04/jmh
Potassium	6.8	mg/L		0.5		2	E200.7	06/16/08 18:04/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	06/16/08 18:04/eli-c
Sodium	277	mg/L	D	2		2	E200.7	06/16/08 18:04/eli-c
Sulfate	466	mg/L	D	3		50	E300.0	06/01/08 00:15/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1510	umhos/cm		5.0		1	A2510 B	06/02/08 15:09/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	06/04/08 00:00/jmh
pH	8.05	s.u.		0.01		1	A4500-H B	06/02/08 15:50/tb
Sodium Adsorption Ratio (SAR)	9.7	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	06/05/08 14:41/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 18:04/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 05:48/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 18:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/16/08 18:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 05:48/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 18:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 05:48/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 18:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 05:48/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	06/16/08 18:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 05:48/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 18:04/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 18:04/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-002  
Client Sample ID: DewBurd GW42

Report Date: 07/30/08  
Collection Date: 05/30/08 11:55  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 05:48/eli-c
Uranium	0.0142	mg/L		0.0003		1	E200.8	06/23/08 05:48/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 18:04/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	06/23/08 05:48/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 02:08/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:36/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	558	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	15.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	159	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	4.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	17.8	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	100	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	2.0	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	150	pCi/L		20		1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	39	pCi/L				1	E901.1	06/17/08 16:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	14.0	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 precision (±)	5.4	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 MDC	8.7	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	06/19/08 09:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-002  
Client Sample ID: DewBurd GW42

Report Date: 07/30/08  
Collection Date: 05/30/08 11:55  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/16/08 14:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	219000	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	691	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/14/08 02:43/eli-c
Arsenic	0.004	mg/L	D	0.002		1	E200.8	06/14/08 02:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/14/08 02:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/14/08 02:43/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 22:02/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/14/08 02:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/14/08 02:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/14/08 02:43/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	06/13/08 22:02/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/14/08 02:43/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	06/14/08 02:43/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/12/08 10:56/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/14/08 02:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/14/08 02:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/14/08 02:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 22:51/eli-c
Strontium	0.7	mg/L		0.1		1	E200.8	06/14/08 02:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/14/08 02:43/eli-c
Uranium	0.0149	mg/L		0.0003		1	E200.8	06/14/08 02:43/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	06/14/08 02:43/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	6.08	%				1	A1030 E	07/18/08 00:00/jmh
Anions	13.6	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	15.3	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	932	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	07/18/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-003  
Client Sample ID: DewBurd GW2

Report Date: 07/30/08  
Collection Date: 05/30/08 15:21  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	212	mg/L		5		1	A2320 B	06/02/08 11:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:59/mb
Bicarbonate as HCO3	258	mg/L		5		1	A2320 B	06/02/08 11:59/mb
Calcium	57.8	mg/L		0.5		2	E200.7	06/16/08 18:16/eli-c
Chloride	9	mg/L		1		1	E300.0	06/01/08 01:37/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	06/01/08 01:37/jmh
Magnesium	19.0	mg/L		0.5		2	E200.7	06/16/08 18:16/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	06/03/08 13:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/01/08 01:37/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/01/08 01:37/jmh
Potassium	11.0	mg/L		0.5		2	E200.7	06/16/08 18:16/eli-c
Silica	4.3	mg/L		0.5		2	E200.7	06/16/08 18:16/eli-c
Sodium	297	mg/L	D	2		2	E200.7	06/16/08 18:16/eli-c
Sulfate	579	mg/L	D	3		50	E300.0	06/01/08 01:21/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1670	umhos/cm		5.0		1	A2510 B	06/02/08 15:10/tb
Oxidation-Reduction Potential	190	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.92	s.u.		0.01		1	A4500-H B	06/02/08 15:51/tb
Sodium Adsorption Ratio (SAR)	8.7	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	06/05/08 14:41/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 18:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 05:55/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 18:16/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/16/08 18:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 05:55/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 18:16/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 05:55/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 18:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 05:55/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	06/23/08 05:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 05:55/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 18:16/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 18:16/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-003  
Client Sample ID: DewBurd GW2

Report Date: 07/30/08  
Collection Date: 05/30/08 15:21  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	06/23/08 05:55/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/23/08 05:55/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 18:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 18:16/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/26/08 02:15/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:38/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.2	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	10.3	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Lead 210	3.1	pCi/L	U			1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.90	pCi/L				1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	2.1	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/17/08 16:05/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.4	pCi/L	U			1	E909.0M	06/13/08 07:15/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 MDC	8.7	pCi/L				1	E909.0M	06/13/08 07:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	06/19/08 09:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-003  
Client Sample ID: DewBurd GW2

Report Date: 07/30/08  
Collection Date: 05/30/08 15:21  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L	U	0.2		1	E903.0	06/19/08 09:39/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Thorium 230	0.1	pCi/L				1	E907.0	06/16/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/16/08 14:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	727	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	83.8	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L	D	0.003		1	E200.8	06/14/08 02:50/eli-c
Arsenic	0.004	mg/L		0.002	1	E200.8	06/14/08 02:50/eli-c	
Barium	ND	mg/L		0.1	1	E200.8	06/14/08 02:50/eli-c	
Beryllium	ND	mg/L		0.001	1	E200.8	06/14/08 02:50/eli-c	
Boron	ND	mg/L		0.1		2	E200.7	06/13/08 22:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/14/08 02:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/14/08 02:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/14/08 02:50/eli-c
Iron	1.54	mg/L		0.03		2	E200.7	06/13/08 22:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/14/08 02:50/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	06/14/08 02:50/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/12/08 10:59/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/14/08 02:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/14/08 02:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/14/08 02:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 22:58/eli-c
Strontium	1.8	mg/L		0.1		1	E200.8	06/14/08 02:50/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/14/08 02:50/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/14/08 02:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/14/08 02:50/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.25	%				1	A1030 E	07/18/08 00:00/jmh
Anions	16.6	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	17.7	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	1110	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	07/18/08 00:00/imh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

U - Not detected at minimum detectable concentration



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050427-004  
**Client Sample ID:** DewBurd GW650

**Report Date:** 07/30/08  
**Collection Date:** 05/30/08 16:30  
**Date Received:** 05/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	30	mg/L		5		1	A2320 B	06/02/08 12:10/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	06/02/08 12:10/mb
Bicarbonate as HCO <sub>3</sub>	37	mg/L		5		1	A2320 B	06/02/08 12:10/mb
Calcium	125	mg/L		0.5		2	E200.7	06/16/08 18:24/eli-c
Chloride	16	mg/L		1		1	E300.0	06/01/08 02:10/jmh
Fluoride	0.1	mg/L		0.1		1	E300.0	06/01/08 02:10/jmh
Magnesium	70.6	mg/L		0.5		2	E200.7	06/16/08 18:24/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH <sub>3</sub> G	06/03/08 13:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/01/08 02:10/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/01/08 02:10/jmh
Potassium	15.6	mg/L		0.5		2	E200.7	06/16/08 18:24/eli-c
Silica	ND	mg/L		0.5		2	E200.7	06/16/08 18:24/eli-c
Sodium	119	mg/L	D	2		2	E200.7	06/16/08 18:24/eli-c
Sulfate	825	mg/L	D	3		50	E300.0	06/01/08 01:54/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1700	umhos/cm		5.0		1	A2510 B	06/02/08 15:11/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	06/04/08 00:00/jmh
pH	7.30	s.u.		0.01		1	A4500-H B	06/02/08 15:52/tb
Sodium Adsorption Ratio (SAR)	2.1	unitless		0.10		1	Calculation	07/18/08 18:14/ADM
Solids, Total Dissolved TDS @ 180 C	1400	mg/L		5		1	A2540 C	06/05/08 14:42/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 18:24/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/23/08 06:01/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 18:24/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/16/08 18:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/23/08 06:01/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/16/08 18:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/23/08 06:01/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	06/16/08 18:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/23/08 06:01/eli-c
Manganese	0.94	mg/L		0.01		1	E200.8	06/23/08 06:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/23/08 06:01/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 18:24/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/16/08 18:24/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 15:44/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/24/08 13:52/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-004  
Client Sample ID: DewBurd GW650

Report Date: 07/30/08  
Collection Date: 05/30/08 16:30  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Thorium 232	ND	mg/L		0.005			1	E200.8	06/23/08 06:01/eli-c
Uranium	ND	mg/L		0.0003			1	E200.8	06/23/08 06:01/eli-c
Vanadium	ND	mg/L		0.1			2	E200.7	06/16/08 18:24/eli-c
Zinc	ND	mg/L		0.01			2	E200.7	06/16/08 18:24/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	06/26/08 02:21/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	06/20/08 10:40/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	2.1	pCi/L	U				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	2.9	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.6	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta	10.8	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	3.2	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Beta MDC	5.1	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Lead 210	1.5	pCi/L	U				1	E909.0M	06/17/08 06:30/eli-c
Lead 210 MDC	8.2	pCi/L					1	E909.0M	06/17/08 06:30/eli-c
Lead 210 precision (±)	4.9	pCi/L					1	E909.0M	06/17/08 06:30/eli-c
Polonium 210	-0.2	pCi/L	U	1.0			1	RMO-3008	06/16/08 18:00/eli-c
Polonium 210 precision (±)	0.50	pCi/L					1	RMO-3008	06/16/08 18:00/eli-c
Radium 226	1.2	pCi/L					1	E903.0	06/19/08 02:32/eli-c
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	06/19/08 02:32/eli-c
Thorium 230	0.0	pCi/L	U	0.2			1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	06/16/08 13:30/eli-c
Gross Gamma	0.0	pCi/L	U	20			1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/17/08 16:05/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	6.2	pCi/L	U				1	E909.0M	06/13/08 07:15/eli-c
Lead 210 precision (±)	5.3	pCi/L					1	E909.0M	06/13/08 07:15/eli-c
Lead 210 MDC	8.7	pCi/L					1	E909.0M	06/13/08 07:15/eli-c
Polonium 210	0.2	pCi/L	U	1.0			1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	0.40	pCi/L					1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	-0.02	pCi/L	U				1	E903.0	06/19/08 09:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050427-004  
Client Sample ID: DewBurd GW650

Report Date: 07/30/08  
Collection Date: 05/30/08 16:30  
Date Received: 05/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	06/19/08 09:39/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	06/16/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/16/08 14:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	254	pCi/L		100		1	D5072-92	06/04/08 12:40/eli-c
Radon 222 precision (±)	77.0	pCi/L				1	D5072-92	06/04/08 12:40/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/14/08 02:57/eli-c
Arsenic	0.002	mg/L	D	0.002		1	E200.8	06/14/08 02:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/14/08 02:57/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/14/08 02:57/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	06/13/08 22:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/14/08 02:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/14/08 02:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/14/08 02:57/eli-c
Iron	8.99	mg/L		0.03		2	E200.7	06/13/08 22:10/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	06/14/08 02:57/eli-c
Manganese	0.66	mg/L		0.01		2	E200.7	06/13/08 22:10/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/12/08 11:05/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/14/08 02:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/14/08 02:57/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/14/08 02:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 23:05/eli-c
Strontium	2.6	mg/L		0.1		1	E200.8	06/14/08 02:57/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/14/08 02:57/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	06/14/08 02:57/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	06/14/08 02:57/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.40	%				1	A1030 E	07/18/08 00:00/jmh
Anions	18.2	meq/L				1	A1030 E	07/18/08 00:00/jmh
Cations	17.7	meq/L				1	A1030 E	07/18/08 00:00/jmh
Solids, Total Dissolved Calculated	1190	mg/L				1	A1030 E	07/18/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.13					1	A1030 E	07/18/08 00:00/jmh

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080602A-ALK-SEL-W							
Sample ID: LCS1_080602A	Laboratory Control Sample				Run: PH_COND1-R_080602A		06/02/08 10:56		
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_080602A	Method Blank				Run: PH_COND1-R_080602A		06/02/08 12:28		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08050406-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080602A		06/02/08 11:35		
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	98	80	120			
Sample ID: R08050406-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080602A		06/02/08 11:38		
Alkalinity, Total as CaCO <sub>3</sub>	244	mg/L	5.0	100	80	120	0.8	10	
Method: A2510 B		Batch: 080602_2_COND-PROBE-W							
Sample ID: LCS_COND-1_080602	Laboratory Control Sample				Run: PH_COND2-R_080602A		06/02/08 14:54		
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: LCS1-1_080602	Laboratory Control Sample				Run: PH_COND2-R_080602A		06/02/08 14:55		
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080602	Laboratory Control Sample				Run: PH_COND2-R_080602A		06/02/08 14:57		
Conductivity @ 25 C	4900	umhos/cm	5.0	98	90	110			
Sample ID: MBLK-1_080602	Method Blank				Run: PH_COND2-R_080602A		06/02/08 14:59		
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08050427-004A	Sample Duplicate				Run: PH_COND2-R_080602A		06/02/08 15:13		
Conductivity @ 25 C	1640	umhos/cm	5.0				3.6	10	
Method: A2540 C		Batch: 080605A-SLDS-TDS-W							
Sample ID: LCS1_080605A	Laboratory Control Sample				Run: BAL-4-R_080605A		06/05/08 14:38		
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	107	90	110			
Sample ID: MBLK1_080605A	Method Blank				Run: BAL-4-R_080605A		06/05/08 14:40		
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: R08060018-007BMS	Sample Matrix Spike				Run: BAL-4-R_080605A		06/05/08 14:46		
Solids, Total Dissolved TDS @ 180 C	2100	mg/L	5.0	138	80	120			S
Sample ID: R08060018-007BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080605A		06/05/08 14:46		
Solids, Total Dissolved TDS @ 180 C	2100	mg/L	5.0	148	80	120	0.9	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080604-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080604B		06/04/08 00:00		
Oxidation-Reduction Potential	470	mV		100	95	105			
Sample ID: R08050427-004F	Sample Duplicate				Run: PH_COND1-R_080604B		06/04/08 00:00		
Oxidation-Reduction Potential	200	mV					0.5	10	
Method: A3114 B							Analytical Run: SUB-C102993		
Sample ID: 288-92-2	Initial Calibration Verification Standard						06/20/08 09:57		
Selenium-IV	0.053	mg/L	0.0010	105	90	110			
Method: A3114 B							Batch: C_SE3114-080620A		
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C102993		06/20/08 10:11		
Selenium-IV	0.049	mg/L	0.0010	99	90	110			
Sample ID: R08050356-001A	Sample Matrix Spike				Run: SUB-C102993		06/20/08 10:45		
Selenium-IV	0.069	mg/L	0.0010	137	85	115			S
Sample ID: R08050356-001A	Sample Matrix Spike Duplicate				Run: SUB-C102993		06/20/08 10:48		
Selenium-IV	0.075	mg/L	0.0010	151	85	115	9.3	10	S
Method: A3114 B							Batch: C_SE3114-080620C		
Sample ID: MBLK	Method Blank				Run: SUB-C103018		06/20/08 15:10		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C103018		06/20/08 15:14		
Selenium	0.049	mg/L	0.0010	99	90	110			
Sample ID: R08050356-001A	Sample Matrix Spike				Run: SUB-C103018		06/20/08 15:48		
Selenium	0.073	mg/L	0.0010	146	85	115			S
Sample ID: R08050356-001A	Sample Matrix Spike Duplicate				Run: SUB-C103018		06/20/08 15:50		
Selenium	0.073	mg/L	0.0010	145	85	115	0.0	10	S
Method: A4500-H B							Batch: 080602_1_PH-W		
Sample ID: LCS_pH-1_080602	Laboratory Control Sample				Run: PH_COND2-R_080602B		06/02/08 15:39		
pH	6.93	s.u.	0.010	101	98.55	101.45			
Sample ID: R08060006-001ADUP	Sample Duplicate				Run: PH_COND2-R_080602B		06/02/08 15:55		
pH	7.56	s.u.	0.010				0.1	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2008-06-03_2_NH3_01							
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080603A			06/03/08 11:58
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:01
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080603A			06/03/08 12:14
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: R08050427-003BMS	Sample Matrix Spike					Run: TECHAA2-R_080603A			06/03/08 13:27
Nitrogen, Ammonia as N	0.57	mg/L	0.10	90	80	120			
Sample ID: R08050427-003BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080603A			06/03/08 13:28
Nitrogen, Ammonia as N	0.58	mg/L	0.10	94	80	120	1.9	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102753		
Sample ID: MB-080616A	Method Blank		Run: SUB-C102753				06/16/08 15:33		
Silica	ND	mg/L	0.02						
Aluminum	0.01	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.005	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	0.002	mg/L	0.002						
Sample ID: LFB-080616A	Laboratory Fortified Blank		Run: SUB-C102753				06/16/08 15:37		
Silica	0.37	mg/L	0.10	92	85	125			
Aluminum	0.99	mg/L	0.10	98	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.00	mg/L	0.10	98	85	125			
Calcium	53	mg/L	0.50	105	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	111	85	125			
Magnesium	52	mg/L	0.50	104	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	0.98	mg/L	0.10	98	85	125			
Nickel	1.0	mg/L	0.050	100	85	125			
Potassium	46	mg/L	0.50	91	85	125			
Sodium	51	mg/L	0.77	102	85	125			
Vanadium	1.0	mg/L	0.10	104	85	125			
Zinc	1.0	mg/L	0.010	100	85	125			
Sample ID: C08060096-002CMS2	Sample Matrix Spike		Run: SUB-C102753				06/16/08 18:08		
Aluminum	1.95	mg/L	0.10	98	70	130			
Barium	2.08	mg/L	0.10	104	70	130			
Boron	2.10	mg/L	0.10	102	70	130			
Chromium	2.09	mg/L	0.050	104	70	130			
Iron	2.14	mg/L	0.030	106	70	130			
Manganese	2.13	mg/L	0.010	103	70	130			
Molybdenum	2.00	mg/L	0.10	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R102753		
Sample ID: C08060096-002CMS2	Sample Matrix Spike		Run: SUB-C102753				06/16/08 18:08		
Nickel	2.06	mg/L	0.050	103	70	130			
Vanadium	2.12	mg/L	0.10	104	70	130			
Zinc	2.10	mg/L	0.010	104	70	130			
Calcium	141	mg/L	1.0	102	70	130			
Magnesium	117	mg/L	1.0	104	70	130			
Potassium	98.4	mg/L	1.0	92	70	130			
Silica	4.58	mg/L	0.10		70	130			A
Sodium	372	mg/L	1.5	95	70	130			
Sample ID: C08060096-002CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C102753				06/16/08 18:12		
Aluminum	1.98	mg/L	0.10	99	70	130	1.6	20	
Barium	2.12	mg/L	0.10	106	70	130	2.0	20	
Boron	2.16	mg/L	0.10	105	70	130	2.9	20	
Chromium	2.13	mg/L	0.050	106	70	130	1.9	20	
Iron	2.16	mg/L	0.030	108	70	130	1.2	20	
Manganese	2.17	mg/L	0.010	105	70	130	1.9	20	
Molybdenum	2.06	mg/L	0.10	103	70	130	3.2	20	
Nickel	2.12	mg/L	0.050	106	70	130	2.4	20	
Vanadium	2.21	mg/L	0.10	108	70	130	4.1	20	
Zinc	2.15	mg/L	0.010	106	70	130	2.4	20	
Calcium	145	mg/L	1.0	106	70	130	2.7	20	
Magnesium	121	mg/L	1.0	107	70	130	2.7	20	
Potassium	99.1	mg/L	1.0	92	70	130	0.7	20	
Silica	4.65	mg/L	0.10		70	130	1.3	20	A
Sodium	369	mg/L	1.5	92	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R103038		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C103038				06/22/08 13:02		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Thorium 232	8E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Zinc	0.0005	mg/L	0.0003						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C103038				06/22/08 14:35		
Arsenic	0.0517	mg/L	0.0010	103	85	115			
Cadmium	0.0524	mg/L	0.0010	105	85	115			
Copper	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0527	mg/L	0.0010	105	85	115			
Manganese	0.0530	mg/L	0.0010	106	85	115			
Mercury	0.00507	mg/L	0.0010	101	85	115			
Thorium 232	0.0520	mg/L	0.0010	104	85	115			
Uranium	0.0525	mg/L	0.00030	105	85	115			
Zinc	0.0554	mg/L	0.0010	110	85	115			
<b>Sample ID: R08050419-003C</b>	Post Digestion Spike		Run: SUB-C103038				06/22/08 19:53		
Arsenic	0.0536	mg/L	0.0010	106	70	130			
Cadmium	0.0507	mg/L	0.010	101	70	130			
Copper	0.0505	mg/L	0.010	100	70	130			
Lead	0.0543	mg/L	0.050	109	70	130			
Manganese	0.136	mg/L	0.010	100	70	130			
Mercury	0.00517	mg/L	0.0010	103	70	130			
Thorium 232	0.0561	mg/L	0.0010	112	70	130			
Uranium	0.0558	mg/L	0.00030	111	70	130			
Zinc	0.0511	mg/L	0.010	96	70	130			
<b>Sample ID: R08050419-003C</b>	Post Digestion Spike Duplicate		Run: SUB-C103038				06/22/08 20:00		
Arsenic	0.0548	mg/L	0.0010	108	70	130	2.2	20	
Cadmium	0.0519	mg/L	0.010	104	70	130	2.3	20	
Copper	0.0510	mg/L	0.010	101	70	130	0.8	20	
Lead	0.0549	mg/L	0.050	110	70	130	1.2	20	
Manganese	0.138	mg/L	0.010	103	70	130	0.9	20	
Mercury	0.00531	mg/L	0.0010	106	70	130	2.7	20	
Thorium 232	0.0571	mg/L	0.0010	114	70	130	1.8	20	
Uranium	0.0567	mg/L	0.00030	113	70	130	1.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103038		
Sample ID: R08050419-003C	Post Digestion Spike Duplicate			Run: SUB-C103038			06/22/08 20:00		
Zinc	0.0522	mg/L	0.010	98	70	130	2.2	20	
Sample ID: C08060423-001BMS	Sample Matrix Spike			Run: SUB-C103038			06/23/08 02:04		
Arsenic	0.0502	mg/L	0.0010	91	70	130			
Cadmium	0.0433	mg/L	0.0010	87	70	130			
Copper	0.0491	mg/L	0.0010	95	70	130			
Lead	0.0532	mg/L	0.0010	105	70	130			
Manganese	0.0789	mg/L	0.0010	93	70	130			
Mercury	0.00506	mg/L	0.0010	101	70	130			
Thorium 232	0.0551	mg/L	0.0010	109	70	130			
Uranium	0.0552	mg/L	0.00030	110	70	130			
Zinc	0.142	mg/L	0.0010	71	70	130			
Sample ID: C08060423-001BMSD	Sample Matrix Spike Duplicate			Run: SUB-C103038			06/23/08 02:11		
Arsenic	0.0527	mg/L	0.0010	96	70	130	4.9	20	
Cadmium	0.0451	mg/L	0.0010	90	70	130	4.1	20	
Copper	0.0526	mg/L	0.0010	102	70	130	6.9	20	
Lead	0.0559	mg/L	0.0010	110	70	130	4.9	20	
Manganese	0.0827	mg/L	0.0010	101	70	130	4.7	20	
Mercury	0.00530	mg/L	0.0010	106	70	130	4.7	20	
Thorium 232	0.0588	mg/L	0.0010	117	70	130	6.5	20	
Uranium	0.0583	mg/L	0.00030	116	70	130	5.5	20	
Zinc	0.150	mg/L	0.0010	86	70	130	5.1	20	
Method: E200.8							Batch: C_R103200		
Sample ID: LRB	Method Blank			Run: SUB-C103200			06/24/08 11:37		
Silver	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C103200			06/24/08 11:44		
Silver	0.0200	mg/L	0.0010	100	85	115			
Sample ID: C08060096-004CMS4	Post Digestion Spike			Run: SUB-C103200			06/24/08 13:59		
Silver	0.0131	mg/L	0.010	66	70	130			S
Sample ID: C08060096-004CMSD4	Post Digestion Spike Duplicate			Run: SUB-C103200			06/24/08 14:26		
Silver	0.0127	mg/L	0.010	63	70	130	3.6	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/30/08  
Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R35068		
Sample ID: LFB0805311606-3	Laboratory Fortified Blank			Run: DIONEX_080531A			05/31/08 19:36		
Chloride	4.62	mg/L	0.50	92	90	110			
Fluoride	1.83	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
Sample ID: LFB0805311606-4	Laboratory Fortified Blank			Run: DIONEX_080531A			05/31/08 19:52		
Chloride	4.57	mg/L	0.50	91	90	110			
Fluoride	1.81	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
Sample ID: R08050427-002AMS	Sample Matrix Spike			Run: DIONEX_080531A			06/01/08 00:32		
Chloride	241	mg/L	5.4	87	80	120			
Fluoride	92.5	mg/L	0.56	86	80	120			
Nitrogen, Nitrate as N	117	mg/L	1.3	94	80	120			
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120			
Sulfate	1100	mg/L	3.4	85	80	120			
Sample ID: R08050427-002AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080531A			06/01/08 00:48		
Chloride	241	mg/L	5.4	87	80	120	0.3	10	
Fluoride	92.2	mg/L	0.56	85	80	120	0.3	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	93	80	120	0.2	10	
Nitrogen, Nitrite as N	122	mg/L	2.9	98	80	120	0.6	10	
Sulfate	1110	mg/L	3.4	85	80	120	0.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0466		
<b>Sample ID: MB-GrAB-0466</b>	Method Blank					Run: SUB-C103442		06/27/08 13:26	
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-0.5	pCi/L							U
<b>Sample ID: C08060305-001AMS</b>	Sample Matrix Spike					Run: SUB-C103442		06/27/08 13:26	
Gross Alpha	150	pCi/L		105	70	130			
<b>Sample ID: C08060305-001AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C103442		06/27/08 13:26	
Gross Alpha	130	pCi/L		97	70	130	8.2	16.6	
<b>Sample ID: UNAT-GrAB-0466</b>	Laboratory Control Sample					Run: SUB-C103442		06/27/08 13:27	
Gross Alpha	130	pCi/L		97	70	130			
<b>Sample ID: C08060305-001AMS</b>	Sample Matrix Spike					Run: SUB-C103442		06/27/08 13:26	
Gross Beta	110	pCi/L		120	70	130			
<b>Sample ID: C08060305-001AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C103442		06/27/08 13:27	
Gross Beta	110	pCi/L		115	70	130	5.0	15.8	
<b>Method: E903.0</b>							Batch: C_RA226-2856		
<b>Sample ID: MB-RA226-2856</b>	Method Blank					Run: SUB-C102973		06/19/08 04:13	
Radium 226	-0.1	pCi/L							U
<b>Sample ID: LCS-RA226-2856</b>	Laboratory Control Sample					Run: SUB-C102973		06/19/08 04:13	
Radium 226	6.7	pCi/L		87	70	130			
<b>Sample ID: TAP-WATER-MS</b>	Sample Matrix Spike					Run: SUB-C102973		06/19/08 04:13	
Radium 226	6.9	pCi/L		87	70	130			
<b>Sample ID: TAP-WATER-MSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C102973		06/19/08 04:13	
Radium 226	6.2	pCi/L		78	70	130	11	24.5	
<b>Method: E907.0</b>							Batch: C_R103514		
<b>Sample ID: C08060096-003HMS</b>	Sample Matrix Spike					Run: SUB-C103514		06/16/08 13:30	
Thorium 230	12.4	pCi/L	0.20	102	70	130			
<b>Sample ID: C08060096-003HMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C103514		06/16/08 13:30	
Thorium 230	11.0	pCi/L	0.20	90	70	130	12	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/30/08

Work Order: R08050427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R103750		
Sample ID: R08050356-004K	Sample Matrix Spike		Run: SUB-C103750				07/01/08 14:30		
Polonium 210	180	pCi/L	1.0	109	70	130			
Sample ID: R08050356-004K	Sample Matrix Spike Duplicate		Run: SUB-C103750				07/01/08 14:30		
Polonium 210	170	pCi/L	1.0	101	70	130	8.2	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## Chain of Custody and Analytical Request Record

Page \_\_\_\_ of \_\_\_\_

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>LESPEL</b>		Project Name, PWS, Permit, Etc. <b>Power Tech Dewey Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>LESPEL</b>		Contact Name: <b>Devy. foreman reception</b>		Email: <b>Eric Letourne</b>	Sampler: (Please Print) <b>Eric Letourne</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:					
<div><div><input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/MWTP <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____</div><div><input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC</div></div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1. DewBurd GW 18		5/30/08	11:12	W	<div><div><input checked="" type="checkbox"/> AWS <input checked="" type="checkbox"/> SVB <input checked="" type="checkbox"/> BO <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Water <input checked="" type="checkbox"/> Soils/Solids <input checked="" type="checkbox"/> Vegetation <input checked="" type="checkbox"/> Bioassay <input checked="" type="checkbox"/> Other</div><div><b>SEE ATTACHED</b> Normal Turnaround (TAT)</div><div><b>RUSH</b></div><div>Comments: Don Anderson well Set 25 Pinner down Set 7 Wayne Peterson well Set 9 Jemel stock tank Set 12</div></div>
2. DewBurd GW 42		5/30/08	11:55	W	
3. DewBurd GW 2		5/30/08	15:21	W	
4. DewBurd GW 650		5/30/08	16:30	W	
5.					
6.					
7.					
8.					
9.					
10.					
Custody Record Relinquished by (print): <b>Eric Letourne</b> Relinquished by (print): _____ Date/Time: <b>5-31-08 10:20</b> Signature: <b>[Signature]</b>		Received by (print): <b>J. Hartman</b> Received by (print): _____ Date/Time: <b>5/31/08 15:15</b> Signature: <b>[Signature]</b>		Signature: _____	
MUST be Signed		Sample Disposal: Return to Client: _____		Lab Disposal: _____	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

August 15, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08060210

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 2 samples from RESPEC Inc on 6/11/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08060210-001	DewBurd GW680	06/10/08 10:50	06/11/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08060210-002	DewBurd GW688	06/10/08 16:37	06/11/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-001  
Client Sample ID: DewBurd GW680

Report Date: 08/15/08  
Collection Date: 06/10/08 10:50  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	188	mg/L		5		1	A2320 B	06/12/08 14:28/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/12/08 14:28/mb
Bicarbonate as HCO3	229	mg/L		5		1	A2320 B	06/12/08 14:28/mb
Calcium	415	mg/L		0.5		2	E200.7	06/26/08 15:14/eli-c
Chloride	12	mg/L		1		1	E300.0	06/12/08 18:45/eli-g
Fluoride	0.3	mg/L		0.1		1	E300.0	06/12/08 18:45/eli-g
Magnesium	134	mg/L		0.5		2	E200.7	06/26/08 15:14/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 10:56/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/12/08 18:45/eli-g
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/12/08 18:45/eli-g
Potassium	19.3	mg/L		0.5		2	E200.7	06/26/08 15:14/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	06/26/08 15:14/eli-c
Sodium	134	mg/L	D	2		2	E200.7	06/26/08 15:14/eli-c
Sulfate	1410	mg/L		1		10	E300.0	06/12/08 18:19/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	3060	umhos/cm		5.0		1	A2510 B	06/18/08 09:34/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	06/17/08 00:00/jmh
pH	7.32	s.u.		0.01		1	A4500-H B	06/16/08 14:02/tb
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	07/30/08 11:38/ADM
Solids, Total Dissolved TDS @ 180 C	2500	mg/L		5		1	A2540 C	06/13/08 12:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/26/08 15:14/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/04/08 01:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/26/08 15:14/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/26/08 15:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/04/08 01:47/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/26/08 15:14/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/04/08 01:47/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	06/26/08 15:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/04/08 01:47/eli-c
Manganese	0.49	mg/L		0.01		2	E200.7	06/26/08 15:14/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/04/08 01:47/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/26/08 15:14/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/26/08 15:14/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:14/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/07/08 11:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-001  
Client Sample ID: DewBurd GW680

Report Date: 08/15/08  
Collection Date: 06/10/08 10:50  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/04/08 01:47/eli-c
Uranium	0.0227	mg/L		0.0003		1	E200.8	07/04/08 01:47/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/26/08 15:14/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	06/26/08 15:14/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/02/08 07:04/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:11/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4370	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Alpha precision (±)	60.4	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Alpha MDC	7.8	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta	1320	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta precision (±)	17.9	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta MDC	9.5	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Lead 210	15.7	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.8	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	06/30/08 12:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	06/30/08 12:00/eli-c
Radium 226	1410	pCi/L				1	E903.0	07/15/08 21:51/eli-c
Radium 226 precision (±)	10.9	pCi/L				1	E903.0	07/15/08 21:51/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/08/08 22:11/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	07/08/08 22:11/eli-c
Gross Gamma	5700	pCi/L		20		1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	390	pCi/L				1	E901.1	06/17/08 16:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	12.0	pCi/L				1	E909.0M	07/08/08 09:00/eli-c
Lead 210 precision (±)	6.5	pCi/L				1	E909.0M	07/08/08 09:00/eli-c
Lead 210 MDC	10.6	pCi/L				1	E909.0M	07/08/08 09:00/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008	06/30/08 12:00/eli-c
Polonium 210 precision (±)	0.57	pCi/L				1	RMO-3008	06/30/08 12:00/eli-c
Radium 226	4.4	pCi/L				1	E903.0	07/08/08 09:54/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-001  
Client Sample ID: DewBurd GW680

Report Date: 08/15/08  
Collection Date: 06/10/08 10:50  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	0.6	pCi/L					1	E903.0	07/08/08 09:54/eli-c
Radium 226 MDC	0.3	pCi/L					1	E903.0	07/08/08 09:54/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	07/01/08 19:21/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	07/01/08 19:21/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	91700	pCi/L		100			1	D5072-92	06/16/08 16:08/eli-c
Radon 222 precision (±)	525	pCi/L					1	D5072-92	06/16/08 16:08/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	06/27/08 05:40/eli-c
Arsenic	0.005	mg/L	D	0.002			1	E200.8	06/27/08 05:40/eli-c
Barium	ND	mg/L		0.1			2	E200.7	06/18/08 23:09/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	06/27/08 05:40/eli-c
Boron	0.1	mg/L		0.1			2	E200.7	06/18/08 23:09/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	06/27/08 05:40/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	06/18/08 23:09/eli-c
Copper	ND	mg/L		0.01			2	E200.7	06/18/08 23:09/eli-c
Iron	0.28	mg/L		0.03			2	E200.7	06/18/08 23:09/eli-c
Lead	ND	mg/L		0.001			1	E200.8	06/27/08 05:40/eli-c
Manganese	0.48	mg/L		0.01			2	E200.7	06/18/08 23:09/eli-c
Mercury	ND	mg/L		0.0001			1	E245.1	06/21/08 10:32/eli-b
Molybdenum	ND	mg/L		0.1			2	E200.7	06/18/08 23:09/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	06/18/08 23:09/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	06/27/08 05:40/eli-c
Silver	ND	mg/L		0.005			1	E200.8	07/07/08 19:27/eli-c
Strontium	8.1	mg/L		0.1			2	E200.7	06/18/08 23:09/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	06/27/08 05:40/eli-c
Uranium	0.0244	mg/L		0.0003			1	E200.8	06/27/08 05:40/eli-c
Zinc	0.01	mg/L		0.01			2	E200.7	06/18/08 23:09/eli-c
DATA QUALITY									
A/C Balance (± 5)	6.54	%					1	A1030 E	07/30/08 00:00/jmh
Anions	33.4	meq/L					1	A1030 E	07/30/08 00:00/jmh
Cations	38.1	meq/L					1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	2250	mg/L					1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.10						1	A1030 E	07/30/08 00:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-002  
Client Sample ID: DewBurd GW688

Report Date: 08/15/08  
Collection Date: 06/10/08 16:37  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	100	mg/L		5		1	A2320 B	06/12/08 14:57/mb
Carbonate as CO3	7	mg/L		5		1	A2320 B	06/12/08 14:57/mb
Bicarbonate as HCO3	107	mg/L		5		1	A2320 B	06/12/08 14:57/mb
Calcium	34.1	mg/L		0.5		2	E200.7	06/26/08 15:26/eli-c
Chloride	11	mg/L		1		1	E300.0	06/12/08 19:10/eli-g
Fluoride	0.5	mg/L		0.1		1	E300.0	06/12/08 19:10/eli-g
Magnesium	16.6	mg/L		0.5		2	E200.7	06/26/08 15:26/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	06/19/08 10:57/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/12/08 19:10/eli-g
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/12/08 19:10/eli-g
Potassium	12.5	mg/L		0.5		2	E200.7	06/26/08 15:26/eli-c
Silica	3.7	mg/L		0.5		2	E200.7	06/26/08 15:26/eli-c
Sodium	195	mg/L	D	2		2	E200.7	06/26/08 15:26/eli-c
Sulfate	398	mg/L		1		5	E300.0	06/12/08 18:57/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1260	umhos/cm		5.0		1	A2510 B	06/18/08 09:38/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	06/17/08 00:00/jmh
pH	8.82	s.u.		0.01		1	A4500-H B	06/16/08 14:03/tb
Sodium Adsorption Ratio (SAR)	6.9	unitless		0.10		1	Calculation	07/30/08 11:38/ADM
Solids, Total Dissolved TDS @ 180 C	740	mg/L		5		1	A2540 C	06/13/08 12:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	06/26/08 15:26/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/04/08 02:00/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/26/08 15:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/26/08 15:26/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/04/08 02:00/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/26/08 15:26/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/04/08 02:00/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	06/26/08 15:26/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/04/08 02:00/eli-c
Manganese	0.02	mg/L		0.01		2	E200.7	06/26/08 15:26/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/04/08 02:00/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/26/08 15:26/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/26/08 15:26/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/07/08 11:47/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-002  
Client Sample ID: DewBurd GW688

Report Date: 08/15/08  
Collection Date: 06/10/08 16:37  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/04/08 02:00/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/04/08 02:00/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/26/08 15:26/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/26/08 15:26/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/02/08 07:08/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:13/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	17.3	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Alpha precision (±)	2.7	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Alpha MDC	2.6	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta	17.1	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Gross Beta MDC	3.2	pCi/L				1	E900.0	07/11/08 09:45/eli-c
Lead 210	-0.5	pCi/L	U			1	E909.0M	06/25/08 09:15/eli-c
Lead 210 MDC	5.9	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Lead 210 precision (±)	3.5	pCi/L				1	E909.0M	06/25/08 09:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/30/08 12:00/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	06/30/08 12:00/eli-c
Radium 226	2.5	pCi/L				1	E903.0	07/15/08 23:27/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	07/15/08 23:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/09/08 12:34/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	07/09/08 12:34/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	06/17/08 16:05/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	06/17/08 16:05/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.8	pCi/L	U			1	E909.0M	07/08/08 09:00/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	07/08/08 09:00/eli-c
Lead 210 MDC	10.6	pCi/L				1	E909.0M	07/08/08 09:00/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	06/30/08 12:00/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	06/30/08 12:00/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	07/08/08 09:54/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060210-002  
Client Sample ID: DewBurd GW688

Report Date: 08/15/08  
Collection Date: 06/10/08 16:37  
Date Received: 06/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.1	pCi/L	U	0.2		1	E903.0	07/08/08 09:54/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/08/08 09:54/eli-c
Thorium 230	0.1	pCi/L				1	E907.0	07/01/08 19:21/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/01/08 19:21/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	749	pCi/L		100		1	D5072-92	06/16/08 16:08/eli-c
Radon 222 precision (±)	105	pCi/L				1	D5072-92	06/16/08 16:08/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L	D	0.003		1	E200.8	06/27/08 05:47/eli-c
Arsenic	ND	mg/L		0.002		1	E200.8	06/27/08 05:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/18/08 23:13/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	06/27/08 05:47/eli-c
Boron	ND	mg/L		0.1		2	E200.7	06/18/08 23:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/27/08 05:47/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	06/18/08 23:13/eli-c
Copper	ND	mg/L		0.01		2	E200.7	06/18/08 23:13/eli-c
Iron	0.15	mg/L		0.03		2	E200.7	06/18/08 23:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/27/08 05:47/eli-c
Manganese	0.01	mg/L		0.01		2	E200.7	06/18/08 23:13/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	06/23/08 19:47/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	06/18/08 23:13/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	06/18/08 23:13/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/27/08 05:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/07/08 19:34/eli-c
Strontium	1.1	mg/L	0.1		2	E200.7	06/18/08 23:13/eli-c	
Thallium	ND	mg/L	0.001		1	E200.8	06/27/08 05:47/eli-c	
Uranium	ND	mg/L	0.0003		1	E200.8	06/27/08 05:47/eli-c	
Zinc	ND	mg/L	0.01		2	E200.7	06/18/08 23:13/eli-c	
DATA QUALITY								
A/C Balance (± 5)	5.73	%				1	A1030 E	07/30/08 00:00/jmh
Anions	10.6	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	11.9	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	738	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080612A-ALK-SEL-W		
Sample ID: LCS1_080612A	Laboratory Control Sample				Run: PH_COND1-R_080612A			06/12/08 12:38	
Alkalinity, Total as CaCO3	936	mg/L	5.0	94	90	110			
Sample ID: MBLK1_080612A	Method Blank				Run: PH_COND1-R_080612A			06/12/08 12:40	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R08060199-002AMS	Sample Matrix Spike				Run: PH_COND1-R_080612A			06/12/08 14:17	
Alkalinity, Total as CaCO3	304	mg/L	5.0	106	80	120			
Sample ID: R08060199-002AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080612A			06/12/08 14:22	
Alkalinity, Total as CaCO3	308	mg/L	5.0	109	80	120	1.3	10	
Method: A2510 B							Batch: 080618_1_COND-PROBE-W		
Sample ID: LCS_COND-1_080618	Laboratory Control Sample				Run: PH_COND2-R_080618A			06/18/08 09:20	
Conductivity @ 25 C	1390	umhos/cm	5.0	98	90	110			
Sample ID: LCS1-1_080618	Laboratory Control Sample				Run: PH_COND2-R_080618A			06/18/08 09:21	
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_080618	Laboratory Control Sample				Run: PH_COND2-R_080618A			06/18/08 09:23	
Conductivity @ 25 C	5060	umhos/cm	5.0	101	90	110			
Sample ID: MBLK-1_080618	Method Blank				Run: PH_COND2-R_080618A			06/18/08 09:24	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08060210-002ADUP	Sample Duplicate				Run: PH_COND2-R_080618A			06/18/08 09:38	
Conductivity @ 25 C	1210	umhos/cm	5.0				4.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 C</b>							Batch: 080613A-SLDS-TDS-W		
<b>Sample ID: LCS1_080613A</b>	Laboratory Control Sample				Run: BAL-4-R_080616B				06/13/08 11:48
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	109	90	110			
<b>Sample ID: MBLK1_080613A</b>	Method Blank				Run: BAL-4-R_080616B				06/13/08 11:36
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
<b>Sample ID: R08060199-001AMS</b>	Sample Matrix Spike				Run: BAL-4-R_080616B				06/13/08 11:59
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	110	80	120			
<b>Sample ID: R08060199-001AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080616B				06/13/08 12:00
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	115	80	120	0.9	10	
<b>Sample ID: R08060228-004AMS</b>	Sample Matrix Spike				Run: BAL-4-R_080616B				06/13/08 12:06
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	5.0	107	80	120			
<b>Sample ID: R08060228-004AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080616B				06/13/08 12:07
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	5.0	113	80	120	0.6	10	
<b>Method: A2580 B</b>							Batch: 080617-ORP-ISE-W		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: PH_COND1-R_080617A				06/17/08 00:00
Oxidation-Reduction Potential	470	mV		99	95	105			
<b>Sample ID: R08060210-002F</b>	Sample Duplicate				Run: PH_COND1-R_080617A				06/17/08 00:00
Oxidation-Reduction Potential	180	mV					0.7	10	
<b>Method: A3114 B</b>							Analytical Run: SUB-C102993		
<b>Sample ID: 288-92-2</b>	Initial Calibration Verification Standard								06/20/08 09:57
Selenium-IV	0.053	mg/L	0.0010	105	90	110			
<b>Method: A3114 B</b>							Batch: C_SE3114-080620A		
<b>Sample ID: 288-92-2</b>	Laboratory Control Sample				Run: SUB-C102993				06/20/08 10:11
Selenium-IV	0.049	mg/L	0.0010	99	90	110			
<b>Sample ID: C08060097-001HMS</b>	Sample Matrix Spike				Run: SUB-C102993				06/20/08 11:18
Selenium-IV	0.046	mg/L	0.0010	93	85	115			
<b>Sample ID: C08060097-001HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102993				06/20/08 11:20
Selenium-IV	0.048	mg/L	0.0010	96	85	115	3.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080620C		
Sample ID: MBLK	Method Blank					Run: SUB-C103018			06/20/08 15:10
Selenium	ND	mg/L	6E-05						
Sample ID: 288-92-2	Laboratory Control Sample					Run: SUB-C103018			06/20/08 15:14
Selenium	0.049	mg/L	0.0010	99	90	110			
Sample ID: C08060097-001HMS	Sample Matrix Spike					Run: SUB-C103018			06/20/08 16:20
Selenium	0.044	mg/L	0.0010	87	85	115			
Sample ID: C08060097-001HMSD	Sample Matrix Spike Duplicate					Run: SUB-C103018			06/20/08 16:22
Selenium	0.044	mg/L	0.0010	89	85	115	1.8	10	
Method: A4500-H B							Batch: 080616_3_PH-W		
Sample ID: LCS_pH-1_080616	Laboratory Control Sample					Run: PH_COND2-R_080616B			06/16/08 13:55
pH	6.90	s.u.	0.010	101	98.55	101.45			
Sample ID: R08060241-001BDUP	Sample Duplicate					Run: PH_COND2-R_080616B			06/16/08 14:05
pH	7.46	s.u.	0.010				0.1	1.25	
Method: A4500-NH3 G							Batch: A2008-06-19_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080619A			06/19/08 10:10
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080619A			06/19/08 10:12
Nitrogen, Ammonia as N	0.23	mg/L	0.10	92	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080619A			06/19/08 10:22
Nitrogen, Ammonia as N	0.22	mg/L	0.10	89	90	110			S
Sample ID: R08060199-003CMS	Sample Matrix Spike					Run: TECHAA2-R_080619A			06/19/08 10:54
Nitrogen, Ammonia as N	0.25	mg/L	0.10	101	80	120			
Sample ID: R08060199-003CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080619A			06/19/08 10:55
Nitrogen, Ammonia as N	0.24	mg/L	0.10	94	80	120	7.0	10	
Method: D5072-92							Batch: C_R102830		
Sample ID: MB-R102830	Method Blank					Run: SUB-C102830			06/16/08 16:08
Radon 222	7	pCi/L							
Sample ID: LCS-R102830	Laboratory Control Sample					Run: SUB-C102830			06/16/08 16:08
Radon 222	302	pCi/L	100	97	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18864		
Sample ID: MB-18864	Method Blank		Run: SUB-C102898				06/18/08 21:07		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	0.01	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.003	mg/L	0.001						
Sample ID: LCS3-18864	Laboratory Control Sample		Run: SUB-C102898				06/18/08 21:11		
Barium	0.501	mg/L	0.10	100	85	115			
Boron	0.508	mg/L	0.10	102	85	115			
Chromium	0.505	mg/L	0.050	101	85	115			
Copper	0.506	mg/L	0.010	101	85	115			
Iron	2.71	mg/L	0.030	108	85	115			
Manganese	2.54	mg/L	0.010	102	85	115			
Molybdenum	0.498	mg/L	0.10	100	85	115			
Nickel	0.502	mg/L	0.050	100	85	115			
Strontium	0.499	mg/L	0.10	100	85	115			
Zinc	0.513	mg/L	0.010	102	85	115			
Sample ID: R08060210-002D	Sample Matrix Spike		Run: SUB-C102898				06/18/08 23:17		
Barium	0.522	mg/L	0.10	101	70	130			
Boron	0.557	mg/L	0.10	103	70	130			
Chromium	0.513	mg/L	0.050	103	70	130			
Copper	0.519	mg/L	0.010	104	70	130			
Iron	2.91	mg/L	0.030	110	70	130			
Manganese	2.58	mg/L	0.010	102	70	130			
Molybdenum	0.512	mg/L	0.10	102	70	130			
Nickel	0.499	mg/L	0.050	100	70	130			
Strontium	1.60	mg/L	0.10	99	70	130			
Zinc	0.525	mg/L	0.010	104	70	130			
Sample ID: R08060210-002D	Sample Matrix Spike Duplicate		Run: SUB-C102898				06/18/08 23:21		
Barium	0.529	mg/L	0.10	103	70	130	1.3	20	
Boron	0.542	mg/L	0.10	100	70	130	2.7	20	
Chromium	0.499	mg/L	0.050	100	70	130	2.7	20	
Copper	0.521	mg/L	0.010	104	70	130	0.4	20	
Iron	2.92	mg/L	0.030	111	70	130	0.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18864		
Sample ID: R08060210-002D		Sample Matrix Spike Duplicate			Run: SUB-C102898			06/18/08 23:21	
Manganese	2.65	mg/L	0.010	105	70	130	2.7	20	
Molybdenum	0.511	mg/L	0.10	102	70	130	0.1	20	
Nickel	0.480	mg/L	0.050	96	70	130	3.8	20	
Strontium	1.67	mg/L	0.10	113	70	130	4.3	20	
Zinc	0.512	mg/L	0.010	101	70	130	2.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

**Client:** RESPEC Inc

**Report Date:** 08/15/08

**Project:** Edgemont

**Work Order:** R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R103332		
<b>Sample ID: MB-080626A</b>	Method Blank			Run: SUB-C103332			06/26/08 15:06		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.003	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	ND	mg/L	0.002						
<b>Sample ID: LFB-080626A</b>	Laboratory Fortified Blank			Run: SUB-C103332			06/26/08 15:10		
Silica	0.39	mg/L	0.10	98	85	125			
Aluminum	1.0	mg/L	0.10	103	85	125			
Barium	0.99	mg/L	0.10	99	85	125			
Boron	1.0	mg/L	0.10	102	85	125			
Calcium	54	mg/L	0.50	107	85	125			
Chromium	1.0	mg/L	0.050	102	85	125			
Iron	1.1	mg/L	0.030	105	85	125			
Magnesium	54	mg/L	0.50	109	85	125			
Manganese	1.0	mg/L	0.010	100	85	125			
Molybdenum	0.99	mg/L	0.10	99	85	125			
Nickel	1.00	mg/L	0.050	100	85	125			
Potassium	47	mg/L	0.50	94	85	125			
Sodium	52	mg/L	0.77	104	85	125			
Vanadium	1.0	mg/L	0.10	101	85	125			
Zinc	1.0	mg/L	0.010	102	85	125			
<b>Sample ID: R08060210-001C</b>	Sample Matrix Spike			Run: SUB-C103332			06/26/08 15:18		
Aluminum	2.07	mg/L	0.10	104	70	130			
Barium	2.11	mg/L	0.10	105	70	130			
Boron	2.30	mg/L	0.10	107	70	130			
Chromium	2.14	mg/L	0.050	107	70	130			
Iron	2.22	mg/L	0.030	108	70	130			
Manganese	2.59	mg/L	0.010	105	70	130			
Molybdenum	2.06	mg/L	0.10	103	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103332		
Sample ID: R08060210-001C	Sample Matrix Spike			Run: SUB-C103332			06/26/08 15:18		
Nickel	2.11	mg/L	0.050	105	70	130			
Vanadium	2.22	mg/L	0.10	110	70	130			
Zinc	2.15	mg/L	0.010	107	70	130			
Calcium	511	mg/L	1.0		70	130			A
Magnesium	242	mg/L	1.0	108	70	130			
Potassium	108	mg/L	1.0	88	70	130			
Silica	4.99	mg/L	0.10		70	130			A
Sodium	238	mg/L	1.5	103	70	130			
Sample ID: R08060210-001C	Sample Matrix Spike Duplicate			Run: SUB-C103332			06/26/08 15:22		
Aluminum	2.19	mg/L	0.10	110	70	130	5.6	20	
Barium	2.13	mg/L	0.10	106	70	130	1.0	20	
Boron	2.30	mg/L	0.10	107	70	130	0.2	20	
Chromium	2.17	mg/L	0.050	108	70	130	1.2	20	
Iron	2.26	mg/L	0.030	110	70	130	1.7	20	
Manganese	2.59	mg/L	0.010	105	70	130	0.0	20	
Molybdenum	2.06	mg/L	0.10	103	70	130	0.0	20	
Nickel	2.14	mg/L	0.050	107	70	130	1.7	20	
Vanadium	2.21	mg/L	0.10	110	70	130	0.3	20	
Zinc	2.16	mg/L	0.010	108	70	130	0.7	20	
Calcium	517	mg/L	1.0		70	130	1.2	20	A
Magnesium	242	mg/L	1.0	108	70	130	0.2	20	
Potassium	108	mg/L	1.0	89	70	130	0.6	20	
Silica	4.99	mg/L	0.10		70	130	0.0	20	A
Sodium	238	mg/L	1.5	104	70	130	0.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18864		
<b>Sample ID: MB-18864</b>	Method Blank		Run: SUB-C103319				06/27/08 04:06		
Antimony	ND	mg/L	0.0002						
Arsenic	0.001	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	0.0001	mg/L							
Selenium	ND	mg/L	0.0002						
Silver	0.0001	mg/L	4E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18864</b>	Laboratory Control Sample		Run: SUB-C103319				06/27/08 04:12		
Antimony	0.556	mg/L	0.050	111	85	115			
Arsenic	0.513	mg/L	0.0010	102	85	115			
Beryllium	0.253	mg/L	0.010	101	85	115			
Cadmium	0.255	mg/L	0.010	102	85	115			
Lead	0.537	mg/L	0.050	107	85	115			
Selenium	0.497	mg/L	0.0010	99	85	115			
Silver	0.0503	mg/L	0.010	100	85	115			
Thallium	0.544	mg/L	0.10	109	85	115			
<b>Sample ID: R08060210-002D</b>	Sample Matrix Spike		Run: SUB-C103319				06/27/08 05:54		
Antimony	0.550	mg/L	0.050	110	70	130			
Arsenic	0.488	mg/L	0.0010	97	70	130			
Beryllium	0.235	mg/L	0.010	94	70	130			
Cadmium	0.234	mg/L	0.010	93	70	130			
Lead	0.514	mg/L	0.050	103	70	130			
Selenium	0.452	mg/L	0.0010	90	70	130			
Silver	0.0467	mg/L	0.010	93	70	130			
Thallium	0.529	mg/L	0.10	106	70	130			
Uranium	0.597	mg/L	0.00030	119	70	130			
<b>Sample ID: R08060210-002D</b>	Sample Matrix Spike Duplicate		Run: SUB-C103319				06/27/08 06:00		
Antimony	0.557	mg/L	0.050	111	70	130	1.3	20	
Arsenic	0.500	mg/L	0.0010	100	70	130	2.3	20	
Beryllium	0.237	mg/L	0.010	95	70	130	0.9	20	
Cadmium	0.243	mg/L	0.010	97	70	130	3.8	20	
Lead	0.537	mg/L	0.050	107	70	130	4.3	20	
Selenium	0.460	mg/L	0.0010	92	70	130	1.8	20	
Silver	0.0484	mg/L	0.010	97	70	130	3.7	20	
Thallium	0.539	mg/L	0.10	108	70	130	1.9	20	
Uranium	0.584	mg/L	0.00030	117	70	130	2.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18884
Sample ID: LCS1-18884	Laboratory Control Sample					Run: SUB-C103282			06/26/08 05:54
Uranium	0.0498	mg/L	0.00030	95	80	120			
Sample ID: C08060805-005FMS	Sample Matrix Spike					Run: SUB-C103282			06/26/08 08:29
Uranium	0.0122	mg/L	0.00030	90	70	130			
Sample ID: C08060805-005FMSD	Sample Matrix Spike Duplicate					Run: SUB-C103282			06/26/08 08:33
Uranium	0.0125	mg/L	0.00030	92	70	130	2.5	20	
Sample ID: MB-18884	Method Blank					Run: SUB-C103591			07/02/08 07:00
Uranium	0.0004	mg/L	2E-05						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103735		
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C103735				07/03/08 12:39		
Arsenic	0.0545	mg/L	0.0010	109	85	115			
Cadmium	0.0539	mg/L	0.0010	108	85	115			
Copper	0.0547	mg/L	0.0010	109	85	115			
Lead	0.0535	mg/L	0.0010	107	85	115			
Mercury	0.00530	mg/L	0.0010	104	85	115			
Thorium 232	0.0532	mg/L	0.0010	106	85	115			
Uranium	0.0535	mg/L	0.00030	107	85	115			
Re-running for Ag.									
Sample ID: C08060235-001AMS	Sample Matrix Spike		Run: SUB-C103735				07/03/08 12:59		
Uranium	0.068	mg/L	0.0010	114	70	130			
Sample ID: C08060235-001AMSD	Sample Matrix Spike Duplicate		Run: SUB-C103735				07/03/08 13:06		
Uranium	0.069	mg/L	0.0010	118	70	130	2.7	20	
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C103735				07/03/08 16:54		
Arsenic	0.0521	mg/L	0.0010	104	85	115			
Cadmium	0.0515	mg/L	0.0010	103	85	115			
Copper	0.0520	mg/L	0.0010	104	85	115			
Lead	0.0525	mg/L	0.0010	105	85	115			
Mercury	0.00520	mg/L	0.0010	102	85	115			
Thorium 232	0.0504	mg/L	0.0010	101	85	115			
Uranium	0.0504	mg/L	0.00030	101	85	115			
Sample ID: C08060706-002BMS4	Post Digestion Spike		Run: SUB-C103735				07/04/08 03:08		
Arsenic	0.0541	mg/L	0.0010	107	70	130			
Cadmium	0.0488	mg/L	0.010	95	70	130			
Copper	0.0499	mg/L	0.010	96	70	130			
Lead	0.0536	mg/L	0.050	107	70	130			
Mercury	0.00523	mg/L	0.0010	105	70	130			
Thorium 232	0.0571	mg/L	0.0010	114	70	130			
Uranium	0.0627	mg/L	0.00030	113	70	130			
Sample ID: C08060706-002BMSD4	Post Digestion Spike Duplicate		Run: SUB-C103735				07/04/08 03:15		
Arsenic	0.0541	mg/L	0.0010	107	70	130	0.0	20	
Cadmium	0.0497	mg/L	0.010	97	70	130	1.9	20	
Copper	0.0499	mg/L	0.010	96	70	130	0.2	20	
Lead	0.0539	mg/L	0.050	108	70	130	0.6	20	
Mercury	0.00535	mg/L	0.0010	107	70	130	2.2	20	
Thorium 232	0.0573	mg/L	0.0010	115	70	130	0.4	20	
Uranium	0.0629	mg/L	0.00030	114	70	130	0.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R103823		
Sample ID: LRB	Method Blank					Run: SUB-C103823			07/07/08 14:02
Silver	7E-05	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank					Run: SUB-C103823			07/07/08 14:09
Silver	0.0210	mg/L	0.0010	105	85	115			
Sample ID: C08060805-004DMS4	Post Digestion Spike					Run: SUB-C103823			07/07/08 14:36
Silver	0.0838	mg/L	0.010	84	70	130			
Sample ID: C08060805-004DMSD4	Post Digestion Spike Duplicate					Run: SUB-C103823			07/07/08 14:43
Silver	0.0855	mg/L	0.010	85	70	130	2.1	20	
Sample ID: C08061335-006AMS4	Post Digestion Spike					Run: SUB-C103823			07/07/08 16:11
Silver	0.00980	mg/L	0.010	49	70	130			S
Sample ID: C08061335-006AMSD4	Post Digestion Spike Duplicate					Run: SUB-C103823			07/07/08 16:17
Silver	0.00900	mg/L	0.010	45	70	130	0.0	20	S
Method: E245.1							Batch: C_B_33083		
Sample ID: MB-33083	Method Blank					Run: SUB-C103198			06/21/08 08:04
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33083	Laboratory Fortified Blank					Run: SUB-C103198			06/21/08 08:07
Mercury	0.0021	mg/L	0.0010	106	85	115			
Sample ID: B08061452-005CMS	Sample Matrix Spike					Run: SUB-C103198			06/21/08 09:57
Mercury	0.0018	mg/L	0.0010	90	70	130			
Sample ID: B08061452-005CMSD	Sample Matrix Spike Duplicate					Run: SUB-C103198			06/21/08 10:02
Mercury	0.0017	mg/L	0.0010	84	70	130	8.0	30	
Method: E245.1							Batch: C_B_33106		
Sample ID: MB-33106	Method Blank					Run: SUB-C103264			06/23/08 19:36
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33106	Laboratory Fortified Blank					Run: SUB-C103264			06/23/08 19:38
Mercury	0.0017	mg/L	0.0010	86	85	115			
Sample ID: B08061470-001B MS	Sample Matrix Spike					Run: SUB-C103264			06/23/08 19:43
Mercury	0.0018	mg/L	0.0010	91	70	130			
Sample ID: B08061470-001B MSD	Sample Matrix Spike Duplicate					Run: SUB-C103264			06/23/08 19:45
Mercury	0.0021	mg/L	0.0010	103	70	130	13	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Analytical Run: SUB-C103198		
Sample ID: QCS	Initial Calibration Verification Standard						06/21/08 07:48		
Mercury	0.0022	mg/L	0.0010	107	90	110			
Method: E245.1							Analytical Run: SUB-C103264		
Sample ID: QCS	Initial Calibration Verification Standard						06/23/08 19:27		
Mercury	0.0019	mg/L	0.0010	94	90	110			
Method: E300.0							Batch: G_R160439		
Sample ID: LCS	Laboratory Control Sample				Run: SUB-G160439		06/11/08 11:31		
Chloride	28.7	mg/L	1.0	95	90	110			
Fluoride	19.8	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	22.2	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	28.9	mg/L	0.10	95	90	110			
Sulfate	141	mg/L	1.0	94	90	110			
Sample ID: MBLK	Method Blank				Run: SUB-G160439		06/11/08 11:43		
Chloride	ND	mg/L	0.08						
Fluoride	ND	mg/L	0.007						
Nitrogen, Nitrate as N	ND	mg/L	0.008						
Nitrogen, Nitrite as N	ND	mg/L	0.002						
Sulfate	ND	mg/L	0.04						
Sample ID: G08060437-001AMS	Sample Matrix Spike				Run: SUB-G160439		06/12/08 17:54		
Chloride	198	mg/L	1.0	100	80	120			
Fluoride	19.6	mg/L	0.10	99	80	120			
Nitrogen, Nitrate as N	19.2	mg/L	0.10	98	80	120			
Nitrogen, Nitrite as N	20.0	mg/L	0.10	102	80	120			
Sulfate	576	mg/L	1.0	98	80	120			
Sample ID: G08060437-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-G160439		06/12/08 18:07		
Chloride	198	mg/L	1.0	99	80	120	0.2	20	
Fluoride	19.6	mg/L	0.10	99	80	120	0.1	20	
Nitrogen, Nitrate as N	19.2	mg/L	0.10	98	80	120	0.1	20	
Nitrogen, Nitrite as N	19.9	mg/L	0.10	102	80	120	0.4	20	
Sulfate	573	mg/L	1.0	96	80	120	0.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0475		
Sample ID: MB-GrAB-0475	Method Blank				Run: SUB-C104225			07/10/08 21:30	
Gross Alpha	2	pCi/L							
Gross Beta	-2	pCi/L							U
Sample ID: UNAT-GrAB-0475	Laboratory Control Sample				Run: SUB-C104225			07/10/08 21:30	
Gross Alpha	130	pCi/L		91	70	130			
Sample ID: C08060630-001AMS	Sample Matrix Spike				Run: SUB-C104225			07/10/08 21:30	
Gross Alpha	310	pCi/L		158	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS the MS are acceptable the batch is approved.									
Sample ID: C08060630-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C104225			07/10/08 21:30	
Gross Alpha	250	pCi/L		120	70	130	19	16.1	R
Sample ID: Cs137-GrAB-0475	Laboratory Control Sample				Run: SUB-C104225			07/10/08 21:30	
Gross Beta	100	pCi/L		110	70	130			
Sample ID: C08060630-001AMS	Sample Matrix Spike				Run: SUB-C104225			07/10/08 21:30	
Gross Beta	120	pCi/L		98	70	130			
Sample ID: C08060630-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C104225			07/11/08 09:45	
Gross Beta	120	pCi/L		101	70	130	2.0	15.4	
Method: E901.1							Batch: C_R102941		
Sample ID: LCS-R102941	Laboratory Control Sample				Run: SUB-C102941			06/17/08 16:05	
Americium 241	29000	pCi/L	20	92	70	130			
Cesium 137	270000	pCi/L	20	101	70	130			
Cobalt 60	71000	pCi/L	20	102	70	130			
Sample ID: MB-R102941	Method Blank				Run: SUB-C102941			06/17/08 16:05	
Gross Gamma	ND	pCi/L							U
Sample ID: C08060096-004HDUP	Sample Duplicate				Run: SUB-C102941			06/17/08 16:05	
Gross Gamma	ND	pCi/L	20				0.0	30	U

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.  
U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/15/08

Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_18884
Sample ID: C08060704-003FMS	Sample Matrix Spike					Run: SUB-C103951			07/08/08 09:54
Radium 226	180	pCi/L		112	70	130			
Sample ID: C08060704-003FMSD	Sample Matrix Spike Duplicate					Run: SUB-C103951			07/08/08 09:54
Radium 226	180	pCi/L		116	70	130	1.0	21.6	
Sample ID: LCS-18884	Laboratory Control Sample					Run: SUB-C103951			07/08/08 11:32
Radium 226	15	pCi/L		99	70	130			
Sample ID: MB-18884	Method Blank					Run: SUB-C103951			07/08/08 11:32
Radium 226	-1	pCi/L							U
Method: E903.0									Batch: C_RA226-2915
Sample ID: C08060570-001AMS	Sample Matrix Spike					Run: SUB-C104307			07/15/08 16:23
Radium 226	21	pCi/L		112	70	130			
Sample ID: C08060570-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C104307			07/15/08 16:23
Radium 226	21	pCi/L		110	70	130	1.7	21.8	
Sample ID: MB-RA226-2915	Method Blank					Run: SUB-C104307			07/15/08 23:27
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2915	Laboratory Control Sample					Run: SUB-C104307			07/15/08 23:27
Radium 226	8.5	pCi/L		108	70	130			
Method: E907.0									Batch: C_18884
Sample ID: C08060721-001AMS	Sample Matrix Spike					Run: SUB-C104381			07/16/08 09:48
Thorium 230	44.3	pCi/Filter	0.20	90	70	130			
Sample ID: C08060721-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C104381			07/16/08 09:50
Thorium 230	47.8	pCi/Filter	0.20	98	70	130	7.7	67.1	
Sample ID: LCS-18884	Laboratory Control Sample					Run: SUB-C104381			07/03/08 20:05
Thorium 230	21.2	pCi/L	0.20	88	70	130			
Sample ID: MB-18884	Method Blank					Run: SUB-C104381			07/03/08 20:05
Thorium 230	1	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0556		
<b>Sample ID: LCS-RA-TH-ISO-0556</b>	Laboratory Control Sample				Run: SUB-C104256				07/08/08 22:11
Thorium 230	5.46	pCi/L	0.20	91	70	130			
<b>Sample ID: R08060210-001H</b>	Sample Matrix Spike				Run: SUB-C104256				07/09/08 12:34
Thorium 230	47.6	pCi/L	0.20	96	70	130			
<b>Sample ID: R08060210-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C104256				07/09/08 12:34
Thorium 230	42.3	pCi/L	0.20	89	70	130	12	30	
<b>Sample ID: MB-RA-TH-ISO-0556</b>	Method Blank				Run: SUB-C104256				07/09/08 12:34
Thorium 230	0.009	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_18884		
<b>Sample ID: R08060210-002I</b>	Sample Matrix Spike				Run: SUB-C105000				07/08/08 09:00
Lead 210	1500	pCi/L		129	70	130			
<b>Sample ID: R08060210-002I</b>	Sample Matrix Spike Duplicate				Run: SUB-C105000				07/08/08 09:00
Lead 210	1200	pCi/L		99	70	130	26	30	
<b>Sample ID: MB-R105000</b>	Method Blank				Run: SUB-C105000				07/08/08 09:00
Lead 210	4	pCi/L							U
<b>Sample ID: LCS-R105000</b>	Laboratory Control Sample				Run: SUB-C105000				07/08/08 09:00
Lead 210	140	pCi/L		118	70	130			
<b>Method: E909.0M</b>							Batch: C_R104574		
<b>Sample ID: C08060289-003FMS</b>	Sample Matrix Spike				Run: SUB-C104574				06/25/08 09:15
Lead 210	310	pCi/L		106	70	130			
<b>Sample ID: C08060289-003FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104574				06/25/08 09:15
Lead 210	450	pCi/L		152	70	130	35	30	SR
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MS are acceptable the batch is approved.									
<b>Sample ID: MB-R104574</b>	Method Blank				Run: SUB-C104574				06/25/08 09:15
Lead 210	-0.3	pCi/L							U
<b>Sample ID: LCS-R104574</b>	Laboratory Control Sample				Run: SUB-C104574				06/25/08 09:15
Lead 210	47	pCi/L		80	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/15/08  
Work Order: R08060210

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R103733		
Sample ID: R08060210-002H	Sample Matrix Spike				Run: SUB-C103733		06/30/08 12:00		
Polonium 210	80	pCi/L	1.0	93	70	130			
Sample ID: R08060210-002H	Sample Matrix Spike Duplicate				Run: SUB-C103733		06/30/08 12:00		
Polonium 210	84	pCi/L	1.0	98	70	130	5.1	30	
Sample ID: LCS-R103733	Laboratory Control Sample				Run: SUB-C103733		06/30/08 12:00		
Polonium 210	48	pCi/L	1.0	109	70	130			
Sample ID: MB-R103733	Method Blank				Run: SUB-C103733		06/30/08 12:00		
Polonium 210	0.3	pCi/L							U
Method: RMO-3008							Batch: C_R103734		
Sample ID: C08060805-005FMS	Sample Matrix Spike				Run: SUB-C103734		06/30/08 12:00		
Polonium 210	42	pCi/L	1.0	96	70	130			
Sample ID: C08060805-005FMSD	Sample Matrix Spike Duplicate				Run: SUB-C103734		06/30/08 12:00		
Polonium 210	47	pCi/L	1.0	107	70	130	11	30	
Sample ID: LCS-18884	Laboratory Control Sample				Run: SUB-C103734		06/30/08 12:00		
Polonium 210	97	pCi/L	1.0	112	70	130			
Sample ID: MB-18884	Method Blank				Run: SUB-C103734		06/30/08 12:00		
Polonium 210	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>PowerTech Dewey Burdock</b>		Sample Origin State: <b>SD</b>		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address:		Contact Name: <b>Corey Foreman-Respec</b>		Phone/Fax:		Sampler: (Please Print) <b>Corey Foreman</b>	
Invoice Address:		Invoice Contact & Phone:		Purchase Order:		Quote/Bottle Order:	
Special Report/Formats - ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/>				ANALYSIS REQUESTED			
				Number of Containers Sample Type: AWSVB0 Air Water Soils/Solids Vegetation Bioassay Other			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX		SEE ATTACHED Normal Turnaround (TAT)	
1. <b>Dew Burd Gw 680</b>		<b>6/10/08</b>	<b>10:50</b>	<b>W</b>		<b>RUSH</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	
2. <b>Dew Burd Gw 688</b>		<b>6/10/08</b>	<b>16:37</b>	<b>W</b>		Comments: <b>All Gw</b> <b>Burdock Hwy Well</b> <b>Set 12</b> <b>Burdock W. Private</b> <b>at 5 well</b>	
3.						Receipt Temp <b>6.4</b> °C On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
4.						Custody Seal: <input type="checkbox"/> Y <input type="checkbox"/> N Intact: <input type="checkbox"/> Y <input type="checkbox"/> N Signature: <input type="checkbox"/> Y <input type="checkbox"/> N Match: <input type="checkbox"/> Y <input type="checkbox"/> N	
5.							
6.							
7.							
8.							
9.							
10.							
Custody Record Must be signed		Relinquished by (print): <b>Corey Foreman</b>		Date/Time: <b>6/10/08 0930</b>		Signature: <b>Corey Foreman</b>	
Sample Disposal: Return to Client:		Lab Disposal:		Received by Laboratory:		Date/Time: <b>6-11-08 9:30</b>	
				Signature: <b>Steve Foreman</b>			

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.

This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report.

Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

August 20, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08060335      Quote ID: R286  
Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 6/18/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08060335-001	DewBurd GW619	06/17/08 18:10	06/18/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



Date: 20-Aug-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08060335

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08060996

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08060996



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060335-001  
Client Sample ID: DewBurd GW619

Report Date: 08/20/08  
Collection Date: 06/17/08 18:10  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	116	mg/L		5		1	A2320 B	06/25/08 11:06/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:06/mb
Bicarbonate as HCO3	141	mg/L		5		1	A2320 B	06/25/08 11:06/mb
Calcium	375	mg/L		0.5		2	E200.7	07/08/08 19:08/eli-c
Chloride	9	mg/L		1		1	E300.0	06/20/08 01:16/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	06/20/08 01:16/jmh
Magnesium	129	mg/L		0.5		2	E200.7	07/08/08 19:08/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:24/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/20/08 01:16/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/20/08 01:16/jmh
Potassium	17.6	mg/L		0.5		2	E200.7	07/08/08 19:08/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	07/08/08 19:08/eli-c
Sodium	90	mg/L	D	2		2	E200.7	07/08/08 19:08/eli-c
Sulfate	1230	mg/L	D	3		50	E300.0	06/20/08 00:27/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2390	umhos/cm		5.0		1	A2510 B	06/19/08 14:52/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	06/23/08 00:00/jmh
pH	7.82	s.u.		0.01		1	A4500-H B	06/19/08 12:22/tb
Sodium Adsorption Ratio (SAR)	1.0	unitless		0.10		1	Calculation	08/20/08 11:24/ADM
Solids, Total Dissolved TDS @ 180 C	2000	mg/L		5		1	A2540 C	06/20/08 08:26/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/08/08 19:08/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/17/08 17:01/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 19:08/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 19:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 17:01/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 19:08/eli-c
Copper	0.01	mg/L		0.01		1	E200.8	07/17/08 17:01/eli-c
Iron	3.03	mg/L		0.03		2	E200.7	07/08/08 19:08/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	07/17/08 17:01/eli-c
Manganese	1.74	mg/L		0.01		2	E200.7	07/08/08 19:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 17:01/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 19:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 19:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 17:01/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060335-001  
Client Sample ID: DewBurd GW619

Report Date: 08/20/08  
Collection Date: 06/17/08 18:10  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/17/08 17:01/eli-c
Uranium	0.0016	mg/L		0.0003		1	E200.8	07/17/08 17:01/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/08/08 19:08/eli-c
Zinc	0.03	mg/L		0.01		2	E200.7	07/08/08 19:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/17/08 22:45/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 11:37/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	398	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Alpha precision (±)	19.5	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Alpha MDC	8.8	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Beta	144	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Beta precision (±)	7.7	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Beta MDC	9.3	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Lead 210	-1.1	pCi/L	U			1	E909.0M	07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	07/09/08 18:40/eli-c
Radium 226	110	pCi/L				1	E903.0	07/16/08 08:37/eli-c
Radium 226 precision (±)	1.8	pCi/L				1	E903.0	07/16/08 08:37/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/17/08 12:48/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/17/08 12:48/eli-c
Gross Gamma	270	pCi/L		20		1	E901.1	06/20/08 16:37/eli-c
Gross Gamma precision (±)	52	pCi/L				1	E901.1	06/20/08 16:37/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	2.0	pCi/L	U			1	E909.0M	07/14/08 09:30/eli-c
Lead 210 precision (±)	10.9	pCi/L				1	E909.0M	07/14/08 09:30/eli-c
Lead 210 MDC	18.2	pCi/L				1	E909.0M	07/14/08 09:30/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	8.8	pCi/L				1	E903.0	07/15/08 14:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060335-001  
Client Sample ID: DewBurd GW619

Report Date: 08/20/08  
Collection Date: 06/17/08 18:10  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	1.0	pCi/L				1	E903.0	07/15/08 14:46/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	07/15/08 14:46/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/13/08 18:14/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/13/08 18:14/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	5770	pCi/L		100		1	D5072-92	06/21/08 07:14/eli-c
Radon 222 precision (±)	118	pCi/L				1	D5072-92	06/21/08 07:14/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	06/26/08 15:22/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	06/26/08 15:22/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/26/08 15:22/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 21:45/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 23:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/26/08 15:22/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/26/08 15:22/eli-c
Copper	0.01	mg/L		0.01		1	E200.8	06/26/08 15:22/eli-c
Iron	13.0	mg/L		0.03		2	E200.7	07/08/08 23:04/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	06/26/08 15:22/eli-c
Manganese	1.65	mg/L		0.01		1	E200.8	06/26/08 15:22/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	06/30/08 08:13/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	06/26/08 15:22/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/26/08 15:22/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	06/26/08 15:22/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/26/08 15:22/eli-c
Strontium	5.4	mg/L		0.1		1	E200.8	06/26/08 15:22/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	06/26/08 15:22/eli-c
Uranium	0.0018	mg/L		0.0003		1	E200.8	06/26/08 15:22/eli-c
Zinc	0.08	mg/L		0.01		1	E200.8	06/26/08 15:22/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	9.08	%				1	A1030 E	08/20/08 00:00/lkl
Anions	28.3	meq/L				1	A1030 E	08/20/08 00:00/lkl
Cations	34.0	meq/L				1	A1030 E	08/20/08 00:00/lkl
Solids, Total Dissolved Calculated	1940	mg/L				1	A1030 E	08/20/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	08/20/08 00:00/lkl

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2320 B</b>							Batch: 080625A-ALK-SEL-W		
<b>Sample ID: LCS1_080625A</b> Alkalinity, Total as CaCO <sub>3</sub>	Laboratory Control Sample 964	mg/L	5.0	96	90	110			06/25/08 09:31
<b>Sample ID: MBLK1_080625A</b> Alkalinity, Total as CaCO <sub>3</sub>	Method Blank ND	mg/L	3						06/25/08 09:34
<b>Sample ID: R08060319-002DMS</b> Alkalinity, Total as CaCO <sub>3</sub>	Sample Matrix Spike 392	mg/L	5.0	98	80	120			06/25/08 10:59
<b>Sample ID: R08060319-002DMSD</b> Alkalinity, Total as CaCO <sub>3</sub>	Sample Matrix Spike Duplicate 390	mg/L	5.0	96	80	120	0.5	10	06/25/08 11:03
<b>Method: A2510 B</b>							Batch: 080619_1-COND-PROBE-W		
<b>Sample ID: LCS_COND-1_080619</b> Conductivity @ 25 C	Laboratory Control Sample 1420	umhos/cm	5.0	100	90	110			06/19/08 14:11
<b>Sample ID: LCS1-1_080619</b> Conductivity @ 25 C	Laboratory Control Sample 148	umhos/cm	5.0	99	90	110			06/19/08 14:13
<b>Sample ID: LCS2-1_080619</b> Conductivity @ 25 C	Laboratory Control Sample 5020	umhos/cm	5.0	100	90	110			06/19/08 14:14
<b>Sample ID: MBLK-1_080619</b> Conductivity @ 25 C	Method Blank ND	umhos/cm	5						06/19/08 14:53
<b>Sample ID: R08060335-001ADUP</b> Conductivity @ 25 C	Sample Duplicate 2400	umhos/cm	5.0				0.4	10	06/19/08 14:52
<b>Method: A2540 C</b>							Batch: 080620A-SLDS-TDS-W		
<b>Sample ID: R08060331-003BMS</b> Solids, Total Dissolved TDS @ 180 C	Sample Matrix Spike 1400	mg/L	5.0	112	80	120			06/20/08 08:25
<b>Sample ID: R08060331-003BMSD</b> Solids, Total Dissolved TDS @ 180 C	Sample Matrix Spike Duplicate 1400	mg/L	5.0	110	80	120	0.3	10	06/20/08 08:25
<b>Method: A2580 B</b>							Batch: 080623-ORP-ISE-W		
<b>Sample ID: LCS</b> Oxidation-Reduction Potential	Laboratory Control Sample 470	mV		100	95	105			06/23/08 00:00
<b>Sample ID: R08060335-001F</b> Oxidation-Reduction Potential	Sample Duplicate 150	mV					2.7	10	06/23/08 00:00

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SE3114-080719A		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C104480			07/19/08 11:18
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample					Run: SUB-C104480			07/19/08 11:21
Selenium-IV	0.046	mg/L	0.0010	92	90	110			
<b>Sample ID: C08060993-001AMS</b>	Sample Matrix Spike					Run: SUB-C104480			07/19/08 11:25
Selenium-IV	0.050	mg/L	0.0010	100	85	115			
<b>Sample ID: C08060993-001AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C104480			07/19/08 11:27
Selenium-IV	0.051	mg/L	0.0010	102	85	115	1.6	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719C		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C104484			07/19/08 14:18
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample					Run: SUB-C104484			07/19/08 14:20
Selenium	0.046	mg/L	0.0010	92	90	110			
<b>Sample ID: C08060993-001AMS</b>	Sample Matrix Spike					Run: SUB-C104484			07/19/08 14:24
Selenium	0.051	mg/L	0.0010	102	85	115			
<b>Sample ID: C08060993-001AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C104484			07/19/08 14:26
Selenium	0.052	mg/L	0.0010	104	85	115	1.8	10	
<b>Method: A4500-H B</b>							Batch: 080619_2_PH-W		
<b>Sample ID: LCS_pH-1_080619</b>	Laboratory Control Sample					Run: PH_COND2-R_080619A			06/19/08 11:37
pH	6.91	s.u.	0.010	101	98.55	101.45			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G Batch: A2008-06-19_2_NH3_01									
Sample ID: MBLK-2 Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01				Run: TECHAA2-R_080619A		06/19/08 10:10
Sample ID: LFB-3 Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.23	mg/L	0.10	92	90	110	Run: TECHAA2-R_080619A		06/19/08 10:12
Sample ID: LFB-4 Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.22	mg/L	0.10	89	90	110	Run: TECHAA2-R_080619A		06/19/08 10:22 S
Sample ID: R08060347-003FMS Nitrogen, Ammonia as N	Sample Matrix Spike 0.20	mg/L	0.10	81	80	120	Run: TECHAA2-R_080619A		06/19/08 12:31
Sample ID: R08060347-003FMSD Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.22	mg/L	0.10	89	80	120	Run: TECHAA2-R_080619A	9.9	06/19/08 12:32 10
Method: D5072-92 Batch: C_R103092									
Sample ID: C08060969-003IDUP Radon 222	Sample Duplicate 129	pCi/L	100				Run: SUB-C103092	0.1	06/21/08 07:14 30
Sample ID: MB-R103092 Radon 222	Method Blank 20	pCi/L					Run: SUB-C103092		06/21/08 07:14
Sample ID: LCS-R103092 Radon 222	Laboratory Control Sample 301	pCi/L	100	91	70	130	Run: SUB-C103092		06/21/08 07:14
Method: E200.7 Batch: C_18911									
Sample ID: MB-18911 Boron Iron	Method Blank 0.03 ND	mg/L mg/L	0.01 0.009				Run: SUB-C103914		07/08/08 22:15
Sample ID: LCS3-18911 Boron Iron	Laboratory Control Sample 0.549 2.70	mg/L mg/L	0.10 0.030	103 108	85 85	115 115	Run: SUB-C103914		07/08/08 22:19
Sample ID: R08060335-001D Boron Iron	Sample Matrix Spike 0.586 15.9	mg/L mg/L	0.10 0.030	102	70 70	130 130	Run: SUB-C103914		07/08/08 23:08 A
Sample ID: R08060335-001D Boron Iron	Sample Matrix Spike Duplicate 0.585 16.3	mg/L mg/L	0.10 0.030	102	70 70	130 130	Run: SUB-C103914	0.2 2.4	07/08/08 23:12 20 20 A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103914		
Sample ID: MB-080708A	Method Blank		Run: SUB-C103914				07/08/08 13:45		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	0.002	mg/L	0.002						
Iron	0.005	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.010	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080708A	Laboratory Fortified Blank		Run: SUB-C103914				07/08/08 13:49		
Silica	0.39	mg/L	0.10	97	85	125			
Aluminum	0.96	mg/L	0.10	96	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.0	mg/L	0.10	101	85	125			
Calcium	51	mg/L	0.50	103	85	125			
Chromium	1.0	mg/L	0.050	102	85	125			
Iron	1.1	mg/L	0.030	108	85	125			
Magnesium	53	mg/L	0.50	105	85	125			
Manganese	1.0	mg/L	0.010	103	85	125			
Molybdenum	1.0	mg/L	0.10	102	85	125			
Nickel	1.0	mg/L	0.050	101	85	125			
Potassium	46	mg/L	0.50	91	85	125			
Sodium	48	mg/L	0.77	95	85	125			
Vanadium	1.1	mg/L	0.10	108	85	125			
Zinc	1.0	mg/L	0.010	100	85	125			
Sample ID: C08060995-003AMS2	Sample Matrix Spike		Run: SUB-C103914				07/08/08 18:40		
Aluminum	2.05	mg/L	0.10	103	70	130			
Barium	2.05	mg/L	0.10	98	70	130			
Boron	2.12	mg/L	0.10	98	70	130			
Chromium	2.02	mg/L	0.050	101	70	130			
Iron	2.07	mg/L	0.030	104	70	130			
Manganese	2.02	mg/L	0.010	99	70	130			
Molybdenum	2.00	mg/L	0.10	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/20/08

Project: Edgemont

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103914		
Sample ID: C08060995-003AMS2	Sample Matrix Spike		Run: SUB-C103914				07/08/08 18:40		
Nickel	1.97	mg/L	0.050	99	70	130			
Vanadium	2.06	mg/L	0.10	100	70	130			
Zinc	2.01	mg/L	0.010	100	70	130			
Calcium	260	mg/L	1.0	99	70	130			
Magnesium	165	mg/L	1.0	99	70	130			
Potassium	104	mg/L	1.0	92	70	130			
Silica	6.43	mg/L	0.10		70	130			A
Sodium	551	mg/L	1.5		70	130			A
Sample ID: C08060995-003AMS2	Sample Matrix Spike Duplicate		Run: SUB-C103914				07/08/08 18:44		
Aluminum	2.13	mg/L	0.10	106	70	130	3.5	20	
Barium	2.08	mg/L	0.10	100	70	130	1.6	20	
Boron	2.21	mg/L	0.10	103	70	130	4.3	20	
Chromium	2.08	mg/L	0.050	104	70	130	3.0	20	
Iron	2.13	mg/L	0.030	106	70	130	2.5	20	
Manganese	2.09	mg/L	0.010	103	70	130	3.3	20	
Molybdenum	2.04	mg/L	0.10	102	70	130	2.0	20	
Nickel	2.05	mg/L	0.050	102	70	130	3.8	20	
Vanadium	2.09	mg/L	0.10	101	70	130	1.4	20	
Zinc	2.08	mg/L	0.010	104	70	130	3.6	20	
Calcium	258	mg/L	1.0	97	70	130	0.6	20	
Magnesium	163	mg/L	1.0	97	70	130	1.4	20	
Potassium	102	mg/L	1.0	90	70	130	1.6	20	
Silica	6.47	mg/L	0.10		70	130	0.7	20	A
Sodium	558	mg/L	1.5		70	130	1.3	20	A
Sample ID: C08070109-003CMS2	Sample Matrix Spike		Run: SUB-C103914				07/08/08 21:02		
Aluminum	4.97	mg/L	0.10	99	70	130			
Barium	4.88	mg/L	0.10	93	70	130			
Boron	5.39	mg/L	0.10	94	70	130			
Chromium	4.90	mg/L	0.050	98	70	130			
Iron	4.95	mg/L	0.030	99	70	130			
Manganese	4.71	mg/L	0.010	94	70	130			
Molybdenum	5.12	mg/L	0.10	101	70	130			
Nickel	4.79	mg/L	0.050	96	70	130			
Vanadium	4.99	mg/L	0.10	99	70	130			
Zinc	5.03	mg/L	0.011	96	70	130			
Calcium	727	mg/L	1.0	98	70	130			
Magnesium	364	mg/L	1.0	97	70	130			
Potassium	290	mg/L	1.0	85	70	130			
Silica	100	mg/L	0.10		70	130			A

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103914		
Sample ID: C08070109-003CMS2		Sample Matrix Spike		Run: SUB-C103914				07/08/08 21:02	
Sodium	828	mg/L	3.9	93	70	130			
Sample ID: C08070109-003CMSD2		Sample Matrix Spike Duplicate		Run: SUB-C103914				07/08/08 21:06	
Aluminum	5.03	mg/L	0.10	100	70	130	1.2	20	
Barium	5.05	mg/L	0.10	96	70	130	3.5	20	
Boron	5.53	mg/L	0.10	97	70	130	2.5	20	
Chromium	4.99	mg/L	0.050	99	70	130	1.9	20	
Iron	5.06	mg/L	0.030	101	70	130	2.1	20	
Manganese	4.87	mg/L	0.010	97	70	130	3.4	20	
Molybdenum	5.11	mg/L	0.10	101	70	130	0.1	20	
Nickel	4.88	mg/L	0.050	98	70	130	1.7	20	
Vanadium	5.06	mg/L	0.10	100	70	130	1.4	20	
Zinc	5.16	mg/L	0.011	98	70	130	2.6	20	
Calcium	729	mg/L	1.0	99	70	130	0.4	20	
Magnesium	364	mg/L	1.0	97	70	130	0.1	20	
Potassium	299	mg/L	1.0	89	70	130	3.1	20	
Silica	99.6	mg/L	0.10		70	130	0.6	20	A
Sodium	824	mg/L	3.9	91	70	130	0.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18911		
Sample ID: MB-18911	Method Blank		Run: SUB-C103319				06/26/08 14:55		
Antimony	0.0002	mg/L	0.0002						
Arsenic	0.0007	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Chromium	0.005	mg/L	5E-05						
Copper	0.002	mg/L	0.0002						
Lead	6E-06	mg/L							
Manganese	0.0003	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	0.0002						
Selenium	ND	mg/L	0.0002						
Silver	0.0001	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	7E-05	mg/L	4E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.001	mg/L	0.0003						
Sample ID: LCS3-18911	Laboratory Control Sample		Run: SUB-C103319				06/26/08 15:02		
Antimony	0.536	mg/L	0.050	107	85	115			
Arsenic	0.525	mg/L	0.0010	105	85	115			
Barium	0.520	mg/L	0.10	104	85	115			
Beryllium	0.235	mg/L	0.010	94	85	115			
Cadmium	0.259	mg/L	0.010	104	85	115			
Chromium	0.509	mg/L	0.050	101	85	115			
Copper	0.501	mg/L	0.010	100	85	115			
Lead	0.538	mg/L	0.050	108	85	115			
Manganese	2.55	mg/L	0.010	102	85	115			
Molybdenum	0.538	mg/L	0.10	108	85	115			
Nickel	0.506	mg/L	0.050	101	85	115			
Selenium	0.516	mg/L	0.0010	103	85	115			
Silver	0.0457	mg/L	0.010	91	85	115			
Strontium	0.553	mg/L	0.10	111	85	115			
Thallium	0.528	mg/L	0.10	106	85	115			
Uranium	0.573	mg/L	0.00030	115	85	115			
Zinc	0.477	mg/L	0.010	95	85	115			
Sample ID: R08060335-001D	Sample Matrix Spike		Run: SUB-C103319				06/26/08 15:29		
Antimony	0.556	mg/L	0.050	111	70	130			
Arsenic	0.544	mg/L	0.0010	108	70	130			
Barium	0.568	mg/L	0.10	111	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18911		
Sample ID: R08060335-001D	Sample Matrix Spike		Run: SUB-C103319				06/26/08 15:29		
Beryllium	0.220	mg/L	0.010	88	70	130			
Cadmium	0.252	mg/L	0.010	101	70	130			
Chromium	0.509	mg/L	0.050	101	70	130			
Copper	0.504	mg/L	0.010	99	70	130			
Lead	0.564	mg/L	0.050	112	70	130			
Manganese	4.21	mg/L	0.010	102	70	130			
Molybdenum	0.573	mg/L	0.10	114	70	130			
Nickel	0.513	mg/L	0.050	102	70	130			
Selenium	0.522	mg/L	0.0010	104	70	130			
Silver	0.0451	mg/L	0.010	90	70	130			
Strontium	6.22	mg/L	0.10		70	130			A
Thallium	0.574	mg/L	0.10	115	70	130			
Uranium	0.629	mg/L	0.00030	125	70	130			
Zinc	0.507	mg/L	0.010	85	70	130			
Sample ID: R08060335-001D	Sample Matrix Spike Duplicate		Run: SUB-C103319				06/26/08 15:35		
Antimony	0.550	mg/L	0.050	110	70	130	1.1	20	
Arsenic	0.528	mg/L	0.0010	105	70	130	2.9	20	
Barium	0.559	mg/L	0.10	109	70	130	1.5	20	
Beryllium	0.215	mg/L	0.010	86	70	130	2.2	20	
Cadmium	0.247	mg/L	0.010	99	70	130	2.0	20	
Chromium	0.495	mg/L	0.050	98	70	130	2.8	20	
Copper	0.488	mg/L	0.010	96	70	130	3.1	20	
Lead	0.562	mg/L	0.050	112	70	130	0.4	20	
Manganese	4.21	mg/L	0.010	102	70	130	0.0	20	
Molybdenum	0.561	mg/L	0.10	112	70	130	2.1	20	
Nickel	0.494	mg/L	0.050	98	70	130	3.8	20	
Selenium	0.504	mg/L	0.0010	101	70	130	3.5	20	
Silver	0.0441	mg/L	0.010	88	70	130	2.2	20	
Strontium	6.16	mg/L	0.10		70	130	1.0	20	A
Thallium	0.571	mg/L	0.10	114	70	130	0.5	20	
Uranium	0.630	mg/L	0.00030	126	70	130	0.1	20	
Zinc	0.496	mg/L	0.010	83	70	130	2.1	20	
Sample ID: R08060335-001D	Sample Matrix Spike		Run: SUB-C104018				07/10/08 11:21		
Arsenic	0.529	mg/L	0.0010	105	70	130			
Copper	0.516	mg/L	0.010	101	70	130			
Lead	0.513	mg/L	0.050	103	70	130			
Manganese	4.40	mg/L	0.010	111	70	130			
Molybdenum	0.510	mg/L	0.10	102	70	130			
Selenium	0.513	mg/L	0.0020	103	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18911		
Sample ID: R08060335-001D	Sample Matrix Spike			Run: SUB-C104018				07/10/08 11:21	
Uranium	0.532	mg/L	0.00032	106	70	130			
Sample ID: R08060335-001D	Sample Matrix Spike Duplicate			Run: SUB-C104018				07/10/08 11:26	
Arsenic	0.523	mg/L	0.0010	104	70	130	1.1	20	
Copper	0.506	mg/L	0.010	99	70	130	2.0	20	
Lead	0.510	mg/L	0.050	102	70	130	0.7	20	
Manganese	4.36	mg/L	0.010	109	70	130	1.0	20	
Molybdenum	0.513	mg/L	0.10	103	70	130	0.5	20	
Selenium	0.508	mg/L	0.0020	102	70	130	0.9	20	
Uranium	0.536	mg/L	0.00032	107	70	130	0.8	20	
Sample ID: R08060335-001D	Sample Matrix Spike			Run: SUB-C104345				07/17/08 08:20	
Antimony	5.82	mg/L	0.050	116	70	130			
Arsenic	5.26	mg/L	0.0010	105	70	130			
Barium	5.58	mg/L	0.10	111	70	130			
Beryllium	2.89	mg/L	0.010	116	70	130			
Cadmium	2.45	mg/L	0.010	98	70	130			
Chromium	5.14	mg/L	0.050	103	70	130			
Copper	4.77	mg/L	0.010	95	70	130			
Lead	5.26	mg/L	0.050	105	70	130			
Manganese	43.0	mg/L	0.010	165	70	130			S
Molybdenum	5.34	mg/L	0.10	107	70	130			
Nickel	4.81	mg/L	0.050	96	70	130			
Selenium	5.02	mg/L	0.0020	100	70	130			
Silver	0.439	mg/L	0.010	88	70	130			
Strontium	57.2	mg/L	0.10	1050	70	130			S
Thallium	5.34	mg/L	0.10	107	70	130			
Uranium	6.14	mg/L	0.00032	123	70	130			
Zinc	5.30	mg/L	0.010	104	70	130			
Sample ID: R08060335-001D	Sample Matrix Spike Duplicate			Run: SUB-C104345				07/17/08 08:25	
Antimony	5.82	mg/L	0.050	116	70	130	0.0	20	
Arsenic	5.12	mg/L	0.0010	102	70	130	2.8	20	
Barium	5.64	mg/L	0.10	113	70	130	1.1	20	
Beryllium	2.89	mg/L	0.010	116	70	130	0.2	20	
Cadmium	2.44	mg/L	0.010	98	70	130	0.2	20	
Chromium	5.25	mg/L	0.050	105	70	130	2.2	20	
Copper	4.68	mg/L	0.010	93	70	130	2.0	20	
Lead	5.37	mg/L	0.050	107	70	130	2.1	20	
Manganese	44.1	mg/L	0.010	169	70	130	2.5	20	S
Molybdenum	5.34	mg/L	0.10	107	70	130	0.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/20/08

Project: Edgemont

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18911		
Sample ID: R08060335-001D		Sample Matrix Spike Duplicate			Run: SUB-C104345		07/17/08 08:25		
Nickel	4.68	mg/L	0.050	94	70	130	2.6	20	
Selenium	4.89	mg/L	0.0020	98	70	130	2.6	20	
Silver	0.442	mg/L	0.010	88	70	130	0.6	20	
Strontium	57.4	mg/L	0.10	1050	70	130	0.2	20	S
Thallium	5.36	mg/L	0.10	107	70	130	0.3	20	
Uranium	6.31	mg/L	0.00032	126	70	130	2.7	20	
Zinc	5.15	mg/L	0.010	101	70	130	2.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R104438		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C104438				07/17/08 11:20		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	4E-05	mg/L	3E-05						
Thorium 232	0.0002	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C104438				07/17/08 11:26		
Arsenic	0.0520	mg/L	0.0010	104	85	115			
Cadmium	0.0515	mg/L	0.0010	103	85	115			
Copper	0.0517	mg/L	0.0010	103	85	115			
Lead	0.0515	mg/L	0.0010	103	85	115			
Mercury	0.00546	mg/L	0.0010	109	85	115			
Silver	0.0201	mg/L	0.0010	100	85	115			
Thorium 232	0.0506	mg/L	0.0010	101	85	115			
Uranium	0.0509	mg/L	0.00030	102	85	115			
<b>Sample ID: C08060995-004AMS4</b>	Post Digestion Spike		Run: SUB-C104438				07/17/08 16:47		
Arsenic	0.0487	mg/L	0.0010	95	70	130			
Cadmium	0.0441	mg/L	0.010	88	70	130			
Copper	0.0468	mg/L	0.010	86	70	130			
Lead	0.0482	mg/L	0.050	96	70	130			
Mercury	0.00512	mg/L	0.0010	102	70	130			
Silver	0.0147	mg/L	0.010	74	70	130			
Thorium 232	0.0507	mg/L	0.0010	101	70	130			
Uranium	0.0584	mg/L	0.00030	101	70	130			
<b>Sample ID: C08060995-004AMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C104438				07/17/08 16:54		
Arsenic	0.0505	mg/L	0.0010	99	70	130	3.5	20	
Cadmium	0.0441	mg/L	0.010	88	70	130	0.1	20	
Copper	0.0485	mg/L	0.010	90	70	130	3.7	20	
Lead	0.0484	mg/L	0.050	97	70	130	0.0	20	
Mercury	0.00516	mg/L	0.0010	103	70	130	0.8	20	
Silver	0.0148	mg/L	0.010	74	70	130	0.7	20	
Thorium 232	0.0514	mg/L	0.0010	103	70	130	1.3	20	
Uranium	0.0586	mg/L	0.00030	102	70	130	0.4	20	
<b>Sample ID: C08061333-001CMS4</b>	Post Digestion Spike		Run: SUB-C104438				07/17/08 20:17		
Arsenic	0.0486	mg/L	0.0010	96	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104438		
Sample ID: C08061333-001CMS4	Post Digestion Spike			Run: SUB-C104438			07/17/08 20:17		
Cadmium	0.0455	mg/L	0.010	91	70	130			
Copper	0.0450	mg/L	0.010	90	70	130			
Lead	0.0481	mg/L	0.050	95	70	130			
Mercury	0.00500	mg/L	0.0010	100	70	130			
Silver	0.0110	mg/L	0.010	55	70	130			S
Thorium 232	0.0492	mg/L	0.0010	98	70	130			
Uranium	0.0537	mg/L	0.00030	97	70	130			
Sample ID: C08061333-001CMSD4	Post Digestion Spike Duplicate			Run: SUB-C104438			07/17/08 20:24		
Arsenic	0.0482	mg/L	0.0010	95	70	130	0.9	20	
Cadmium	0.0459	mg/L	0.010	92	70	130	0.9	20	
Copper	0.0453	mg/L	0.010	90	70	130	0.7	20	
Lead	0.0479	mg/L	0.050	95	70	130	0.0	20	
Mercury	0.00503	mg/L	0.0010	101	70	130	0.6	20	
Silver	0.0128	mg/L	0.010	64	70	130	16	20	S
Thorium 232	0.0491	mg/L	0.0010	97	70	130	0.1	20	
Uranium	0.0536	mg/L	0.00030	97	70	130	0.2	20	
Method: E245.1							Batch: B_33204		
Sample ID: MB-33204	Method Blank			Run: SUB-B113209			06/30/08 07:09		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33204	Laboratory Fortified Blank			Run: SUB-B113209			06/30/08 07:12		
Mercury	0.0017	mg/L	0.0010	86	85	115			
Sample ID: R08060335-001D	Sample Matrix Spike			Run: SUB-B113209			06/30/08 08:31		
Mercury	0.0021	mg/L	0.0010	103	70	130			
Sample ID: R08060335-001D	Sample Matrix Spike Duplicate			Run: SUB-B113209			06/30/08 08:33		
Mercury	0.0020	mg/L	0.0010	99	70	130	4.0	30	
Method: E245.1							Analytical Run: SUB-B113209		
Sample ID: QCS	Initial Calibration Verification Standard						06/30/08 06:57		
Mercury	0.0019	mg/L	0.0010	97	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R35577		
<b>Sample ID: LFB0806190922-3</b>	Laboratory Fortified Blank			Run: DIONEX_080619A			06/19/08 17:04		
Chloride	4.62	mg/L	0.50	92	90	110			
Fluoride	1.80	mg/L	0.10	90	90	110			
Nitrogen, Nitrate as N	2.27	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	90	110			
Sulfate	13.9	mg/L	1.0	93	90	110			
<b>Sample ID: LFB0806190922-4</b>	Laboratory Fortified Blank			Run: DIONEX_080619A			06/19/08 17:20		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	1.85	mg/L	0.10	93	90	110			
Nitrogen, Nitrate as N	2.34	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	14.3	mg/L	1.0	95	90	110			
<b>Sample ID: R08060335-001AMS</b>	Sample Matrix Spike			Run: DIONEX_080619A			06/20/08 00:43		
Chloride	244	mg/L	5.4	87	80	120			
Fluoride	93.4	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	117	mg/L	1.3	93	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1890	mg/L	3.4	87	80	120			
<b>Sample ID: R08060335-001AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080619A			06/20/08 01:00		
Chloride	240	mg/L	5.4	85	80	120	2.0	10	
Fluoride	91.0	mg/L	0.56	83	80	120	2.6	10	
Nitrogen, Nitrate as N	114	mg/L	1.3	91	80	120	2.4	10	
Nitrogen, Nitrite as N	121	mg/L	2.9	97	80	120	2.5	10	
Sulfate	1870	mg/L	3.4	85	80	120	0.9	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0481		
Sample ID: MB-GrAB-0481	Method Blank				Run: SUB-C104629			07/21/08 10:42	
Gross Alpha	-1	pCi/L							U
Gross Beta	-6	pCi/L							U
Sample ID: UNAT-GrAB-0481	Laboratory Control Sample				Run: SUB-C104629			07/21/08 10:42	
Gross Alpha	140	pCi/L	103		70	130			
Sample ID: Cs137-GrAB-0481	Laboratory Control Sample				Run: SUB-C104629			07/21/08 10:42	
Gross Beta	90	pCi/L	103		70	130			
Sample ID: C08070009-010DMS	Sample Matrix Spike				Run: SUB-C104629			07/21/08 10:42	
Gross Alpha	145	pCi/L	105		70	130			
Sample ID: C08070009-010DMSD	Sample Matrix Spike Duplicate				Run: SUB-C104629			07/21/08 10:42	
Gross Alpha	127	pCi/L	92		70	130	13	18.1	
Sample ID: C08070009-010DMS	Sample Matrix Spike				Run: SUB-C104629			07/21/08 10:42	
Gross Beta	88.7	pCi/L	87		70	130			
Sample ID: C08070009-010DMSD	Sample Matrix Spike Duplicate				Run: SUB-C104629			07/21/08 10:42	
Gross Beta	98.5	pCi/L	97		70	130	11	16.1	
Method: E901.1							Batch: C_R103216		
Sample ID: LCS-R103216	Laboratory Control Sample				Run: SUB-C103216			06/20/08 16:37	
Cesium 137	457000	pCi/Filter	20	106	70	130			
Cobalt 60	325000	pCi/Filter	20	102	70	130			
Sample ID: MB-R103216	Method Blank				Run: SUB-C103216			06/20/08 16:37	
Gross Gamma		pCi/Filter	20						U
Sample ID: C08060794-001ADUP	Sample Duplicate				Run: SUB-C103216			06/20/08 16:37	
Gross Gamma		pCi/Filter	20				0.0	30	U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18917		
Sample ID: C08060995-004KMS	Sample Matrix Spike				Run: SUB-C104309		07/15/08 14:46		
Radium 226	160	pCi/L		100	70	130			
Sample ID: C08060995-004KMSD	Sample Matrix Spike Duplicate				Run: SUB-C104309		07/15/08 14:46		
Radium 226	170	pCi/L		110	70	130	9.7	24.6	
Sample ID: LCS-18917	Laboratory Control Sample				Run: SUB-C104309		07/15/08 14:46		
Radium 226	16	pCi/L		112	70	130			
Sample ID: MB-18917	Method Blank				Run: SUB-C104309		07/15/08 16:22		
Radium 226	-2	pCi/L							U
Method: E903.0							Batch: C_RA226-2918		
Sample ID: MB-RA226-2918	Method Blank				Run: SUB-C104311		07/16/08 07:03		
Radium 226	0.1	pCi/L							
Sample ID: C08060981-001AMS	Sample Matrix Spike				Run: SUB-C104311		07/16/08 07:03		
Radium 226	19	pCi/L		109	70	130			
Sample ID: C08060981-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C104311		07/16/08 07:03		
Radium 226	19	pCi/L		108	70	130	0.6	21	
Sample ID: LCS-RA226-2918	Laboratory Control Sample				Run: SUB-C104311		07/16/08 08:37		
Radium 226	8.2	pCi/L		102	70	130			
Method: E907.0							Batch: C_18917		
Sample ID: R08060335-001I	Sample Matrix Spike				Run: SUB-C104217		07/13/08 18:14		
Thorium 230	19.7	pCi/L	0.20	85	70	130			
Sample ID: R08060335-001I	Sample Matrix Spike Duplicate				Run: SUB-C104217		07/13/08 18:14		
Thorium 230	21.7	pCi/L	0.20	96	70	130	9.5	30	
Sample ID: LCS-18917	Laboratory Control Sample				Run: SUB-C104217		07/13/08 18:14		
Thorium 230	51.9	pCi/L	0.20	108	70	130			
Sample ID: MB-18917	Method Blank				Run: SUB-C104217		07/13/08 18:14		
Thorium 230	0.7	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_RA-TH-ISO-0566		
Sample ID: LCS-RA-TH-ISO-0566	Laboratory Control Sample				Run: SUB-C104779			07/21/08 16:02	
Thorium 230	6.43	pCi/L	0.20	105	70	130			
Sample ID: C08061025-003BMS	Sample Matrix Spike				Run: SUB-C104779			07/21/08 16:13	
Thorium 230	15.8	pCi/L	0.20	96	70	130			
Sample ID: C08061025-003BMSD	Sample Matrix Spike Duplicate				Run: SUB-C104779			07/21/08 16:14	
Thorium 230	14.3	pCi/L	0.20	89	70	130	9.5	30	
Sample ID: MB-RA-TH-ISO-0566	Method Blank				Run: SUB-C104779			07/17/08 12:48	
Thorium 230	0.05	pCi/L							U
Method: E909.0M							Batch: C_18917		
Sample ID: C08060943-002FMS	Sample Matrix Spike				Run: SUB-C105224			07/14/08 09:30	
Lead 210	1300	pCi/L		111	70	130			
Sample ID: C08060943-002FMSD	Sample Matrix Spike Duplicate				Run: SUB-C105224			07/14/08 09:30	
Lead 210	830	pCi/L		71	70	130	44	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R105224	Method Blank				Run: SUB-C105224			07/14/08 09:30	
Lead 210	5	pCi/L							U
Sample ID: LCS-R105224	Laboratory Control Sample				Run: SUB-C105224			07/14/08 09:30	
Lead 210	120	pCi/L		95	70	130			
Method: E909.0M							Batch: C_R105675		
Sample ID: C08070067-003AMS	Sample Matrix Spike				Run: SUB-C105675			07/18/08 08:20	
Lead 210	640	pCi/L		110	70	130			
Sample ID: C08070067-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C105675			07/18/08 08:20	
Lead 210	540	pCi/L		92	70	130	18	30	
Sample ID: MB-R105675	Method Blank				Run: SUB-C105675			07/18/08 08:20	
Lead 210	-2	pCi/L							U
Sample ID: LCS-R105675	Laboratory Control Sample				Run: SUB-C105675			07/18/08 08:20	
Lead 210	110	pCi/L		94	70	130			

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060335

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_18917		
Sample ID: C08060943-001FMS	Sample Matrix Spike				Run: SUB-C106132		08/18/08 17:00		
Polonium 210	29	pCi/L	1.0	128	70	130			
Sample ID: C08060943-001FMSD	Sample Matrix Spike Duplicate				Run: SUB-C106132		08/18/08 17:00		
Polonium 210	22	pCi/L	1.0	99	70	130	25	30	
Sample ID: MB-R106132	Method Blank				Run: SUB-C106132		08/18/08 17:00		
Polonium 210	-0.09	pCi/L					U		
Sample ID: LCS-R106132	Laboratory Control Sample				Run: SUB-C106132		08/18/08 17:00		
Polonium 210	84	pCi/L	1.0	97	70	130			
Method: RMO-3008							Batch: C_R104442		
Sample ID: C08061021-004EMS	Sample Matrix Spike				Run: SUB-C104442		07/09/08 18:40		
Polonium 210	65	pCi/L	1.0	73	70	130			
Sample ID: C08061021-004EMSD	Sample Matrix Spike Duplicate				Run: SUB-C104442		07/09/08 18:40		
Polonium 210	75	pCi/L	1.0	85	70	130	14	30	
Sample ID: LCS-R104442	Laboratory Control Sample				Run: SUB-C104442		07/09/08 18:40		
Polonium 210	44	pCi/L	1.0	103	70	130			
Sample ID: MB-R104442	Method Blank				Run: SUB-C104442		07/09/08 18:40		
Polonium 210	-0.3	pCi/L					U		

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc.: <b>Riverkel Dewy Burdock</b>		Sample Origin State: _____	EP A/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: _____		Contact Name: <b>Carly Foreman</b> Phone/Fax: _____		Email: <b>carly.foreman@respec.com</b>	Sampler: (Please Print) <b>Eric Krantz</b>
Invoice Address: _____		Invoice Contact & Phone: _____		Purchase Order: _____	Quote/Bottle Order: _____
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		ANALYSIS REQUESTED	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) <b>Pembund GwL 19</b>		Collection Date <b>6/17/08</b>	Collection Time <b>18:10</b>	MATRIX <b>W</b>	SEE ATTACHED Normal Turnaround (TAT)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Custody Record Must be Signed		Relinquished by (print): <b>Carly Foreman</b> Date/Time: <b>6/18/08 06:30</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Steve Traill</b> Date/Time: <b>6-18-08 06:30</b>	Signature: <b>[Signature]</b>
Sample Disposal: _____		Return to Client: _____		Lab Disposal: _____	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

August 21, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08060427

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 6/25/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08060427-001	DewBurd GW698	06/24/08 11:55	06/25/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08060427-002	DewBurd GW696	06/24/08 15:08	06/25/08	Aqueous	Same As Above
R08060427-003	DewBurd GW694	06/24/08 15:16	06/25/08	Aqueous	Same As Above
R08060427-004	DewBurd GW695	06/24/08 17:30	06/25/08	Aqueous	Same As Above
R08060427-005	DewBurd GW697	06/24/08 18:20	06/25/08	Aqueous	Same As Above
R08060427-006	DewBurd GW3026	06/24/08 20:06	06/25/08	Aqueous	Same As Above



R08060427-007 DewBurd BLK01

06/24/08 20:10 06/25/08

Aqueous

Metals by ICP/ICPMS, Dissolved  
Metals by ICP/ICPMS, Suspended  
Metals by ICP/ICPMS, Total  
Alkalinity  
Conductivity  
Mercury, Total  
Selenium, Dissolved  
Selenium, Dissolved  
Selenium, Dissolved  
Anions by Ion Chromatography  
Nitrogen, Ammonia  
Oxidation Reduction Potential  
pH  
Digestion, Total Metals  
Digestion, Total Metals  
Dissolved Filtration  
Digestion, Mercury by CVAA  
Gross Alpha, Gross Beta  
Gross Gamma, Dissolved  
Lead 210, Dissolved  
Lead 210, Suspended  
Polonium 210, Dissolved  
Polonium 210, Suspended  
Radium 226, Dissolved  
Radium 226, Suspended  
Radon 222  
Thorium, Isotopic  
Thorium, Suspended Isotopic  
Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



Date: 21-Aug-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08060427

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08061394

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.  
End of comments imported for SUBBED Workorder: C08061394



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-001  
Client Sample ID: DewBurd GW698

Report Date: 08/21/08  
Collection Date: 06/24/08 11:55  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	114	mg/L		5		1	A2320 B	07/03/08 11:29/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:29/mb
Bicarbonate as HCO3	139	mg/L		5		1	A2320 B	07/03/08 11:29/mb
Calcium	393	mg/L		0.5		2	E200.7	07/07/08 18:09/eli-c
Chloride	9	mg/L		1		1	E300.0	06/26/08 21:12/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	06/26/08 21:12/jmh
Magnesium	141	mg/L		0.5		2	E200.7	07/07/08 18:09/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:44/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/26/08 21:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/26/08 21:12/jmh
Potassium	15.9	mg/L		0.5		2	E200.7	07/07/08 18:09/eli-c
Silica	5.5	mg/L		0.5		2	E200.7	07/07/08 18:09/eli-c
Sodium	89	mg/L	D	2		2	E200.7	07/07/08 18:09/eli-c
Sulfate	1470	mg/L		1		20	E300.0	06/26/08 20:56/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2530	umhos/cm		5.0		1	A2510 B	07/01/08 11:07/tb
Oxidation-Reduction Potential	94	mV				1	A2580 B	06/27/08 00:00/jmh
pH	7.09	s.u.		0.01		1	A4500-H B	07/01/08 10:03/tb
Sodium Adsorption Ratio (SAR)	0.98	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	06/27/08 11:54/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:09/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/15/08 18:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:09/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:06/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:06/eli-c
Iron	1.60	mg/L		0.03		2	E200.7	07/07/08 18:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:06/eli-c
Manganese	2.56	mg/L		0.01		2	E200.7	07/07/08 18:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:06/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:09/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:09/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:11/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:06/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-001  
Client Sample ID: DewBurd GW698

Report Date: 08/21/08  
Collection Date: 06/24/08 11:55  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:06/eli-c
Uranium	0.104	mg/L		0.0003		1	E200.8	07/15/08 18:06/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 18:09/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/07/08 18:09/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0043	mg/L		0.0003		1	E200.8	07/10/08 12:15/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:13/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1790	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha precision (±)	40.7	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha MDC	8.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta	470	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta precision (±)	11.1	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta MDC	8.7	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Lead 210	-1.7	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	429	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	4.4	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 15:49/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	07/28/08 15:49/eli-c
Gross Gamma	170	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	38	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	7.4	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.78	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	11.6	pCi/L				1	E903.0	07/15/08 23:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-001  
Client Sample ID: DewBurd GW698

Report Date: 08/21/08  
Collection Date: 06/24/08 11:55  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	1.1	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Thorium 230	0.7	pCi/L		0.2		1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	07/10/08 19:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	40700	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	418	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 00:31/eli-c
Arsenic	0.005	mg/L	D	0.003		10	E200.8	07/17/08 00:31/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:29/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 13:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:29/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 00:31/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:29/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:29/eli-c
Iron	5.48	mg/L		0.03		2	E200.7	07/08/08 02:29/eli-c
Lead	0.001	mg/L		0.001		10	E200.8	07/17/08 00:31/eli-c
Manganese	2.66	mg/L		0.01		2	E200.7	07/08/08 02:29/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/07/08 21:18/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:29/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:29/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/17/08 00:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 13:41/eli-c
Strontium	5.2	mg/L		0.1		2	E200.7	07/08/08 02:29/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 00:31/eli-c
Uranium	0.113	mg/L		0.0003		10	E200.8	07/17/08 00:31/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/08/08 02:29/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.88	%				1	A1030 E	08/21/08 00:00/kl
Anions	33.1	meq/L				1	A1030 E	08/21/08 00:00/kl
Cations	35.8	meq/L				1	A1030 E	08/21/08 00:00/kl
Solids, Total Dissolved Calculated	2200	mg/L				1	A1030 E	08/21/08 00:00/kl
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	08/21/08 00:00/kl

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-002  
Client Sample ID: DewBurd GW696

Report Date: 08/21/08  
Collection Date: 06/24/08 15:08  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	07/03/08 11:32/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:32/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	07/03/08 11:32/mb
Calcium	31.6	mg/L		0.5		2	E200.7	07/07/08 18:22/eli-c
Chloride	12	mg/L		1		1	E300.0	06/26/08 21:45/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/26/08 21:45/jmh
Magnesium	11.1	mg/L		0.5		2	E200.7	07/07/08 18:22/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:47/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/26/08 21:45/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/26/08 21:45/jmh
Potassium	9.4	mg/L		0.5		2	E200.7	07/07/08 18:22/eli-c
Silica	5.0	mg/L		0.5		2	E200.7	07/07/08 18:22/eli-c
Sodium	295	mg/L	D	2		2	E200.7	07/07/08 18:22/eli-c
Sulfate	456	mg/L		1		20	E300.0	06/26/08 21:29/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	07/01/08 11:07/tb
Oxidation-Reduction Potential	99	mV				1	A2580 B	06/27/08 00:00/jmh
pH	8.29	s.u.		0.01		1	A4500-H B	07/01/08 10:04/tb
Sodium Adsorption Ratio (SAR)	12	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	06/27/08 11:56/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:22/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/15/08 18:39/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:22/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:22/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:39/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:22/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:39/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	07/07/08 18:22/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:39/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/07/08 18:22/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:39/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:22/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:22/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-002  
Client Sample ID: DewBurd GW696

Report Date: 08/21/08  
Collection Date: 06/24/08 15:08  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/15/08 18:39/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 18:22/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:22/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 12:20/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:15/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	23.9	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta	9.9	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Lead 210	-5.3	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	3.3	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/28/08 20:05/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	5.6	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/15/08 23:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060427-002  
**Client Sample ID:** DewBurd GW696

**Report Date:** 08/21/08  
**Collection Date:** 06/24/08 15:08  
**Date Received:** 06/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	07/10/08 19:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	517	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	136	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 00:38/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/17/08 00:38/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:34/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:08/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:34/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 00:38/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:34/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:34/eli-c
Iron	0.67	mg/L		0.03		2	E200.7	07/08/08 02:34/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/17/08 00:38/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/08/08 02:34/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:42/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:34/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:34/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/17/08 00:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:08/eli-c
Strontium	0.8	mg/L		0.1		2	E200.7	07/08/08 02:34/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 00:38/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/17/08 00:38/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 02:34/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.89	%				1	A1030 E	08/21/08 00:00/lkl
Anions	13.3	meq/L				1	A1030 E	08/21/08 00:00/lkl
Cations	15.6	meq/L				1	A1030 E	08/21/08 00:00/lkl
Solids, Total Dissolved Calculated	934	mg/L				1	A1030 E	08/21/08 00:00/lkl
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	08/21/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060427-003  
**Client Sample ID:** DewBurd GW694

**Report Date:** 08/21/08  
**Collection Date:** 06/24/08 15:16  
**Date Received:** 06/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	206	mg/L		5		1	A2320 B	07/03/08 11:36/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:36/mb
Bicarbonate as HCO3	251	mg/L		5		1	A2320 B	07/03/08 11:36/mb
Calcium	103	mg/L		0.5		2	E200.7	07/07/08 18:38/eli-c
Chloride	9	mg/L		1		1	E300.0	06/26/08 22:18/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	06/26/08 22:18/jmh
Magnesium	37.1	mg/L		0.5		2	E200.7	07/07/08 18:38/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:48/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/26/08 22:18/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/26/08 22:18/jmh
Potassium	13.6	mg/L		0.5		2	E200.7	07/07/08 18:38/eli-c
Silica	4.6	mg/L		0.5		2	E200.7	07/07/08 18:38/eli-c
Sodium	180	mg/L	D	2		2	E200.7	07/07/08 18:38/eli-c
Sulfate	486	mg/L		1		20	E300.0	06/26/08 22:02/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1400	umhos/cm		5.0		1	A2510 B	07/01/08 11:08/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	06/27/08 00:00/jmh
pH	7.82	s.u.		0.01		1	A4500-H B	07/01/08 10:05/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	06/27/08 11:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:38/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/15/08 18:12/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:38/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:12/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:12/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/07/08 18:38/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:12/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	07/07/08 18:38/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:12/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:38/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:38/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:12/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060427-003  
**Client Sample ID:** DewBurd GW694

**Report Date:** 08/21/08  
**Collection Date:** 06/24/08 15:16  
**Date Received:** 06/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:12/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	07/15/08 18:12/eli-c
Vanadium	0.1	mg/L		0.1		2	E200.7	07/07/08 18:38/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:38/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 12:25/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:17/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	23.7	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta	15.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Lead 210	-0.1	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.8	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	2.2	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	07/29/08 12:45/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/29/08 12:45/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	4.8	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.19	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	07/15/08 23:30/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060427-003  
**Client Sample ID:** DewBurd GW694

**Report Date:** 08/21/08  
**Collection Date:** 06/24/08 15:16  
**Date Received:** 06/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/11/08 17:07/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/11/08 17:07/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	611	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	137	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 00:45/eli-c
Arsenic	ND	mg/L	D	0.003		10	E200.8	07/17/08 00:45/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:38/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:15/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:38/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 00:45/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:38/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:38/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	07/08/08 02:38/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/17/08 00:45/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	07/08/08 02:38/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:49/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:38/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:38/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/17/08 00:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:15/eli-c
Strontium	2.9	mg/L		0.1		2	E200.7	07/08/08 02:38/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 00:45/eli-c
Uranium	0.0006	mg/L		0.0003		10	E200.8	07/17/08 00:45/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 02:38/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	6.22	%				1	A1030 E	08/21/08 00:00/ikl
Anions	14.5	meq/L				1	A1030 E	08/21/08 00:00/ikl
Cations	16.4	meq/L				1	A1030 E	08/21/08 00:00/ikl
Solids, Total Dissolved Calculated	965	mg/L				1	A1030 E	08/21/08 00:00/ikl
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	08/21/08 00:00/ikl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-004  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 06/24/08 17:30  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	07/03/08 11:40/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:40/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	07/03/08 11:40/mb
Calcium	52.5	mg/L		0.5		2	E200.7	07/07/08 18:42/eli-c
Chloride	11	mg/L		1		1	E300.0	06/26/08 23:57/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/26/08 23:57/jmh
Magnesium	18.8	mg/L		0.5		2	E200.7	07/07/08 18:42/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:49/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/26/08 23:57/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/26/08 23:57/jmh
Potassium	8.7	mg/L		0.5		2	E200.7	07/07/08 18:42/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	07/07/08 18:42/eli-c
Sodium	250	mg/L	D	2		2	E200.7	07/07/08 18:42/eli-c
Sulfate	442	mg/L		1		20	E300.0	06/26/08 23:07/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1380	umhos/cm		5.0		1	A2510 B	07/01/08 11:09/tb
Oxidation-Reduction Potential	120	mV				1	A2580 B	06/27/08 00:00/jmh
pH	8.14	s.u.		0.01		1	A4500-H B	07/01/08 10:05/tb
Sodium Adsorption Ratio (SAR)	7.5	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	06/27/08 11:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:42/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/15/08 17:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:42/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 17:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:42/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 17:59/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/07/08 18:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 17:59/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	07/07/08 18:42/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 17:59/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:42/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:42/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 17:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-004  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 06/24/08 17:30  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 17:59/eli-c
Uranium	0.0027	mg/L		0.0003		1	E200.8	07/15/08 17:59/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 18:42/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:42/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 12:30/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:19/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	39.7	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha precision (±)	4.8	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta	11.0	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Gross Beta MDC	3.3	pCi/L				1	E900.0	07/19/08 01:30/eli-c
Lead 210	0.7	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.8	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	5.2	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/28/08 20:05/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	2.9	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.17	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	07/15/08 23:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-004  
Client Sample ID: DewBurd GW695

Report Date: 08/21/08  
Collection Date: 06/24/08 17:30  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 23:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/11/08 17:07/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/11/08 17:07/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	2120	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	154	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 00:51/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	07/17/08 00:51/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:42/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:22/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:42/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 00:51/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:42/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:42/eli-c
Iron	0.12	mg/L		0.03		2	E200.7	07/08/08 02:42/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/17/08 00:51/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	07/08/08 02:42/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:51/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:42/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:42/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/17/08 00:51/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:22/eli-c
Strontium	1.0	mg/L		0.1		2	E200.7	07/08/08 02:42/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 00:51/eli-c
Uranium	0.0027	mg/L		0.0003		10	E200.8	07/17/08 00:51/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 02:42/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.98	%				1	A1030 E	08/21/08 00:00/kl
Anions	13.0	meq/L				1	A1030 E	08/21/08 00:00/kl
Cations	15.3	meq/L				1	A1030 E	08/21/08 00:00/kl
Solids, Total Dissolved Calculated	901	mg/L				1	A1030 E	08/21/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	08/21/08 00:00/kl

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-005  
Client Sample ID: DewBurd GW697

Report Date: 08/21/08  
Collection Date: 06/24/08 18:20  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	07/03/08 11:42/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:42/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	07/03/08 11:42/mb
Calcium	53.4	mg/L		0.5		2	E200.7	07/07/08 18:46/eli-c
Chloride	8	mg/L		1		1	E300.0	06/27/08 00:29/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	06/27/08 00:29/jmh
Magnesium	17.7	mg/L		0.5		2	E200.7	07/07/08 18:46/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:51/ch
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	06/27/08 00:29/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 00:29/jmh
Potassium	8.8	mg/L		0.5		2	E200.7	07/07/08 18:46/eli-c
Silica	4.6	mg/L		0.5		2	E200.7	07/07/08 18:46/eli-c
Sodium	218	mg/L	D	2		2	E200.7	07/07/08 18:46/eli-c
Sulfate	409	mg/L		1		20	E300.0	06/27/08 00:13/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	07/01/08 11:10/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	06/27/08 00:00/jmh
pH	8.25	s.u.		0.01		1	A4500-H B	07/01/08 10:07/tb
Sodium Adsorption Ratio (SAR)	6.6	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	06/27/08 11:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:46/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/15/08 18:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:46/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:46/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:19/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:46/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:19/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	07/07/08 18:46/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:19/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/07/08 18:46/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:19/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:46/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:46/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:19/eli-c

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060427-005  
**Client Sample ID:** DewBurd GW697

**Report Date:** 08/21/08  
**Collection Date:** 06/24/08 18:20  
**Date Received:** 06/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:19/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/15/08 18:19/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 18:46/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:46/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 12:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:21/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	11.9	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta	8.1	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta MDC	3.3	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Lead 210	0.5	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.8	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	0.8	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/28/08 20:05/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	2.9	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/16/08 01:53/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-005  
Client Sample ID: DewBurd GW697

Report Date: 08/21/08  
Collection Date: 06/24/08 18:20  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/16/08 01:53/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/16/08 01:53/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	07/11/08 17:07/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/11/08 17:07/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	413	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	132	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 02:47/eli-c
Arsenic	0.003	mg/L	D	0.003		10	E200.8	07/17/08 02:47/eli-c
Barium	0.2	mg/L		0.1		2	E200.7	07/08/08 02:46/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:46/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 02:47/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:46/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:46/eli-c
Iron	0.08	mg/L		0.03		2	E200.7	07/08/08 02:46/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/17/08 02:47/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/08/08 02:46/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:53/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:46/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:46/eli-c
Selenium	0.005	mg/L	D	0.002		10	E200.8	07/17/08 02:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:29/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	07/08/08 02:46/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 02:47/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/17/08 02:47/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 02:46/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	6.52	%				1	A1030 E	08/21/08 00:00/kl
Anions	12.1	meq/L				1	A1030 E	08/21/08 00:00/kl
Cations	13.8	meq/L				1	A1030 E	08/21/08 00:00/kl
Solids, Total Dissolved Calculated	829	mg/L				1	A1030 E	08/21/08 00:00/kl
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	08/21/08 00:00/kl

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-006  
Client Sample ID: DewBurd GW3026

Report Date: 08/21/08  
Collection Date: 06/24/08 20:06  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	172	mg/L		5		1	A2320 B	07/03/08 11:46/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:46/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	07/03/08 11:46/mb
Calcium	461	mg/L		0.5		2	E200.7	07/07/08 18:50/eli-c
Chloride	15	mg/L		1		1	E300.0	06/27/08 01:02/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/27/08 01:02/jmh
Magnesium	137	mg/L		0.5		2	E200.7	07/07/08 18:50/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:52/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 01:02/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 01:02/jmh
Potassium	22.3	mg/L		0.5		2	E200.7	07/07/08 18:50/eli-c
Silica	1.9	mg/L		0.5		2	E200.7	07/07/08 18:50/eli-c
Sodium	171	mg/L	D	2		2	E200.7	07/07/08 18:50/eli-c
Sulfate	1790	mg/L		1		20	E300.0	06/27/08 00:46/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2970	umhos/cm		5.0		1	A2510 B	07/01/08 11:11/tb
Oxidation-Reduction Potential	85	mV				1	A2580 B	06/27/08 00:00/jmh
pH	6.82	s.u.		0.01		1	A4500-H B	07/01/08 10:08/tb
Sodium Adsorption Ratio (SAR)	1.8	unitless		0.10		1	Calculation	08/21/08 16:50/ADM
Solids, Total Dissolved TDS @ 180 C	2700	mg/L		5		1	A2540 C	06/27/08 11:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:50/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/15/08 18:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:50/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/07/08 18:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:26/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	07/07/08 18:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:26/eli-c
Manganese	1.42	mg/L		0.01		2	E200.7	07/07/08 18:50/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:26/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:50/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:50/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:26/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-006  
Client Sample ID: DewBurd GW3026

Report Date: 08/21/08  
Collection Date: 06/24/08 20:06  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:26/eli-c
Uranium	0.0183	mg/L		0.0003		1	E200.8	07/15/08 18:26/eli-c
Vanadium	0.1	mg/L		0.1		2	E200.7	07/07/08 18:50/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:50/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0015	mg/L		0.0003		1	E200.8	07/10/08 12:41/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:25/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	116	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha precision (±)	12.8	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha MDC	9.9	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta	33.9	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta precision (±)	6.9	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta MDC	10.5	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Lead 210	-5.3	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	4.7	pCi/L				1	E903.0	07/22/08 00:40/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	07/22/08 00:40/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 20:06/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/28/08 20:06/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	6.9	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	07/16/08 01:53/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-006  
Client Sample ID: DewBurd GW3026

Report Date: 08/21/08  
Collection Date: 06/24/08 20:06  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/16/08 01:53/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/16/08 01:53/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/11/08 17:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/11/08 17:06/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	950	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	137	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/17/08 02:54/eli-c
Arsenic	0.025	mg/L		0.001		10	E200.8	07/17/08 02:54/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:50/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:36/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/08/08 02:50/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/17/08 02:54/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:50/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:50/eli-c
Iron	21.8	mg/L		0.03		2	E200.7	07/08/08 02:50/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/17/08 02:54/eli-c
Manganese	1.46	mg/L		0.01		2	E200.7	07/08/08 02:50/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:56/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:50/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:50/eli-c
Selenium	0.005	mg/L	D	0.002		10	E200.8	07/17/08 02:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:36/eli-c
Strontium	7.4	mg/L		0.1		2	E200.7	07/08/08 02:50/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/17/08 02:54/eli-c
Uranium	0.0216	mg/L		0.0003		10	E200.8	07/17/08 02:54/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/08/08 02:50/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.44	%				1	A1030 E	08/21/08 00:00/kl
Anions	41.2	meq/L				1	A1030 E	08/21/08 00:00/kl
Cations	42.4	meq/L				1	A1030 E	08/21/08 00:00/kl
Solids, Total Dissolved Calculated	2710	mg/L				1	A1030 E	08/21/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	08/21/08 00:00/kl

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-007  
Client Sample ID: DewBurd BLK01

Report Date: 08/21/08  
Collection Date: 06/24/08 20:10  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	07/03/08 11:47/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:47/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	07/03/08 11:47/mb
Calcium	ND	mg/L		0.5		2	E200.7	07/07/08 18:54/eli-c
Chloride	ND	mg/L		1		1	E300.0	06/28/08 05:29/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	06/28/08 05:29/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	07/07/08 18:54/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/25/08 15:53/ch
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 01:19/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 01:19/jmh
Potassium	ND	mg/L		0.5		2	E200.7	07/07/08 18:54/eli-c
Silica	ND	mg/L		0.5		2	E200.7	07/07/08 18:54/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	07/07/08 18:54/eli-c
Sulfate	1	mg/L		1		1	E300.0	06/28/08 05:29/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	10.9	umhos/cm		5.0		1	A2510 B	07/01/08 11:12/tb
Oxidation-Reduction Potential	360	mV				1	A2580 B	06/27/08 00:00/jmh
pH	4.52	s.u.		0.01		1	A4500-H B	07/01/08 10:10/tb
Solids, Total Dissolved TDS @ 180 C	20	mg/L		5		1	A2540 C	06/27/08 11:59/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 18:54/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/15/08 18:33/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 18:54/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 18:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 18:33/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 18:54/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 18:33/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/07/08 18:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 18:33/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/07/08 18:54/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 18:33/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 18:54/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 18:54/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 18:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 18:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-007  
Client Sample ID: DewBurd BLK01

Report Date: 08/21/08  
Collection Date: 06/24/08 20:10  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/15/08 18:33/eli-c
Vanadium	0.2	mg/L		0.1		2	E200.7	07/07/08 18:54/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 18:54/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 12:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1.7	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha precision (±)	0.7	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Alpha MDC	0.9	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta	1.4	pCi/L	U			1	E900.0	07/19/08 22:56/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Gross Beta MDC	2.5	pCi/L				1	E900.0	07/19/08 22:56/eli-c
Lead 210	-3.4	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	-0.06	pCi/L	U			1	E903.0	07/22/08 00:40/eli-c
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	07/22/08 00:40/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/28/08 20:06/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	07/28/08 20:06/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.5	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/16/08 01:53/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/16/08 01:53/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060427-007  
Client Sample ID: DewBurd BLK01

Report Date: 08/21/08  
Collection Date: 06/24/08 20:10  
Date Received: 06/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/16/08 01:53/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	07/11/08 17:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/11/08 17:06/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	362	pCi/L		100		1	D5072-92	07/02/08 04:29/eli-c
Radon 222 precision (±)	129	pCi/L				1	D5072-92	07/02/08 04:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/10/08 01:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/10/08 01:43/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 02:54/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/17/08 14:42/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 02:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/10/08 01:43/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 02:54/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 02:54/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/08/08 02:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/10/08 01:43/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/08/08 02:54/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/09/08 11:58/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 02:54/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 02:54/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/17/08 03:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 14:42/eli-c
Strontium	ND	mg/L		0.1		2	E200.7	07/08/08 02:54/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/10/08 01:43/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 01:43/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 02:54/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080703A-ALK-SEL-W							
Sample ID: LCS1_080703A	Laboratory Control Sample				Run: PH_COND1-R_080703A				07/03/08 11:24
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080703A	Method Blank				Run: PH_COND1-R_080703A				07/03/08 11:25
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08060452-002AMS	Sample Matrix Spike				Run: PH_COND1-R_080703A				07/03/08 11:59
Alkalinity, Total as CaCO <sub>3</sub>	246	mg/L	5.0	102	80	120			
Sample ID: R08060452-002AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080703A				07/03/08 12:01
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	98	80	120	1.6	10	
Method: A2510 B		Batch: 080701_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080701	Laboratory Control Sample				Run: PH_COND2-R_080701B				07/01/08 10:58
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080701	Laboratory Control Sample				Run: PH_COND2-R_080701B				07/01/08 10:59
Conductivity @ 25 C	160	umhos/cm	5.0	107	90	110			
Sample ID: LCS2-1_080701	Laboratory Control Sample				Run: PH_COND2-R_080701B				07/01/08 11:01
Conductivity @ 25 C	5200	umhos/cm	5.0	104	90	110			
Sample ID: MBLK-1_080701	Method Blank				Run: PH_COND2-R_080701B				07/01/08 11:26
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080627A-SLDS-TDS-W							
Sample ID: LCS1_080627A	Laboratory Control Sample				Run: BAL-4-R_080627A				06/27/08 11:42
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	98	90	110			
Sample ID: MBLK1_080627A	Method Blank				Run: BAL-4-R_080627A				06/27/08 11:44
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08060427-001AMS	Sample Matrix Spike				Run: BAL-4-R_080627A				06/27/08 11:55
Solids, Total Dissolved TDS @ 180 C	2400	mg/L	5.0	111	80	120			
Sample ID: R08060427-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080627A				06/27/08 11:56
Solids, Total Dissolved TDS @ 180 C	2400	mg/L	5.0	113	80	120	0.2	10	
Sample ID: R08060452-002AMS	Sample Matrix Spike				Run: BAL-4-R_080627A				06/27/08 12:03
Solids, Total Dissolved TDS @ 180 C	910	mg/L	5.0	117	80	120			
Sample ID: R08060452-002AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080627A				06/27/08 12:04
Solids, Total Dissolved TDS @ 180 C	910	mg/L	5.0	118	80	120	0.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 080627-ORP-ISE-W		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: PH_COND1-R_080627A		06/27/08 00:00		
Oxidation-Reduction Potential	470	mV		99	95	105			
<b>Sample ID: R08060427-001F</b>	Sample Duplicate				Run: PH_COND1-R_080627A		06/27/08 00:00		
Oxidation-Reduction Potential	90	mV					4.1	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719B		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104481		07/19/08 12:46		
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104481		07/19/08 12:48		
Selenium-IV	0.055	mg/L	0.0010	110	90	110			
<b>Sample ID: C08061335-001AMS</b>	Sample Matrix Spike				Run: SUB-C104481		07/19/08 12:52		
Selenium-IV	0.052	mg/L	0.0010	103	85	115			
<b>Sample ID: C08061335-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104481		07/19/08 12:54		
Selenium-IV	0.052	mg/L	0.0010	104	85	115	1.2	10	
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike				Run: SUB-C104481		07/19/08 13:36		
Selenium-IV	0.052	mg/L	0.0010	103	85	115			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104481		07/19/08 13:38		
Selenium-IV	0.052	mg/L	0.0010	104	85	115	0.9	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719D		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104485		07/19/08 15:42		
Selenium	ND	mg/L	6E-05						
<b>Sample ID: C08061335-001AMS</b>	Sample Matrix Spike				Run: SUB-C104485		07/19/08 15:52		
Selenium	0.050	mg/L	0.0010	100	85	115			
<b>Sample ID: C08061335-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104485		07/19/08 15:54		
Selenium	0.053	mg/L	0.0010	104	85	115	4.2	10	
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104485		07/19/08 15:47		
Selenium	0.050	mg/L	0.0010	100	90	110			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike				Run: SUB-C104485		07/19/08 16:32		
Selenium	0.055	mg/L	0.0010	110	85	115			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104485		07/19/08 16:34		
Selenium	0.055	mg/L	0.0010	109	85	115	0.6	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-H B</b>							Batch: 080701_1_PH-W		
<b>Sample ID: LCS_pH-1_080701</b>	Laboratory Control Sample				Run: PH_COND2-R_080701A		07/01/08 10:01		
pH	6.91	s.u.	0.010	101	98.55	101.45			
<b>Method: A4500-NH3 G</b>							Batch: A2008-06-25_2_NH3_01		
<b>Sample ID: MBLK-2</b>	Method Blank				Run: TECHAA2-R_080625A		06/25/08 14:58		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
<b>Sample ID: LFB-3</b>	Laboratory Fortified Blank				Run: TECHAA2-R_080625A		06/25/08 14:59		
Nitrogen, Ammonia as N	0.28	mg/L	0.10	113	90	110			S
<b>Sample ID: LFB-4</b>	Laboratory Fortified Blank				Run: TECHAA2-R_080625A		06/25/08 15:00		
Nitrogen, Ammonia as N	0.28	mg/L	0.10	110	90	110			
<b>Sample ID: R08060427-001BMS</b>	Sample Matrix Spike				Run: TECHAA2-R_080625A		06/25/08 15:45		
Nitrogen, Ammonia as N	0.43	mg/L	0.10	114	80	120			
<b>Sample ID: R08060427-001BMSD</b>	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080625A		06/25/08 15:46		
Nitrogen, Ammonia as N	0.43	mg/L	0.10	112	80	120	0.7	10	
<b>Method: D5072-92</b>							Batch: C_R103730		
<b>Sample ID: C08070002-001ADUP</b>	Sample Duplicate				Run: SUB-C103730		07/02/08 04:29		
Radon 222	225	pCi/L	100				13	30	
<b>Sample ID: MB-R103730</b>	Method Blank				Run: SUB-C103730		07/02/08 04:29		
Radon 222	20	pCi/L							
<b>Sample ID: LCS-R103730</b>	Laboratory Control Sample				Run: SUB-C103730		07/02/08 04:29		
Radon 222	303	pCi/L	100	92	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18996		
<b>Sample ID: MB-18996</b>	Method Blank		Run: SUB-C103815				07/08/08 01:32		
Barium	ND	mg/L	0.006						
Boron	0.08	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.003	mg/L	0.001						
<b>Sample ID: LCS3-18996</b>	Laboratory Control Sample		Run: SUB-C103815				07/08/08 01:36		
Barium	0.505	mg/L	0.10	101	85	115			
Boron	0.553	mg/L	0.10	95	85	115			
Chromium	0.512	mg/L	0.050	102	85	115			
Copper	0.516	mg/L	0.010	103	85	115			
Iron	2.59	mg/L	0.030	104	85	115			
Manganese	2.56	mg/L	0.010	103	85	115			
Molybdenum	0.509	mg/L	0.10	102	85	115			
Nickel	0.514	mg/L	0.050	103	85	115			
Strontium	0.533	mg/L	0.10	107	85	115			
Zinc	0.506	mg/L	0.010	101	85	115			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike		Run: SUB-C103815				07/08/08 02:58		
Barium	0.526	mg/L	0.10	105	70	130			
Boron	0.512	mg/L	0.10	102	70	130			
Chromium	0.527	mg/L	0.050	105	70	130			
Copper	0.537	mg/L	0.010	107	70	130			
Iron	2.69	mg/L	0.030	107	70	130			
Manganese	2.66	mg/L	0.010	107	70	130			
Molybdenum	0.519	mg/L	0.10	104	70	130			
Nickel	0.523	mg/L	0.050	105	70	130			
Strontium	0.558	mg/L	0.10	112	70	130			
Zinc	0.527	mg/L	0.010	105	70	130			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike Duplicate		Run: SUB-C103815				07/08/08 03:02		
Barium	0.504	mg/L	0.10	101	70	130	4.3	20	
Boron	0.495	mg/L	0.10	99	70	130	3.4	20	
Chromium	0.513	mg/L	0.050	103	70	130	2.7	20	
Copper	0.522	mg/L	0.010	104	70	130	2.9	20	
Iron	2.60	mg/L	0.030	104	70	130	3.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18996		
Sample ID: R08060427-007D	Sample Matrix Spike Duplicate			Run: SUB-C103815			07/08/08 03:02		
Manganese	2.56	mg/L	0.010	102	70	130	4.1	20	
Molybdenum	0.505	mg/L	0.10	101	70	130	2.7	20	
Nickel	0.497	mg/L	0.050	99	70	130	5.1	20	
Strontium	0.545	mg/L	0.10	109	70	130	2.3	20	
Zinc	0.507	mg/L	0.010	101	70	130	3.9	20	
Sample ID: R08060427-007D	Sample Matrix Spike			Run: SUB-C103914			07/09/08 00:09		
Barium	0.510	mg/L	0.10	102	70	130			
Boron	0.493	mg/L	0.10	99	70	130			
Chromium	0.514	mg/L	0.050	103	70	130			
Copper	0.520	mg/L	0.010	104	70	130			
Iron	2.63	mg/L	0.030	105	70	130			
Manganese	2.55	mg/L	0.010	102	70	130			
Molybdenum	0.501	mg/L	0.10	100	70	130			
Nickel	0.507	mg/L	0.050	101	70	130			
Strontium	0.534	mg/L	0.10	107	70	130			
Zinc	0.508	mg/L	0.010	102	70	130			
Sample ID: R08060427-007D	Sample Matrix Spike Duplicate			Run: SUB-C103914			07/09/08 00:13		
Barium	0.502	mg/L	0.10	100	70	130	1.5	20	
Boron	0.489	mg/L	0.10	98	70	130	0.8	20	
Chromium	0.504	mg/L	0.050	101	70	130	1.9	20	
Copper	0.504	mg/L	0.010	101	70	130	3.1	20	
Iron	2.69	mg/L	0.030	108	70	130	2.3	20	
Manganese	2.53	mg/L	0.010	101	70	130	0.6	20	
Molybdenum	0.504	mg/L	0.10	101	70	130	0.7	20	
Nickel	0.503	mg/L	0.050	101	70	130	0.8	20	
Strontium	0.541	mg/L	0.10	108	70	130	1.3	20	
Zinc	0.507	mg/L	0.010	101	70	130	0.3	20	
Sample ID: R08060427-007D	Sample Matrix Spike			Run: SUB-C104107			07/11/08 17:32		
Barium	0.521	mg/L	0.10	104	70	130			
Boron	0.566	mg/L	0.10	104	70	130			
Chromium	0.528	mg/L	0.050	106	70	130			
Copper	0.532	mg/L	0.010	104	70	130			
Iron	2.69	mg/L	0.030	108	70	130			
Manganese	2.65	mg/L	0.010	106	70	130			
Molybdenum	0.520	mg/L	0.10	104	70	130			
Nickel	0.514	mg/L	0.050	103	70	130			
Strontium	0.543	mg/L	0.10	109	70	130			
Zinc	0.528	mg/L	0.010	105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18996		
Sample ID: R08060427-007D		Sample Matrix Spike Duplicate			Run: SUB-C104107		07/11/08 17:36		
Barium	0.524	mg/L	0.10	105	70	130	0.7	20	
Boron	0.572	mg/L	0.10	106	70	130	1.1	20	
Chromium	0.534	mg/L	0.050	107	70	130	1.1	20	
Copper	0.539	mg/L	0.010	106	70	130	1.2	20	
Iron	2.77	mg/L	0.030	111	70	130	2.9	20	
Manganese	2.70	mg/L	0.010	108	70	130	1.7	20	
Molybdenum	0.520	mg/L	0.10	104	70	130	0.1	20	
Nickel	0.523	mg/L	0.050	105	70	130	1.8	20	
Strontium	0.530	mg/L	0.10	106	70	130	2.5	20	
Zinc	0.534	mg/L	0.010	106	70	130	1.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103815		
Sample ID: MB-080707A	Method Blank		Run: SUB-C103815				07/07/08 13:14		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.01	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	0.009	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.02	mg/L	0.003						
Zinc	0.002	mg/L	0.002						
Sample ID: LFB-080707A	Laboratory Fortified Blank		Run: SUB-C103815				07/07/08 13:18		
Silica	0.39	mg/L	0.10	98	85	125			
Aluminum	0.97	mg/L	0.10	97	85	125			
Barium	1.1	mg/L	0.10	106	85	125			
Boron	1.1	mg/L	0.10	105	85	125			
Calcium	55	mg/L	0.50	110	85	125			
Chromium	1.1	mg/L	0.050	107	85	125			
Iron	1.1	mg/L	0.030	111	85	125			
Magnesium	54	mg/L	0.50	109	85	125			
Manganese	1.1	mg/L	0.010	105	85	125			
Molybdenum	1.0	mg/L	0.10	105	85	125			
Nickel	1.1	mg/L	0.050	106	85	125			
Potassium	48	mg/L	0.50	95	85	125			
Sodium	52	mg/L	0.77	104	85	125			
Vanadium	1.1	mg/L	0.10	106	85	125			
Zinc	1.1	mg/L	0.010	106	85	125			
Sample ID: R08060427-001C	Sample Matrix Spike		Run: SUB-C103815				07/07/08 18:14		
Aluminum	2.11	mg/L	0.10	106	70	130			
Barium	2.05	mg/L	0.10	102	70	130			
Boron	2.15	mg/L	0.10	106	70	130			
Chromium	2.14	mg/L	0.050	106	70	130			
Iron	3.75	mg/L	0.030	107	70	130			
Manganese	4.53	mg/L	0.010	99	70	130			
Molybdenum	2.10	mg/L	0.10	105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/21/08

Project: Edgemont

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103815		
Sample ID: R08060427-001C	Sample Matrix Spike			Run: SUB-C103815			07/07/08 18:14		
Nickel	2.11	mg/L	0.050	105	70	130			
Vanadium	2.22	mg/L	0.10	108	70	130			
Zinc	2.16	mg/L	0.010	107	70	130			
Calcium	483	mg/L	1.0	90	70	130			
Magnesium	247	mg/L	1.0	106	70	130			
Potassium	108	mg/L	1.0	92	70	130			
Silica	5.99	mg/L	0.10		70	130			A
Sodium	191	mg/L	1.5	102	70	130			
Sample ID: R08060427-001C	Sample Matrix Spike Duplicate			Run: SUB-C103815			07/07/08 18:18		
Aluminum	2.23	mg/L	0.10	111	70	130	5.4	20	
Barium	2.05	mg/L	0.10	102	70	130	0.1	20	
Boron	2.18	mg/L	0.10	107	70	130	1.4	20	
Chromium	2.12	mg/L	0.050	106	70	130	0.8	20	
Iron	3.72	mg/L	0.030	106	70	130	0.8	20	
Manganese	4.58	mg/L	0.010	101	70	130	0.9	20	
Molybdenum	2.10	mg/L	0.10	105	70	130	0.0	20	
Nickel	2.11	mg/L	0.050	106	70	130	0.1	20	
Vanadium	2.14	mg/L	0.10	104	70	130	3.7	20	
Zinc	2.15	mg/L	0.010	107	70	130	0.4	20	
Calcium	497	mg/L	1.0	104	70	130	2.7	20	
Magnesium	249	mg/L	1.0	108	70	130	0.7	20	
Potassium	108	mg/L	1.0	92	70	130	0.2	20	
Silica	6.06	mg/L	0.10		70	130	1.2	20	A
Sodium	194	mg/L	1.5	105	70	130	1.4	20	
Sample ID: C08061166-001BMS2	Sample Matrix Spike			Run: SUB-C103815			07/07/08 19:02		
Aluminum	1.09	mg/L	0.10	109	70	130			
Barium	1.03	mg/L	0.10	102	70	130			
Boron	1.24	mg/L	0.10	104	70	130			
Calcium	57.4	mg/L	0.50	109	70	130			
Chromium	1.07	mg/L	0.050	107	70	130			
Iron	1.18	mg/L	0.030	108	70	130			
Magnesium	55.1	mg/L	0.50	110	70	130			
Manganese	1.05	mg/L	0.010	105	70	130			
Molybdenum	0.948	mg/L	0.10	95	70	130			
Nickel	1.07	mg/L	0.050	107	70	130			
Potassium	47.8	mg/L	0.50	95	70	130			
Silica	5.46	mg/L	0.10		70	130			A
Sodium	186	mg/L	0.77	94	70	130			
Vanadium	1.17	mg/L	0.10	105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103815		
Sample ID: C08061166-001BMS2	Sample Matrix Spike			Run: SUB-C103815				07/07/08 19:02	
Zinc	1.07	mg/L	0.010	107	70	130			
Sample ID: C08061166-001BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C103815				07/07/08 19:06	
Aluminum	1.05	mg/L	0.10	105	70	130	3.7	20	
Barium	1.00	mg/L	0.10	99	70	130	2.3	20	
Boron	1.22	mg/L	0.10	102	70	130	1.6	20	
Calcium	56.7	mg/L	0.50	108	70	130	1.3	20	
Chromium	1.04	mg/L	0.050	104	70	130	2.6	20	
Iron	1.18	mg/L	0.030	107	70	130	0.5	20	
Magnesium	53.9	mg/L	0.50	108	70	130	2.2	20	
Manganese	1.03	mg/L	0.010	103	70	130	2.1	20	
Molybdenum	0.991	mg/L	0.10	99	70	130	4.5	20	
Nickel	1.03	mg/L	0.050	103	70	130	3.5	20	
Potassium	47.7	mg/L	0.50	95	70	130	0.1	20	
Silica	5.41	mg/L	0.10		70	130	0.9	20	A
Sodium	188	mg/L	0.77	98	70	130	1.2	20	
Vanadium	1.12	mg/L	0.10	101	70	130	3.9	20	
Zinc	1.05	mg/L	0.010	104	70	130	2.2	20	
Sample ID: C08060943-002BMS2	Sample Matrix Spike			Run: SUB-C103815				07/07/08 19:39	
Aluminum	8.45	mg/L	0.10		70	130			A
Barium	1.36	mg/L	0.10	102	70	130			
Boron	1.12	mg/L	0.10	106	70	130			
Chromium	1.08	mg/L	0.050	107	70	130			
Iron	13.4	mg/L	0.030		70	130			A
Manganese	1.61	mg/L	0.010	103	70	130			
Molybdenum	1.00	mg/L	0.10	100	70	130			
Nickel	1.08	mg/L	0.050	106	70	130			
Vanadium	1.13	mg/L	0.10	107	70	130			
Zinc	1.14	mg/L	0.010	107	70	130			
Calcium	87.5	mg/L	1.0	107	70	130			
Magnesium	66.9	mg/L	1.0	109	70	130			
Potassium	63.7	mg/L	1.0	87	70	130			
Silica	21.1	mg/L	0.10		70	130			A
Sodium	56.5	mg/L	1.0	105	70	130			
Sample ID: C08060943-002BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C103815				07/07/08 19:43	
Aluminum	8.21	mg/L	0.10		70	130	2.8	20	A
Barium	1.35	mg/L	0.10	100	70	130	1.1	20	
Boron	1.13	mg/L	0.10	106	70	130	0.5	20	
Chromium	1.08	mg/L	0.050	107	70	130	0.3	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103815		
Sample ID: C08060943-002BMSD2	Sample Matrix Spike Duplicate				Run: SUB-C103815			07/07/08 19:43	
Iron	13.3	mg/L	0.030		70	130	0.5	20	A
Manganese	1.60	mg/L	0.010	101	70	130	1.1	20	
Molybdenum	1.01	mg/L	0.10	101	70	130	1.1	20	
Nickel	1.08	mg/L	0.050	106	70	130	0.4	20	
Vanadium	1.12	mg/L	0.10	106	70	130	1.1	20	
Zinc	1.12	mg/L	0.010	105	70	130	2.3	20	
Calcium	88.4	mg/L	1.0	109	70	130	1.0	20	
Magnesium	65.8	mg/L	1.0	106	70	130	1.7	20	
Potassium	64.7	mg/L	1.0	89	70	130	1.4	20	
Silica	20.8	mg/L	0.10		70	130	1.2	20	A
Sodium	56.3	mg/L	1.0	104	70	130	0.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/21/08

Project: Edgemont

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E200.8							Batch: C_18996			
Sample ID: MB-18996	Method Blank		Run: SUB-C103950				07/10/08 00:55			
Antimony	0.0002	mg/L	0.0002							
Arsenic	0.0008	mg/L	5E-05							
Beryllium	ND	mg/L	0.0001							
Cadmium	ND	mg/L	3E-05							
Lead	0.0010	mg/L	5E-05							
Selenium	ND	mg/L	0.0002							
Silver	0.0002	mg/L	4E-05							
Thallium	ND	mg/L	3E-05							
Uranium	7E-05	mg/L	3E-05							
Sample ID: LCS3-18996							Laboratory Control Sample		Run: SUB-C103950	07/10/08 01:02
Antimony	0.532	mg/L	0.050	106	85	115				
Arsenic	0.530	mg/L	0.0010	106	85	115				
Cadmium	0.264	mg/L	0.010	106	85	115				
Lead	0.522	mg/L	0.050	104	85	115				
Selenium	0.561	mg/L	0.0020	112	85	115				
Silver	0.0505	mg/L	0.010	101	85	115				
Thallium	0.508	mg/L	0.10	102	85	115				
Uranium	0.537	mg/L	0.00032	107	85	115				
Sample ID: R08060427-007D							Sample Matrix Spike		Run: SUB-C103950	07/10/08 01:50
Antimony	0.521	mg/L	0.050	104	70	130				
Arsenic	0.517	mg/L	0.0010	103	70	130				
Beryllium	0.296	mg/L	0.010	118	70	130				
Cadmium	0.252	mg/L	0.010	101	70	130				
Lead	0.534	mg/L	0.050	107	70	130				
Selenium	0.520	mg/L	0.0010	104	70	130				
Silver	0.0534	mg/L	0.010	107	70	130				
Thallium	0.536	mg/L	0.10	107	70	130				
Uranium	0.569	mg/L	0.00030	114	70	130				
Sample ID: R08060427-007D							Sample Matrix Spike Duplicate		Run: SUB-C103950	07/10/08 01:56
Antimony	0.514	mg/L	0.050	103	70	130	1.3	20		
Arsenic	0.512	mg/L	0.0010	102	70	130	1.0	20		
Beryllium	0.287	mg/L	0.010	115	70	130	3.0	20		
Cadmium	0.253	mg/L	0.010	101	70	130	0.4	20		
Lead	0.524	mg/L	0.050	105	70	130	1.9	20		
Selenium	0.513	mg/L	0.0010	103	70	130	1.4	20		
Silver	0.0533	mg/L	0.010	107	70	130	0.1	20		
Thallium	0.529	mg/L	0.10	106	70	130	1.3	20		
Uranium	0.560	mg/L	0.00030	112	70	130	1.6	20		

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

**Client:** RESPEC Inc

**Project:** Edgemont

**Report Date:** 08/21/08

**Work Order:** R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18996		
<b>Sample ID: MB-18996</b>	Method Blank		Run: SUB-C104345				07/16/08 22:50		
Antimony	0.0008	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Silver	0.0001	mg/L	4E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18996</b>	Laboratory Control Sample		Run: SUB-C104345				07/16/08 22:56		
Arsenic	0.574	mg/L	0.0010	114	85	115			
Cadmium	0.283	mg/L	0.010	113	85	115			
Lead	0.566	mg/L	0.050	113	85	115			
Selenium	0.560	mg/L	0.0020	112	85	115			
Silver	0.0526	mg/L	0.010	105	85	115			
Thallium	0.556	mg/L	0.10	111	85	115			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike		Run: SUB-C104345				07/17/08 03:07		
Antimony	0.540	mg/L	0.050	108	70	130			
Arsenic	0.492	mg/L	0.0010	98	70	130			
Beryllium	0.269	mg/L	0.010	108	70	130			
Cadmium	0.246	mg/L	0.010	98	70	130			
Lead	0.490	mg/L	0.050	98	70	130			
Selenium	0.491	mg/L	0.0020	98	70	130			
Silver	0.0448	mg/L	0.010	90	70	130			
Thallium	0.482	mg/L	0.10	96	70	130			
Uranium	0.511	mg/L	0.00032	102	70	130			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike Duplicate		Run: SUB-C104345				07/17/08 03:14		
Antimony	0.503	mg/L	0.050	101	70	130	7.0	20	
Arsenic	0.465	mg/L	0.0010	92	70	130	5.7	20	
Beryllium	0.248	mg/L	0.010	99	70	130	8.0	20	
Cadmium	0.227	mg/L	0.010	91	70	130	7.6	20	
Lead	0.452	mg/L	0.050	90	70	130	8.0	20	
Selenium	0.456	mg/L	0.0020	91	70	130	7.4	20	
Silver	0.0429	mg/L	0.010	86	70	130	4.4	20	
Thallium	0.448	mg/L	0.10	90	70	130	7.4	20	
Uranium	0.472	mg/L	0.00032	94	70	130	8.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/21/08

Project: Edgemont

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18996		
<b>Sample ID: MB-18996</b>	Method Blank		Run: SUB-C104438				07/17/08 13:21		
Antimony	0.0002	mg/L	0.0002						
Arsenic	0.0005	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	0.0002	mg/L	5E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	0.0007	mg/L	4E-05						
Thallium	4E-05	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
<b>Sample ID: LCS3-18996</b>	Laboratory Control Sample		Run: SUB-C104438				07/17/08 13:28		
Antimony	0.550	mg/L	0.050	110	85	115			
Arsenic	0.514	mg/L	0.0010	103	85	115			
Beryllium	0.248	mg/L	0.010	99	85	115			
Cadmium	0.259	mg/L	0.010	104	85	115			
Lead	0.510	mg/L	0.050	102	85	115			
Selenium	0.507	mg/L	0.0020	101	85	115			
Silver	0.0439	mg/L	0.010	86	85	115			
Thallium	0.500	mg/L	0.10	100	85	115			
Uranium	0.520	mg/L	0.00032	104	85	115			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike		Run: SUB-C104438				07/17/08 14:49		
Antimony	0.0550	mg/L	0.050	110	70	130			
Arsenic	0.0525	mg/L	0.0010	105	70	130			
Beryllium	0.0261	mg/L	0.010	131	70	130			S
Cadmium	0.0255	mg/L	0.010	128	70	130			
Lead	0.0516	mg/L	0.050	103	70	130			
Selenium	0.0520	mg/L	0.0010	104	70	130			
Silver	0.00437	mg/L	0.010	109	70	130			
Thallium	0.0506	mg/L	0.10	101	70	130			
Uranium	0.0531	mg/L	0.00030	106	70	130			
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike Duplicate		Run: SUB-C104438				07/17/08 14:56		
Antimony	0.0545	mg/L	0.050	109	70	130	0.9	20	
Arsenic	0.0508	mg/L	0.0010	101	70	130	3.3	20	
Beryllium	0.0252	mg/L	0.010	126	70	130	3.7	20	
Cadmium	0.0256	mg/L	0.010	128	70	130	0.1	20	
Lead	0.0500	mg/L	0.050	100	70	130	3.1	20	
Selenium	0.0504	mg/L	0.0010	101	70	130	3.1	20	
Silver	0.00451	mg/L	0.010	113	70	130	0.0	20	
Thallium	0.0495	mg/L	0.10	99	70	130	0.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18996		
Sample ID: R08060427-007D	Sample Matrix Spike Duplicate			Run: SUB-C104438			07/17/08 14:56		
Uranium	0.0510	mg/L	0.00030	102	70	130	3.9	20	
Sample ID: R08060427-007D	Sample Matrix Spike			Run: SUB-C104503			07/18/08 17:58		
Antimony	0.571	mg/L	0.050	114	70	130			
Arsenic	0.515	mg/L	0.0010	103	70	130			
Cadmium	0.254	mg/L	0.010	101	70	130			
Lead	0.539	mg/L	0.050	108	70	130			
Selenium	0.506	mg/L	0.0010	101	70	130			
Silver	0.0499	mg/L	0.010	100	70	130			
Thallium	0.546	mg/L	0.10	109	70	130			
Uranium	0.587	mg/L	0.00030	117	70	130			
Sample ID: R08060427-007D	Sample Matrix Spike Duplicate			Run: SUB-C104503			07/18/08 18:04		
Antimony	0.564	mg/L	0.050	113	70	130	1.2	20	
Arsenic	0.507	mg/L	0.0010	101	70	130	1.5	20	
Cadmium	0.253	mg/L	0.010	101	70	130	0.2	20	
Lead	0.526	mg/L	0.050	105	70	130	2.5	20	
Selenium	0.496	mg/L	0.0010	99	70	130	1.8	20	
Silver	0.0496	mg/L	0.010	99	70	130	0.6	20	
Thallium	0.536	mg/L	0.10	107	70	130	1.7	20	
Uranium	0.581	mg/L	0.00030	116	70	130	1.0	20	
Sample ID: R08060427-007D	Sample Matrix Spike			Run: SUB-C104617			07/21/08 16:58		
Antimony	0.595	mg/L	0.050	119	70	130			
Arsenic	0.509	mg/L	0.0010	101	70	130			
Beryllium	0.269	mg/L	0.010	108	70	130			
Cadmium	0.264	mg/L	0.010	106	70	130			
Lead	0.519	mg/L	0.050	104	70	130			
Selenium	0.503	mg/L	0.0010	100	70	130			
Silver	0.0497	mg/L	0.010	99	70	130			
Thallium	0.518	mg/L	0.10	104	70	130			
Uranium	0.584	mg/L	0.00030	117	70	130			
Sample ID: R08060427-007D	Sample Matrix Spike Duplicate			Run: SUB-C104617			07/21/08 17:05		
Antimony	0.579	mg/L	0.050	116	70	130	2.7	20	
Arsenic	0.508	mg/L	0.0010	101	70	130	0.2	20	
Beryllium	0.267	mg/L	0.010	107	70	130	0.8	20	
Cadmium	0.256	mg/L	0.010	102	70	130	3.1	20	
Lead	0.522	mg/L	0.050	104	70	130	0.7	20	
Selenium	0.503	mg/L	0.0010	101	70	130	0.1	20	
Silver	0.0485	mg/L	0.010	97	70	130	2.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>									Batch: C_18996
<b>Sample ID: R08060427-007D</b>	Sample Matrix Spike Duplicate				Run: SUB-C104617				07/21/08 17:05
Thallium	0.523	mg/L	0.10	105	70	130	1.0	20	
Uranium	0.586	mg/L	0.00030	117	70	130	0.3	20	
<b>Method: E200.8</b>									Batch: C_19014
<b>Sample ID: MB-19014</b>	Method Blank				Run: SUB-C104018				07/10/08 11:31
Uranium	2E-05	mg/L	2E-05						
<b>Sample ID: LCS1-19014</b>	Laboratory Control Sample				Run: SUB-C104018				07/10/08 11:36
Uranium	0.0504	mg/L	0.00030	96	80	120			
<b>Sample ID: R08060427-007I</b>	Post Digestion Spike				Run: SUB-C104018				07/10/08 12:51
Uranium	0.0119	mg/L	0.00030	95	70	130			
<b>Sample ID: R08060427-007I</b>	Post Digestion Spike Duplicate				Run: SUB-C104018				07/10/08 12:56
Uranium	0.0120	mg/L	0.00030	95	70	130	0.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104306		
Sample ID: LRB	Method Blank		Run: SUB-C104306				07/15/08 12:08		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	7E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104306				07/15/08 12:15		
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Copper	0.0505	mg/L	0.0010	101	85	115			
Lead	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00506	mg/L	0.0010	101	85	115			
Silver	0.0194	mg/L	0.0010	97	85	115			
Thorium 232	0.0507	mg/L	0.0010	101	85	115			
Uranium	0.0509	mg/L	0.00030	102	85	115			
Sample ID: C08061021-002CMS4	Post Digestion Spike		Run: SUB-C104306				07/15/08 19:27		
Arsenic	0.459	mg/L	0.0010	90	70	130			
Cadmium	0.433	mg/L	0.010	86	70	130			
Copper	0.464	mg/L	0.010	89	70	130			
Lead	0.456	mg/L	0.050	87	70	130			
Mercury	0.0437	mg/L	0.0010	87	70	130			
Silver	0.172	mg/L	0.010	86	70	130			
Thorium 232	0.436	mg/L	0.0010	86	70	130			
Uranium	0.439	mg/L	0.00030	87	70	130			
Sample ID: C08061021-002CMSD4	Post Digestion Spike Duplicate		Run: SUB-C104306				07/15/08 19:34		
Arsenic	0.541	mg/L	0.0010	107	70	130	16	20	
Cadmium	0.530	mg/L	0.010	106	70	130	20	20	R
Copper	0.541	mg/L	0.010	104	70	130	15	20	
Lead	0.546	mg/L	0.050	105	70	130	18	20	
Mercury	0.0529	mg/L	0.0010	106	70	130	19	20	
Silver	0.177	mg/L	0.010	89	70	130	3.2	20	
Thorium 232	0.528	mg/L	0.0010	105	70	130	19	20	
Uranium	0.528	mg/L	0.00030	105	70	130	18	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

## QA/QC Summary Report

**Client:** RESPEC Inc

**Project:** Edgemont

**Report Date:** 08/21/08

**Work Order:** R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>									Batch: B_33309
<b>Sample ID: MB-33309</b>	Method Blank					Run: SUB-B113606			07/07/08 19:32
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-33309</b>	Laboratory Fortified Blank					Run: SUB-B113606			07/07/08 19:39
Mercury	0.0020	mg/L	0.0010	100	85	115			
<b>Sample ID: B08062869-005AMS</b>	Sample Matrix Spike					Run: SUB-B113606			07/07/08 20:21
Mercury	0.0022	mg/L	0.0010	105	70	130			
<b>Sample ID: B08062869-005AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B113606			07/07/08 20:24
Mercury	0.0022	mg/L	0.0010	106	70	130	0.5	30	
<b>Method: E245.1</b>									Batch: B_33393
<b>Sample ID: MB-33393</b>	Method Blank					Run: SUB-B113690			07/09/08 11:37
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-33393</b>	Laboratory Fortified Blank					Run: SUB-B113690			07/09/08 11:39
Mercury	0.0020	mg/L	0.0010	101	85	115			
<b>Sample ID: R08060427-002D</b>	Sample Matrix Spike					Run: SUB-B113690			07/09/08 11:44
Mercury	0.0021	mg/L	0.0010	102	70	130			
<b>Sample ID: R08060427-002D</b>	Sample Matrix Spike Duplicate					Run: SUB-B113690			07/09/08 11:46
Mercury	0.0022	mg/L	0.0010	108	70	130	5.5	30	
<b>Sample ID: B08070638-001BMS</b>	Sample Matrix Spike					Run: SUB-B113690			07/09/08 12:07
Mercury	0.0022	mg/L	0.0010	108	70	130			
<b>Sample ID: B08070638-001BMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B113690			07/09/08 12:10
Mercury	0.0021	mg/L	0.0010	103	70	130	4.2	30	
<b>Method: E245.1</b>									Analytical Run: SUB-B113606
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								07/07/08 19:22
Mercury	0.0020	mg/L	0.0010	99	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R35707
Sample ID: LFB0806260829-3	Laboratory Fortified Blank			Run: DIONEX_080627A			06/26/08 19:18		
Chloride	4.77	mg/L	0.50	95	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
Sample ID: LFB0806260829-4	Laboratory Fortified Blank			Run: DIONEX_080627A			06/26/08 19:34		
Chloride	4.71	mg/L	0.50	94	90	110			
Fluoride	1.84	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
Sample ID: R08060426-001AMS	Sample Matrix Spike			Run: DIONEX_080627A			06/26/08 20:07		
Chloride	6.85	mg/L	0.50	86	80	120			
Fluoride	2.13	mg/L	0.10	92	80	120			
Nitrogen, Nitrate as N	2.28	mg/L	0.10	87	80	120			
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	80	120			
Sulfate	66.3	mg/L	1.0	65	80	120			S
Sample ID: R08060426-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080627A			06/26/08 20:23		
Chloride	6.96	mg/L	0.50	88	80	120	1.6	10	
Fluoride	2.18	mg/L	0.10	95	80	120	2.3	10	
Nitrogen, Nitrate as N	2.35	mg/L	0.10	90	80	120	3.0	10	
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	80	120	2.5	10	
Sulfate	66.6	mg/L	1.0	68	80	120	0.5	10	S
Sample ID: R08060427-004AMS	Sample Matrix Spike			Run: DIONEX_080627A			06/26/08 23:24		
Chloride	105	mg/L	2.2	89	80	120			
Fluoride	37.6	mg/L	0.22	87	80	120			
Nitrogen, Nitrate as N	47.1	mg/L	0.50	94	80	120			
Nitrogen, Nitrite as N	50.0	mg/L	1.2	100	80	120			
Sulfate	699	mg/L	1.3	86	80	120			
Sample ID: R08060427-004AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080627A			06/26/08 23:40		
Chloride	102	mg/L	2.2	87	80	120	2.7	10	
Fluoride	36.3	mg/L	0.22	84	80	120	3.6	10	
Nitrogen, Nitrate as N	45.5	mg/L	0.50	91	80	120	3.5	10	
Nitrogen, Nitrite as N	48.3	mg/L	1.2	97	80	120	3.5	10	
Sulfate	709	mg/L	1.3	89	80	120	1.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R35707		
<b>Sample ID: R08060430-001BMS</b>	Sample Matrix Spike			Run: DIONEX_080627A			06/27/08 02:41		
Chloride	10.6	mg/L	0.50	91	80	120			
Fluoride	2.42	mg/L	0.10	94	80	120			
Nitrogen, Nitrate as N	2.88	mg/L	0.10	93	80	120			
Nitrogen, Nitrite as N	2.54	mg/L	0.10	102	80	120			
Sulfate	42.6	mg/L	1.0	81	80	120			
<b>Sample ID: R08060430-001BMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080627A			06/27/08 02:57		
Chloride	10.3	mg/L	0.50	85	80	120	2.9	10	
Fluoride	2.30	mg/L	0.10	88	80	120	5.1	10	
Nitrogen, Nitrate as N	2.73	mg/L	0.10	87	80	120	5.3	10	
Nitrogen, Nitrite as N	2.39	mg/L	0.10	96	80	120	6.1	10	
Sulfate	41.8	mg/L	1.0	76	80	120	1.8	10	S
<b>Method: E300.0</b>							Batch: R35734		
<b>Sample ID: LFB0806275602-3</b>	Laboratory Fortified Blank			Run: DIONEX_080625B			06/27/08 17:26		
Chloride	4.75	mg/L	0.50	95	90	110			
Fluoride	1.87	mg/L	0.10	94	90	110			
Sulfate	14.2	mg/L	1.0	95	90	110			
<b>Sample ID: LFB0806275602-4</b>	Laboratory Fortified Blank			Run: DIONEX_080625B			06/27/08 17:43		
Chloride	4.72	mg/L	0.50	94	90	110			
Fluoride	1.86	mg/L	0.10	93	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
<b>Sample ID: R08060307-006BMS</b>	Sample Matrix Spike			Run: DIONEX_080625B			06/28/08 04:07		
Chloride	154	mg/L	2.2	86	80	120			
Fluoride	36.4	mg/L	0.22	84	80	120			
Sulfate	730	mg/L	1.3	83	80	120			
<b>Sample ID: R08060307-006BMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080625B			06/28/08 04:23		
Chloride	154	mg/L	2.2	86	80	120	0.1	10	
Fluoride	36.5	mg/L	0.22	84	80	120	0.4	10	
Sulfate	728	mg/L	1.3	82	80	120	0.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0479		
Sample ID: MB-GrAB-0479	Method Blank				Run: SUB-C104549		07/19/08 01:29		
Gross Alpha	2	pCi/L							
Gross Beta	-0.9	pCi/L					U		
Sample ID: UNAT-GrAB-0479	Laboratory Control Sample				Run: SUB-C104549		07/19/08 01:29		
Gross Alpha	130	pCi/L	90		70	130			
Sample ID: R08060427-007H	Sample Matrix Spike				Run: SUB-C104549		07/19/08 22:57		
Gross Alpha	160	pCi/L	115		70	130			
Sample ID: R08060427-007H	Sample Matrix Spike Duplicate				Run: SUB-C104549		07/19/08 22:57		
Gross Alpha	150	pCi/L	107		70	130	7.6	15.2	
Sample ID: R08060427-007H	Sample Matrix Spike				Run: SUB-C104549		07/19/08 22:57		
Gross Beta	93	pCi/L	97		70	130			
Sample ID: R08060427-007H	Sample Matrix Spike Duplicate				Run: SUB-C104549		07/19/08 22:57		
Gross Beta	89	pCi/L	93		70	130	4.2	16	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R104840		
<b>Sample ID: LCS-R104840</b>	Laboratory Control Sample			Run: SUB-C104840			07/17/08 13:12		
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
<b>Sample ID: MB-R104840</b>	Method Blank			Run: SUB-C104840			07/17/08 13:12		
Americium 241	ND	pCi/L							
Barium 133	ND	pCi/L							
Bismuth 212	ND	pCi/L							
Bismuth 214	ND	pCi/L							
Cesium 134	ND	pCi/L							
Cesium 137	ND	pCi/L							
Cobalt 60	ND	pCi/L							
Iodine 125	ND	pCi/L							
Iodine 131	ND	pCi/L							
Lead 212	ND	pCi/L							
Lead 214	ND	pCi/L							
Manganese 54	ND	pCi/L							
Potassium 40	ND	pCi/L							
Radium 223	ND	pCi/L							
Radium 224	ND	pCi/L							
Thallium 208	ND	pCi/L							
Thorium 228	ND	pCi/L							
Thorium 234	ND	pCi/L							
Zinc 65	ND	pCi/L							
Radium 228	ND	pCi/L							
Gross Gamma	ND	pCi/L							U
<b>Sample ID: R08060427-007H</b>	Sample Duplicate			Run: SUB-C104840			07/17/08 13:12		
Americium 241	ND	pCi/L	20				0.0	30	
Barium 133	ND	pCi/L	20				0.0	30	
Bismuth 212	ND	pCi/L	20				0.0	30	
Bismuth 214	ND	pCi/L	20				0.0	30	
Cesium 134	ND	pCi/L	20				0.0	30	
Cesium 137	ND	pCi/L	20				0.0	30	
Cobalt 60	ND	pCi/L	20				0.0	30	
Iodine 125	ND	pCi/L	20				0.0	30	
Iodine 131	ND	pCi/L	20				0.0	30	
Lead 212	ND	pCi/L	20				0.0	30	
Lead 214	ND	pCi/L	20				0.0	30	
Manganese 54	ND	pCi/L	20				0.0	30	
Potassium 40	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R104840		
Sample ID: R08060427-007H	Sample Duplicate				Run: SUB-C104840			07/17/08 13:12	
Radium 223	ND	pCi/L	20				0.0	30	
Radium 224	ND	pCi/L	20				0.0	30	
Thallium 208	ND	pCi/L	20				0.0	30	
Thorium 228	ND	pCi/L	20				0.0	30	
Thorium 234	ND	pCi/L	20				0.0	30	
Zinc 65	ND	pCi/L	20				0.0	30	
Radium 228	ND	pCi/L	20				0.0	30	
Gross Gamma	ND	pCi/L	20				0.0	30	
Method: E903.0							Batch: C_19014		
Sample ID: C08061333-004IMS	Sample Matrix Spike				Run: SUB-C104316			07/15/08 21:56	
Radium 226	140	pCi/L		92	70	130			
Sample ID: C08061333-004IMSD	Sample Matrix Spike Duplicate				Run: SUB-C104316			07/15/08 21:56	
Radium 226	150	pCi/L		95	70	130	3.6	24.2	
Sample ID: LCS-19014	Laboratory Control Sample				Run: SUB-C104316			07/16/08 01:53	
Radium 226	13	pCi/L		94	70	130			
Sample ID: MB-19014	Method Blank				Run: SUB-C104316			07/16/08 01:53	
Radium 226	-2	pCi/L							U
Method: E903.0							Batch: C_RA226-2936		
Sample ID: MB-RA226-2936	Method Blank				Run: SUB-C104623			07/21/08 18:07	
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2936	Laboratory Control Sample				Run: SUB-C104623			07/22/08 00:40	
Radium 226	7.6	pCi/L		98	70	130			
Sample ID: C08061394-007HMS	Sample Matrix Spike				Run: SUB-C104623			07/22/08 00:40	
Radium 226	17	pCi/L		107	70	130			
Sample ID: C08061394-007HMSD	Sample Matrix Spike Duplicate				Run: SUB-C104623			07/22/08 00:40	
Radium 226	16	pCi/L		103	70	130	3.9	23.9	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_19014		
<b>Sample ID: R08060427-007I</b>	Sample Matrix Spike				Run: SUB-C104248		07/11/08 17:06		
Thorium 230	21.4	pCi/L	0.20	92	70	130			
<b>Sample ID: R08060427-007I</b>	Sample Matrix Spike Duplicate				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	19.9	pCi/L	0.20	90	70	130	7.4	30	
<b>Sample ID: LCS-19014</b>	Laboratory Control Sample				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	46.6	pCi/L	0.20	98	70	130			
<b>Sample ID: MB-19014</b>	Method Blank				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	-0.08	pCi/L							U
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0578		
<b>Sample ID: LCS-RA-TH-ISO-0578</b>	Laboratory Control Sample				Run: SUB-C105021		07/28/08 15:48		
Thorium 230	6.00	pCi/L	0.20	98	70	130			
<b>Sample ID: R08060427-001H</b>	Sample Matrix Spike				Run: SUB-C105021		07/28/08 15:49		
Thorium 230	14.9	pCi/L	0.20	91	70	130			
<b>Sample ID: R08060427-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C105021		07/28/08 20:05		
Thorium 230	16.8	pCi/L	0.20	104	70	130	12	30	
<b>Sample ID: MB-RA-TH-ISO-0578</b>	Method Blank				Run: SUB-C105021		07/28/08 20:06		
Thorium 230	-0.008	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_19014		
<b>Sample ID: R08060427-001I</b>	Sample Matrix Spike				Run: SUB-C105485		07/08/08 06:20		
Lead 210	150	pCi/L		52	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD are acceptable the batch is approved.									
<b>Sample ID: R08060427-001I</b>	Sample Matrix Spike Duplicate				Run: SUB-C105485		07/08/08 06:20		
Lead 210	230	pCi/L		78	70	130	38	30	R
<b>Sample ID: MB-R105485</b>	Method Blank				Run: SUB-C105485		07/08/08 06:20		
Lead 210	4	pCi/L							U
<b>Sample ID: LCS-R105485</b>	Laboratory Control Sample				Run: SUB-C105485		07/08/08 06:20		
Lead 210	140	pCi/L		115	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R105208		
Sample ID: R08060427-002H	Sample Matrix Spike				Run: SUB-C105208			07/11/08 07:20	
Lead 210	310	pCi/L		53	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: R08060427-002H	Sample Matrix Spike Duplicate				Run: SUB-C105208			07/11/08 07:20	
Lead 210	360	pCi/L		61	70	130	15	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C08061333-001HDUP	Sample Duplicate				Run: SUB-C105208			07/11/08 07:20	
Lead 210	-5.5	pCi/L	1.0				0.0	30	U
Sample ID: MB-R105208	Method Blank				Run: SUB-C105208			07/11/08 07:20	
Lead 210	-5	pCi/L							U
Sample ID: LCS-R105208	Laboratory Control Sample				Run: SUB-C105208			07/11/08 07:20	
Lead 210	110	pCi/L		96	70	130			
Method: RMO-3008							Batch: C_19014		
Sample ID: C08061292-001BMS	Sample Matrix Spike				Run: SUB-C106196			08/18/08 17:00	
Polonium 210	18	pCi/L	1.0	124	70	130			
Sample ID: C08061292-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C106196			08/18/08 17:00	
Polonium 210	15	pCi/L	1.0	104	70	130	18	30	
Sample ID: LCS-19014	Laboratory Control Sample				Run: SUB-C106196			08/18/08 17:00	
Polonium 210	84	pCi/L	1.0	101	70	130			
Sample ID: MB-19014	Method Blank				Run: SUB-C106196			08/18/08 17:00	
Polonium 210	1	pCi/L							
Method: RMO-3008							Batch: C_R104456		
Sample ID: R08060427-001H	Sample Matrix Spike				Run: SUB-C104456			07/14/08 17:45	
Polonium 210	66	pCi/L	1.0	75	70	130			
Sample ID: R08060427-001H	Sample Matrix Spike Duplicate				Run: SUB-C104456			07/14/08 17:45	
Polonium 210	59	pCi/L	1.0	67	70	130	11	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: LCS-R104456	Laboratory Control Sample				Run: SUB-C104456			07/14/08 17:45	
Polonium 210	35	pCi/L	1.0	81	70	130			
Sample ID: MB-R104456	Method Blank				Run: SUB-C104456			07/14/08 17:45	
Polonium 210	-0.2	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08060427

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A							Analytical Run: SUB-B113690		
Sample ID: QCS	Initial Calibration Verification Standard						07/09/08 07:00		
Mercury	0.0020	mg/L	0.0010	101	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>Powerful Dewey Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Corey Foreman</b>		Phone/Fax: <b>294-6400</b>	Email: <b>Corey Foreman@respec.com</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:					
<input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data)					
<input type="checkbox"/> GSA <input type="checkbox"/> Format: <input type="checkbox"/> LEVEL IV					
<input type="checkbox"/> POTW/MWTP <input type="checkbox"/> NEIAC					
<input type="checkbox"/> State: <input type="checkbox"/> Other: <input type="checkbox"/>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	Number of Containers Sample Type: AWSVB0 Air Water Soils/Solids Vegetation Bioassay Other
1. Dew Burd GN 698		6/24/08	11:55	W	
2. Dew Burd GN 696		6/24/08	15:08	W	
3. Dew Burd GN 694		6/24/08	15:16	W	
4. Dew Burd GN 695		6/24/08	17:30	W	
5. Dew Burd GN 697		6/24/08	18:30	W	
6. Dew Burd GN 3026		6/24/08	18:30	W	
7. Dew Burd GN 697		6/24/08	18:30	W	
8. Dew Burd GN 697		6/24/08	18:30	W	
9. Dew Burd GN 697		6/24/08	18:30	W	
10. Dew Burd GN 697		6/24/08	18:30	W	
Custody Record		Relinquished by (print): <b>Corey Foreman</b>	Date Time: <b>6/25/08 01:10</b>	Signature: <b>[Signature]</b>	Received by Laboratory: <b>Steve Howland</b>
MUST be Signed		Sample Disposal:	Return to Client:	Lab Disposal:	Date Time: <b>6-25-08 8:38</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

August 20, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08060452      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 6/26/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08060452-001	DewBurd GW622	06/25/08 12:05	06/26/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08060452-002	DewBurd GW615	06/25/08 13:55	06/26/08	Aqueous	Same As Above
R08060452-003	DewBurd GW681	06/25/08 17:30	06/26/08	Aqueous	Same As Above
R08060452-004	DewBurd GW689	06/25/08 18:18	06/26/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
Linda Larson



Date: 20-Aug-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08060452

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08061333

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08061333



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-001  
Client Sample ID: DewBurd GW622

Report Date: 08/20/08  
Collection Date: 06/25/08 12:05  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	178	mg/L		5		1	A2320 B	07/03/08 11:52/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:52/mb
Bicarbonate as HCO3	217	mg/L		5		1	A2320 B	07/03/08 11:52/mb
Calcium	89.6	mg/L		0.5		2	E200.7	07/09/08 16:00/eli-c
Chloride	10	mg/L		1		1	E300.0	06/27/08 06:47/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/27/08 06:47/jmh
Magnesium	31.2	mg/L		0.5		2	E200.7	07/09/08 16:00/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/30/08 13:44/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 06:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 06:47/jmh
Potassium	10.2	mg/L		0.5		2	E200.7	07/09/08 16:00/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	07/09/08 16:00/eli-c
Sodium	174	mg/L	D	2		2	E200.7	07/09/08 16:00/eli-c
Sulfate	481	mg/L		1		20	E300.0	06/27/08 06:31/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1410	umhos/cm		5.0		1	A2510 B	07/01/08 11:18/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	06/27/08 00:00/jmh
pH	7.95	s.u.		0.01		1	A4500-H B	07/01/08 10:11/tb
Sodium Adsorption Ratio (SAR)	4.0	unitless		0.10		1	Calculation	08/20/08 17:12/ADM
Solids, Total Dissolved TDS @ 180 C	900	mg/L		5		1	A2540 C	06/27/08 12:01/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/09/08 16:00/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/17/08 20:10/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/09/08 16:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 16:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 20:10/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/09/08 16:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/17/08 20:10/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/09/08 16:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/17/08 20:10/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	07/09/08 16:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 20:10/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/09/08 16:00/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/09/08 16:00/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 14:52/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 20:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060452-001  
**Client Sample ID:** DewBurd GW622

**Report Date:** 08/20/08  
**Collection Date:** 06/25/08 12:05  
**Date Received:** 06/26/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/17/08 20:10/eli-c
Uranium	0.0051	mg/L		0.0003		1	E200.8	07/17/08 20:10/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/09/08 16:00/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/09/08 16:00/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 11:42/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 11:52/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	36.4	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	4.3	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	3.6	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta	22.5	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Lead 210	-2.0	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/10/08 21:30/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/10/08 21:30/eli-c
Radium 226	4.1	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/21/08 21:24/eli-c
Thorium 230 precision (±)	0.03	pCi/L				1	E907.0	07/21/08 21:24/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/14/08 11:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/14/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.5	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.74	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	07/15/08 21:56/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-001  
Client Sample ID: DewBurd GW622

Report Date: 08/20/08  
Collection Date: 06/25/08 12:05  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/10/08 19:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1950	pCi/L		100		1	D5072-92	06/30/08 17:19/eli-c
Radon 222 precision (±)	107	pCi/L				1	D5072-92	06/30/08 17:19/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/07/08 17:05/eli-c
Arsenic	0.004	mg/L		0.001		10	E200.8	07/07/08 17:05/eli-c
Barium	0.1	mg/L		0.1		2	E200.7	07/07/08 23:47/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/07/08 17:05/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 23:47/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/07/08 17:05/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 23:47/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/07/08 23:47/eli-c
Iron	5.17	mg/L		0.03		2	E200.7	07/07/08 23:47/eli-c
Lead	0.030	mg/L	D	0.007		10	E200.8	07/07/08 17:05/eli-c
Manganese	0.22	mg/L		0.01		2	E200.7	07/07/08 23:47/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/10/08 16:04/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 23:47/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 23:47/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/07/08 17:05/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/07/08 17:05/eli-c
Strontium	1.6	mg/L		0.1		2	E200.7	07/07/08 23:47/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/07/08 17:05/eli-c
Uranium	0.0059	mg/L		0.0003		10	E200.8	07/07/08 17:05/eli-c
Zinc	0.13	mg/L		0.01		2	E200.7	07/07/08 23:47/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.53	%				1	A1030 E	08/20/08 00:00/kl
Anions	13.9	meq/L				1	A1030 E	08/20/08 00:00/kl
Cations	14.9	meq/L				1	A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	914	mg/L				1	A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	08/20/08 00:00/kl

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-002  
Client Sample ID: DewBurd GW615

Report Date: 08/20/08  
Collection Date: 06/25/08 13:55  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	138	mg/L		5		1	A2320 B	07/03/08 11:56/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 11:56/mb
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	07/03/08 11:56/mb
Calcium	71.8	mg/L		0.5		2	E200.7	07/09/08 16:04/eli-c
Chloride	5	mg/L		1		1	E300.0	06/27/08 07:20/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	06/27/08 07:20/jmh
Magnesium	21.6	mg/L		0.5		2	E200.7	07/09/08 16:04/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/30/08 13:45/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 07:20/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 07:20/jmh
Potassium	8.7	mg/L		0.5		2	E200.7	07/09/08 16:04/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	07/09/08 16:04/eli-c
Sodium	127	mg/L	D	2		2	E200.7	07/09/08 16:04/eli-c
Sulfate	369	mg/L		1		20	E300.0	06/27/08 07:03/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1110	umhos/cm		5.0		1	A2510 B	07/01/08 11:20/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	06/27/08 00:00/jmh
pH	7.48	s.u.		0.01		1	A4500-H B	07/01/08 10:12/tb
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.10		1	Calculation	08/20/08 17:12/ADM
Solids, Total Dissolved TDS @ 180 C	680	mg/L		5		1	A2540 C	06/27/08 12:01/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/09/08 16:04/eli-c
Arsenic	0.016	mg/L		0.001		1	E200.8	07/15/08 19:13/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/09/08 16:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 16:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 19:13/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/09/08 16:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 19:13/eli-c
Iron	0.42	mg/L		0.03		2	E200.7	07/09/08 16:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 19:13/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/09/08 16:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 19:13/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/09/08 16:04/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/09/08 16:04/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 14:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 19:13/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-002  
Client Sample ID: DewBurd GW615

Report Date: 08/20/08  
Collection Date: 06/25/08 13:55  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 19:13/eli-c
Uranium	0.0024	mg/L		0.0003		1	E200.8	07/15/08 19:13/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/09/08 16:04/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/09/08 16:04/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 11:47/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 11:59/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	38.3	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta	12.6	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	2.0	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	3.0	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Lead 210	1.1	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.8	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	07/10/08 21:30/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	07/10/08 21:30/eli-c
Radium 226	7.2	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/21/08 21:24/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	07/21/08 21:24/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/14/08 11:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/14/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.5	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/15/08 21:56/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-002  
Client Sample ID: DewBurd GW615

Report Date: 08/20/08  
Collection Date: 06/25/08 13:55  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	07/15/08 21:56/eli-c
Radium 226 MDC	0.5	pCi/L					1	E903.0	07/15/08 21:56/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	07/10/08 19:50/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	1830	pCi/L		100			1	D5072-92	06/30/08 17:19/eli-c
Radon 222 precision (±)	105	pCi/L					1	D5072-92	06/30/08 17:19/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			10	E200.8	07/07/08 17:12/eli-c
Arsenic	0.024	mg/L		0.001			10	E200.8	07/07/08 17:12/eli-c
Barium	ND	mg/L		0.1			2	E200.7	07/07/08 23:55/eli-c
Beryllium	ND	mg/L		0.001			10	E200.8	07/07/08 17:12/eli-c
Boron	ND	mg/L		0.1			2	E200.7	07/07/08 23:55/eli-c
Cadmium	ND	mg/L		0.005			10	E200.8	07/07/08 17:12/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	07/07/08 23:55/eli-c
Copper	ND	mg/L		0.01			2	E200.7	07/07/08 23:55/eli-c
Iron	1.50	mg/L		0.03			2	E200.7	07/07/08 23:55/eli-c
Lead	0.013	mg/L	D	0.007			10	E200.8	07/07/08 17:12/eli-c
Manganese	0.07	mg/L		0.01			2	E200.7	07/07/08 23:55/eli-c
Mercury	ND	mg/L		0.0002			1	E245.1	07/10/08 16:06/eli-b
Molybdenum	ND	mg/L		0.1			2	E200.7	07/07/08 23:55/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	07/07/08 23:55/eli-c
Selenium	ND	mg/L	D	0.002			10	E200.8	07/07/08 17:12/eli-c
Silver	ND	mg/L		0.005			10	E200.8	07/07/08 17:12/eli-c
Strontium	1.4	mg/L		0.1			2	E200.7	07/07/08 23:55/eli-c
Thallium	ND	mg/L		0.001			10	E200.8	07/07/08 17:12/eli-c
Uranium	0.0023	mg/L		0.0003			10	E200.8	07/07/08 17:12/eli-c
Zinc	ND	mg/L		0.01			2	E200.7	07/07/08 23:55/eli-c
DATA QUALITY									
A/C Balance (± 5)	2.39	%					1	A1030 E	08/20/08 00:00/kl
Anions	10.6	meq/L					1	A1030 E	08/20/08 00:00/kl
Cations	11.1	meq/L					1	A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	696	mg/L					1	A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	0.970						1	A1030 E	08/20/08 00:00/kl

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-003  
Client Sample ID: DewBurd GW681

Report Date: 08/20/08  
Collection Date: 06/25/08 17:30  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	170	mg/L		5		1	A2320 B	07/03/08 12:03/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 12:03/mb
Bicarbonate as HCO3	207	mg/L		5		1	A2320 B	07/03/08 12:03/mb
Calcium	62.3	mg/L		0.5		2	E200.7	07/09/08 16:08/eli-
Chloride	15	mg/L		1		1	E300.0	06/27/08 07:53/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/27/08 07:53/jmh
Magnesium	24.0	mg/L		0.5		2	E200.7	07/09/08 16:08/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/30/08 13:46/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 07:53/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 07:53/jmh
Potassium	9.7	mg/L		0.5		2	E200.7	07/09/08 16:08/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	07/09/08 16:08/eli-c
Sodium	210	mg/L	D	2		2	E200.7	07/09/08 16:08/eli-c
Sulfate	449	mg/L		1		20	E300.0	06/27/08 07:36/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	07/01/08 11:21/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	06/27/08 00:00/jmh
pH	7.99	s.u.		0.01		1	A4500-H B	07/01/08 10:14/tb
Sodium Adsorption Ratio (SAR)	5.7	unitless		0.10		1	Calculation	08/20/08 17:12/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	06/27/08 12:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/09/08 16:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/15/08 19:40/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/09/08 16:08/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 16:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/15/08 19:40/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/09/08 16:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/15/08 19:40/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/09/08 16:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/15/08 19:40/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	07/09/08 16:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/15/08 19:40/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/09/08 16:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/09/08 16:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 15:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/15/08 19:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-003  
Client Sample ID: DewBurd GW681

Report Date: 08/20/08  
Collection Date: 06/25/08 17:30  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/15/08 19:40/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	07/15/08 19:40/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/09/08 16:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/09/08 16:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/10/08 11:51/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 12:01/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1390	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	23.2	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	3.5	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta	364	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	6.2	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Lead 210	42.2	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	7.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	07/10/08 21:30/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	07/10/08 21:30/eli-c
Radium 226	434	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	5.5	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/21/08 21:24/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	07/21/08 21:24/eli-c
Gross Gamma	210	pCi/L		20		1	E901.1	07/14/08 11:00/eli-c
Gross Gamma precision (±)	45	pCi/L				1	E901.1	07/14/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	6.2	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	1.4	pCi/L		1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.81	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.7	pCi/L				1	E903.0	07/15/08 21:56/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-003  
Client Sample ID: DewBurd GW681

Report Date: 08/20/08  
Collection Date: 06/25/08 17:30  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/10/08 19:50/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	389000	pCi/L		100		1	D5072-92	06/30/08 17:19/eli-c
Radon 222 precision (±)	953	pCi/L				1	D5072-92	06/30/08 17:19/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/07/08 17:18/eli-c
Arsenic	0.001	mg/L		0.001		10	E200.8	07/07/08 17:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 23:59/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/07/08 17:18/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/07/08 23:59/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/07/08 17:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 23:59/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/07/08 23:59/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	07/07/08 23:59/eli-c
Lead	0.013	mg/L	D	0.007		10	E200.8	07/07/08 17:18/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	07/07/08 23:59/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/10/08 16:08/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 23:59/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 23:59/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/07/08 17:18/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/07/08 17:18/eli-c
Strontium	1.1	mg/L		0.1		2	E200.7	07/07/08 23:59/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/07/08 17:18/eli-c
Uranium	0.0102	mg/L		0.0003		10	E200.8	07/07/08 17:18/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 23:59/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.51	%				1	A1030 E	08/20/08 00:00/kl
Anions	13.2	meq/L				1	A1030 E	08/20/08 00:00/kl
Cations	14.5	meq/L				1	A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	883	mg/L				1	A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	08/20/08 00:00/kl

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-004  
Client Sample ID: DewBurd GW689

Report Date: 08/20/08  
Collection Date: 06/25/08 18:18  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	150	mg/L		5		1	A2320 B	07/03/08 12:07/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 12:07/mb
Bicarbonate as HCO3	183	mg/L		5		1	A2320 B	07/03/08 12:07/mb
Calcium	46.7	mg/L		0.5		2	E200.7	07/09/08 16:12/eli-c
Chloride	5	mg/L		1		1	E300.0	06/27/08 09:31/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	06/27/08 09:31/jmh
Magnesium	16.0	mg/L		0.5		2	E200.7	07/09/08 16:12/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/30/08 13:48/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/27/08 09:31/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/27/08 09:31/jmh
Potassium	7.7	mg/L		0.5		2	E200.7	07/09/08 16:12/eli-c
Silica	4.3	mg/L		0.5		2	E200.7	07/09/08 16:12/eli-c
Sodium	174	mg/L	D	2		2	E200.7	07/09/08 16:12/eli-c
Sulfate	366	mg/L		1		20	E300.0	06/27/08 08:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1270	umhos/cm		5.0		1	A2510 B	07/01/08 11:24/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	06/27/08 00:00/jmh
pH	8.08	s.u.		0.01		1	A4500-H B	07/01/08 10:15/tb
Sodium Adsorption Ratio (SAR)	5.6	unitless		0.10		1	Calculation	08/20/08 17:12/ADM
Solids, Total Dissolved TDS @ 180 C	700	mg/L		5		1	A2540 C	06/27/08 12:05/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/09/08 16:12/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/17/08 20:51/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/09/08 16:12/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 16:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 20:51/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/09/08 16:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/17/08 20:51/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/09/08 16:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/17/08 20:51/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	07/09/08 16:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 20:51/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/09/08 16:12/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/09/08 16:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 15:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 20:51/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-004  
Client Sample ID: DewBurd GW689

Report Date: 08/20/08  
Collection Date: 06/25/08 18:18  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/17/08 20:51/eli-c
Uranium	0.0034	mg/L		0.0003		1	E200.8	07/17/08 20:51/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/09/08 16:12/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/09/08 16:12/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0005	mg/L		0.0003		1	E200.8	07/10/08 11:56/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 12:03/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	36.5	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha precision (±)	3.7	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta	15.0	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta MDC	3.0	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Lead 210	-6.5	pCi/L	U			1	E909.0M	07/11/08 07:20/eli-c
Lead 210 MDC	11.4	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Lead 210 precision (±)	6.7	pCi/L				1	E909.0M	07/11/08 07:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/10/08 21:30/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	07/10/08 21:30/eli-c
Radium 226	5.5	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	07/21/08 22:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/22/08 11:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/22/08 11:26/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/14/08 11:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/14/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1	pCi/L	U			1	E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.05	pCi/L	U			1	E903.0	07/15/08 21:56/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060452-004  
Client Sample ID: DewBurd GW689

Report Date: 08/20/08  
Collection Date: 06/25/08 18:18  
Date Received: 06/26/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 21:56/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/10/08 19:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	2520	pCi/L		100		1	D5072-92	06/30/08 17:19/eli-c
Radon 222 precision (±)	109	pCi/L				1	D5072-92	06/30/08 17:19/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/07/08 17:25/eli-c
Arsenic	0.003	mg/L		0.001		10	E200.8	07/07/08 17:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 00:15/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/07/08 17:25/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/08/08 00:15/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/07/08 17:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 00:15/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 00:15/eli-c
Iron	1.15	mg/L		0.03		2	E200.7	07/08/08 00:15/eli-c
Lead	0.017	mg/L	D	0.007		10	E200.8	07/07/08 17:25/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/08/08 00:15/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/10/08 16:11/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 00:15/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 00:15/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/07/08 17:25/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/07/08 17:25/eli-c
Strontium	1.0	mg/L		0.1		2	E200.7	07/08/08 00:15/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/07/08 17:25/eli-c
Uranium	0.0060	mg/L		0.0003		10	E200.8	07/07/08 17:25/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 00:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.76	%				1	A1030 E	08/20/08 00:00/ikl
Anions	10.8	meq/L				1	A1030 E	08/20/08 00:00/ikl
Cations	11.4	meq/L				1	A1030 E	08/20/08 00:00/ikl
Solids, Total Dissolved Calculated	718	mg/L				1	A1030 E	08/20/08 00:00/ikl
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	08/20/08 00:00/ikl

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080703A-ALK-SEL-W							
Sample ID: LCS1_080703A	Laboratory Control Sample					Run: PH_COND1-R_080703A			07/03/08 11:24
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080703A	Method Blank					Run: PH_COND1-R_080703A			07/03/08 11:25
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08060452-002AMS	Sample Matrix Spike					Run: PH_COND1-R_080703A			07/03/08 11:59
Alkalinity, Total as CaCO <sub>3</sub>	246	mg/L	5.0	102	80	120			
Sample ID: R08060452-002AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080703A			07/03/08 12:01
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	98	80	120	1.6	10	
Method: A2510 B		Batch: 080701_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080701	Laboratory Control Sample					Run: PH_COND2-R_080701B			07/01/08 10:58
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080701	Laboratory Control Sample					Run: PH_COND2-R_080701B			07/01/08 10:59
Conductivity @ 25 C	160	umhos/cm	5.0	107	90	110			
Sample ID: LCS2-1_080701	Laboratory Control Sample					Run: PH_COND2-R_080701B			07/01/08 11:01
Conductivity @ 25 C	5200	umhos/cm	5.0	104	90	110			
Sample ID: R08060452-001ADUP	Sample Duplicate					Run: PH_COND2-R_080701B			07/01/08 11:18
Conductivity @ 25 C	1420	umhos/cm	5.0				0.7	10	
Sample ID: MBLK-1_080701	Method Blank					Run: PH_COND2-R_080701B			07/01/08 11:26
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080627A-SLDS-TDS-W							
Sample ID: LCS1_080627A	Laboratory Control Sample					Run: BAL-4-R_080627A			06/27/08 11:42
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	98	90	110			
Sample ID: MBLK1_080627A	Method Blank					Run: BAL-4-R_080627A			06/27/08 11:44
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08060452-002AMS	Sample Matrix Spike					Run: BAL-4-R_080627A			06/27/08 12:03
Solids, Total Dissolved TDS @ 180 C	910	mg/L	5.0	117	80	120			
Sample ID: R08060452-002AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080627A			06/27/08 12:04
Solids, Total Dissolved TDS @ 180 C	910	mg/L	5.0	118	80	120	0.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 080627-ORP-ISE-W		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: PH_COND1-R_080627A		06/27/08 00:00		
Oxidation-Reduction Potential	470	mV		99	95	105			
<b>Sample ID: R08060452-001F</b>	Sample Duplicate				Run: PH_COND1-R_080627A		06/27/08 00:00		
Oxidation-Reduction Potential	240	mV					1.8	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719A		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104480		07/19/08 11:18		
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104480		07/19/08 11:21		
Selenium-IV	0.046	mg/L	0.0010	92	90	110			
<b>Sample ID: R08060452-001E</b>	Sample Matrix Spike				Run: SUB-C104480		07/19/08 11:54		
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
<b>Sample ID: R08060452-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104480		07/19/08 11:56		
Selenium-IV	0.047	mg/L	0.0010	94	85	115	2.5	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719C		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104484		07/19/08 14:18		
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104484		07/19/08 14:20		
Selenium	0.046	mg/L	0.0010	92	90	110			
<b>Sample ID: R08060452-001E</b>	Sample Matrix Spike				Run: SUB-C104484		07/19/08 14:54		
Selenium	0.051	mg/L	0.0010	103	85	115			
<b>Sample ID: R08060452-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104484		07/19/08 14:56		
Selenium	0.052	mg/L	0.0010	105	85	115	1.9	10	
<b>Method: A4500-H B</b>							Batch: 080701_1_PH-W		
<b>Sample ID: LCS_pH-1_080701</b>	Laboratory Control Sample				Run: PH_COND2-R_080701A		07/01/08 10:01		
pH	6.91	s.u.	0.010	101	98.55	101.45			
<b>Sample ID: R08060452-002ADUP</b>	Sample Duplicate				Run: PH_COND2-R_080701A		07/01/08 10:14		
pH	7.52	s.u.	0.010				0.5	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2008-06-30_2_NH3_01							
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080630A		06/30/08 13:22	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080630A		06/30/08 13:23	
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080630A		06/30/08 13:24	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	105	90	110			
Sample ID: R08060447-001BMS	Sample Matrix Spike					Run: TECHAA2-R_080630A		06/30/08 13:38	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	77	80	120			S
Sample ID: R08060447-001BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080630A		06/30/08 13:39	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	77	80	120	0.5	10	S
Sample ID: R08060454-001CMS	Sample Matrix Spike					Run: TECHAA2-R_080630A		06/30/08 13:57	
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	80	120			
Sample ID: R08060454-001CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080630A		06/30/08 13:58	
Nitrogen, Ammonia as N	0.25	mg/L	0.10	101	80	120	0.8	10	
Method: D5072-92		Batch: C_R103572							
Sample ID: C08061327-001IDUP	Sample Duplicate					Run: SUB-C103572		06/30/08 17:19	
Radon 222	285	pCi/L	100				24	30	
Sample ID: MB-R103572	Method Blank					Run: SUB-C103572		06/30/08 17:19	
Radon 222	20	pCi/L							
Sample ID: LCS-R103572	Laboratory Control Sample					Run: SUB-C103572		06/30/08 17:19	
Radon 222	300	pCi/L	100	93	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18997		
<b>Sample ID: MB-18997</b>	Method Blank		Run: SUB-C103815				07/07/08 23:38		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.002	mg/L	0.001						
<b>Sample ID: LCS3-18997</b>	Laboratory Control Sample		Run: SUB-C103815				07/07/08 23:42		
Barium	0.498	mg/L	0.10	100	85	115			
Boron	0.513	mg/L	0.10	103	85	115			
Chromium	0.511	mg/L	0.050	102	85	115			
Copper	0.505	mg/L	0.010	101	85	115			
Iron	2.72	mg/L	0.030	109	85	115			
Manganese	2.56	mg/L	0.010	102	85	115			
Molybdenum	0.502	mg/L	0.10	100	85	115			
Nickel	0.512	mg/L	0.050	102	85	115			
Strontium	0.506	mg/L	0.10	101	85	115			
Zinc	0.505	mg/L	0.010	101	85	115			
<b>Sample ID: C08061335-006B MS3</b>	Sample Matrix Spike		Run: SUB-C103815				07/08/08 00:44		
Barium	0.704	mg/L	0.10	111	70	130			
Boron	0.639	mg/L	0.10	105	70	130			
Chromium	0.588	mg/L	0.050	107	70	130			
Copper	0.526	mg/L	0.010	101	70	130			
Iron	41.5	mg/L	0.030		70	130			A
Manganese	2.87	mg/L	0.010	101	70	130			
Molybdenum	0.476	mg/L	0.10	95	70	130			
Nickel	0.540	mg/L	0.050	100	70	130			
Strontium	1.06	mg/L	0.10	100	70	130			
Zinc	0.585	mg/L	0.010	100	70	130			
<b>Sample ID: C08061335-006B MSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C103815				07/08/08 00:48		
Barium	0.718	mg/L	0.10	114	70	130	2.1	20	
Boron	0.646	mg/L	0.10	107	70	130	1.1	20	
Chromium	0.611	mg/L	0.050	112	70	130	3.7	20	
Copper	0.540	mg/L	0.010	104	70	130	2.6	20	
Iron	41.0	mg/L	0.030		70	130	1.4	20	A

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18997		
Sample ID: C08061335-006B MSD3			Sample Matrix Spike Duplicate			Run: SUB-C103815		07/08/08 00:48	
Manganese	2.91	mg/L	0.010	102	70	130	1.3	20	
Molybdenum	0.491	mg/L	0.10	98	70	130	3.1	20	
Nickel	0.568	mg/L	0.050	106	70	130	4.9	20	
Strontium	1.05	mg/L	0.10	99	70	130	0.8	20	
Zinc	0.602	mg/L	0.010	103	70	130	2.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103988		
Sample ID: MB-080709A	Method Blank		Run: SUB-C103988				07/09/08 14:52		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.009	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	0.003	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080709A	Laboratory Fortified Blank		Run: SUB-C103988				07/09/08 14:56		
Silica	0.37	mg/L	0.10	91	85	125			
Aluminum	1.0	mg/L	0.10	104	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.0	mg/L	0.10	100	85	125			
Calcium	53	mg/L	0.50	105	85	125			
Chromium	1.0	mg/L	0.050	102	85	125			
Iron	1.1	mg/L	0.030	107	85	125			
Magnesium	53	mg/L	0.50	106	85	125			
Manganese	1.0	mg/L	0.010	103	85	125			
Molybdenum	1.0	mg/L	0.10	102	85	125			
Nickel	1.0	mg/L	0.050	101	85	125			
Potassium	46	mg/L	0.50	93	85	125			
Sodium	50	mg/L	0.77	100	85	125			
Vanadium	1.0	mg/L	0.10	104	85	125			
Zinc	1.0	mg/L	0.010	103	85	125			
Sample ID: C08061365-007BMS2	Sample Matrix Spike		Run: SUB-C103988				07/09/08 16:24		
Aluminum	4.94	mg/L	0.10	99	70	130			
Barium	4.75	mg/L	0.10	95	70	130			
Boron	5.38	mg/L	0.10	96	70	130			
Chromium	4.88	mg/L	0.050	98	70	130			
Iron	5.00	mg/L	0.030	100	70	130			
Manganese	4.84	mg/L	0.010	97	70	130			
Molybdenum	4.93	mg/L	0.10	99	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R103988		
Sample ID: C08061365-007BMS2	Sample Matrix Spike			Run: SUB-C103988			07/09/08 16:24		
Nickel	4.82	mg/L	0.050	96	70	130			
Vanadium	4.91	mg/L	0.10	98	70	130			
Zinc	4.99	mg/L	0.011	99	70	130			
Calcium	258	mg/L	1.0	98	70	130			
Magnesium	250	mg/L	1.0	99	70	130			
Potassium	220	mg/L	1.0	87	70	130			
Silica	8.66	mg/L	0.10	82	70	130			
Sodium	773	mg/L	3.9	88	70	130			
Sample ID: C08061365-007BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C103988			07/09/08 16:28		
Aluminum	4.91	mg/L	0.10	98	70	130	0.6	20	
Barium	4.76	mg/L	0.10	95	70	130	0.1	20	
Boron	5.41	mg/L	0.10	97	70	130	0.7	20	
Chromium	4.85	mg/L	0.050	97	70	130	0.6	20	
Iron	5.00	mg/L	0.030	100	70	130	0.0	20	
Manganese	4.81	mg/L	0.010	96	70	130	0.6	20	
Molybdenum	4.95	mg/L	0.10	99	70	130	0.4	20	
Nickel	4.80	mg/L	0.050	96	70	130	0.5	20	
Vanadium	4.83	mg/L	0.10	97	70	130	1.6	20	
Zinc	4.98	mg/L	0.011	99	70	130	0.3	20	
Calcium	257	mg/L	1.0	98	70	130	0.6	20	
Magnesium	249	mg/L	1.0	99	70	130	0.6	20	
Potassium	221	mg/L	1.0	88	70	130	0.6	20	
Silica	8.55	mg/L	0.10	76	70	130	1.3	20	
Sodium	778	mg/L	3.9	91	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18997		
Sample ID: MB-18997	Method Blank				Run: SUB-C103823		07/07/08 16:51		
Antimony	0.0004	mg/L	0.0002						
Arsenic	0.0009	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	0.006	mg/L							
Selenium	0.0004	mg/L	0.0002						
Silver	6E-05	mg/L	5E-05						
Thallium	ND	mg/L	4E-05						
Uranium	ND	mg/L	3E-05						
Sample ID: LCS3-18997	Laboratory Control Sample				Run: SUB-C103823		07/07/08 16:58		
Antimony	0.569	mg/L	0.050	114	85	115			
Arsenic	0.554	mg/L	0.0010	111	85	115			
Beryllium	0.265	mg/L	0.010	106	85	115			
Cadmium	0.270	mg/L	0.010	108	85	115			
Lead	0.562	mg/L	0.050	111	85	115			
Selenium	0.556	mg/L	0.0020	111	85	115			
Silver	0.0448	mg/L	0.010	89	85	115			
Thallium	0.532	mg/L	0.10	106	85	115			
Uranium	0.543	mg/L	0.00032	109	85	115			
Sample ID: C08061335-006BMS3	Sample Matrix Spike				Run: SUB-C103823		07/07/08 18:33		
Antimony	0.409	mg/L	0.050	82	70	130			
Arsenic	0.638	mg/L	0.0010	125	70	130			
Beryllium	0.285	mg/L	0.010	113	70	130			
Cadmium	0.305	mg/L	0.010	122	70	130			
Lead	0.651	mg/L	0.050	122	70	130			
Selenium	0.627	mg/L	0.0020	125	70	130			
Silver	0.0530	mg/L	0.010	106	70	130			
Thallium	0.607	mg/L	0.10	121	70	130			
Uranium	0.630	mg/L	0.00032	126	70	130			
Sample ID: C08061335-006BMSD3	Sample Matrix Spike Duplicate				Run: SUB-C103823		07/07/08 18:40		
Antimony	0.397	mg/L	0.050	79	70	130	2.9	20	
Arsenic	0.632	mg/L	0.0010	124	70	130	0.8	20	
Beryllium	0.282	mg/L	0.010	112	70	130	1.1	20	
Cadmium	0.300	mg/L	0.010	120	70	130	1.7	20	
Lead	0.638	mg/L	0.050	120	70	130	2.0	20	
Selenium	0.625	mg/L	0.0020	124	70	130	0.3	20	
Silver	0.0550	mg/L	0.010	110	70	130	3.8	20	
Thallium	0.596	mg/L	0.10	119	70	130	1.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18997
Sample ID: C08061335-006BMSD3	Sample Matrix Spike Duplicate				Run: SUB-C103823				07/07/08 18:40
Uranium	0.614	mg/L	0.00032	122	70	130	2.6	20	
Method: E200.8									Batch: C_19014
Sample ID: MB-19014	Method Blank				Run: SUB-C104018				07/10/08 11:31
Uranium	2E-05	mg/L	2E-05						
Sample ID: LCS1-19014	Laboratory Control Sample				Run: SUB-C104018				07/10/08 11:36
Uranium	0.0504	mg/L	0.00030	96	80	120			
Sample ID: C08061394-007IMS4	Post Digestion Spike				Run: SUB-C104018				07/10/08 12:51
Uranium	0.0119	mg/L	0.00030	95	70	130			
Sample ID: C08061394-007IMSD4	Post Digestion Spike Duplicate				Run: SUB-C104018				07/10/08 12:56
Uranium	0.0120	mg/L	0.00030	95	70	130	0.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104306		
Sample ID: LRB	Method Blank		Run: SUB-C104306				07/15/08 12:08		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	7E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104306				07/15/08 12:15		
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Copper	0.0505	mg/L	0.0010	101	85	115			
Lead	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00506	mg/L	0.0010	101	85	115			
Silver	0.0194	mg/L	0.0010	97	85	115			
Thorium 232	0.0507	mg/L	0.0010	101	85	115			
Uranium	0.0509	mg/L	0.00030	102	85	115			
Sample ID: C08061021-002CMS4	Post Digestion Spike		Run: SUB-C104306				07/15/08 19:27		
Arsenic	0.459	mg/L	0.0010	90	70	130			
Cadmium	0.433	mg/L	0.010	86	70	130			
Copper	0.464	mg/L	0.010	89	70	130			
Lead	0.456	mg/L	0.050	87	70	130			
Mercury	0.0437	mg/L	0.0010	87	70	130			
Silver	0.172	mg/L	0.010	86	70	130			
Thorium 232	0.436	mg/L	0.0010	86	70	130			
Uranium	0.439	mg/L	0.00030	87	70	130			
Sample ID: C08061021-002CMSD4	Post Digestion Spike Duplicate		Run: SUB-C104306				07/15/08 19:34		
Arsenic	0.541	mg/L	0.0010	107	70	130	16	20	
Cadmium	0.530	mg/L	0.010	106	70	130	20	20	R
Copper	0.541	mg/L	0.010	104	70	130	15	20	
Lead	0.546	mg/L	0.050	105	70	130	18	20	
Mercury	0.0529	mg/L	0.0010	106	70	130	19	20	
Silver	0.177	mg/L	0.010	89	70	130	3.2	20	
Thorium 232	0.528	mg/L	0.0010	105	70	130	19	20	
Uranium	0.528	mg/L	0.00030	105	70	130	18	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 08/20/08

Project: Edgemont

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104438		
Sample ID: LRB	Method Blank		Run: SUB-C104438				07/17/08 11:20		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	4E-05	mg/L	3E-05						
Thorium 232	0.0002	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104438				07/17/08 11:26		
Arsenic	0.0520	mg/L	0.0010	104	85	115			
Cadmium	0.0515	mg/L	0.0010	103	85	115			
Copper	0.0517	mg/L	0.0010	103	85	115			
Lead	0.0515	mg/L	0.0010	103	85	115			
Mercury	0.00546	mg/L	0.0010	109	85	115			
Silver	0.0201	mg/L	0.0010	100	85	115			
Thorium 232	0.0506	mg/L	0.0010	101	85	115			
Uranium	0.0509	mg/L	0.00030	102	85	115			
Sample ID: R08060452-001C	Post Digestion Spike		Run: SUB-C104438				07/17/08 20:17		
Arsenic	0.0486	mg/L	0.0010	96	70	130			
Cadmium	0.0455	mg/L	0.010	91	70	130			
Copper	0.0450	mg/L	0.010	90	70	130			
Lead	0.0481	mg/L	0.050	95	70	130			
Mercury	0.00500	mg/L	0.0010	100	70	130			
Silver	0.0110	mg/L	0.010	55	70	130			S
Thorium 232	0.0492	mg/L	0.0010	98	70	130			
Uranium	0.0537	mg/L	0.00030	97	70	130			
Sample ID: R08060452-001C	Post Digestion Spike Duplicate		Run: SUB-C104438				07/17/08 20:24		
Arsenic	0.0482	mg/L	0.0010	95	70	130	0.9	20	
Cadmium	0.0459	mg/L	0.010	92	70	130	0.9	20	
Copper	0.0453	mg/L	0.010	90	70	130	0.7	20	
Lead	0.0479	mg/L	0.050	95	70	130	0.0	20	
Mercury	0.00503	mg/L	0.0010	101	70	130	0.6	20	
Silver	0.0128	mg/L	0.010	64	70	130	16	20	S
Thorium 232	0.0491	mg/L	0.0010	97	70	130	0.1	20	
Uranium	0.0536	mg/L	0.00030	97	70	130	0.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>							Batch: B_33447		
<b>Sample ID: MB-33447</b>	Method Blank				Run: SUB-B113849		07/10/08 15:05		
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-33447</b>	Laboratory Fortified Blank				Run: SUB-B113849		07/10/08 15:08		
Mercury	0.0020	mg/L	0.0010	98	85	115			
<b>Sample ID: B08062984-005CMS</b>	Sample Matrix Spike				Run: SUB-B113849		07/10/08 15:36		
Mercury	0.0021	mg/L	0.0010	103	70	130			
<b>Sample ID: B08062984-005CMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-B113849		07/10/08 15:38		
Mercury	0.0021	mg/L	0.0010	103	70	130	1.0	30	
<b>Method: E245.1</b>							Analytical Run: SUB-B113849		
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard						07/10/08 14:56		
Mercury	0.0019	mg/L	0.0010	94	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>									Batch: R35707
<b>Sample ID: LFB0806260829-3</b>	Laboratory Fortified Blank			Run: DIONEX_080627A			06/26/08 19:18		
Chloride	4.77	mg/L	0.50	95	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	90	110			
Sulfate	13.9	mg/L	1.0	92	90	110			
<b>Sample ID: LFB0806260829-4</b>	Laboratory Fortified Blank			Run: DIONEX_080627A			06/26/08 19:34		
Chloride	4.71	mg/L	0.50	94	90	110			
Fluoride	1.84	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
<b>Sample ID: R08060449-002AMS</b>	Sample Matrix Spike			Run: DIONEX_080627A			06/27/08 05:41		
Chloride	25.1	mg/L	0.50		80	120			A
Fluoride	2.90	mg/L	0.10	95	80	120			
Nitrogen, Nitrate as N	2.59	mg/L	0.10	98	80	120			
Nitrogen, Nitrite as N	2.50	mg/L	0.10	100	80	120			
Sulfate	286	mg/L	1.0		80	120			A
<b>Sample ID: R08060449-002AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080627A			06/27/08 05:58		
Chloride	25.1	mg/L	0.50		80	120	0.2	10	A
Fluoride	2.81	mg/L	0.10	91	80	120	3.2	10	
Nitrogen, Nitrate as N	2.49	mg/L	0.10	94	80	120	3.9	10	
Nitrogen, Nitrite as N	2.35	mg/L	0.10	94	80	120	6.2	10	
Sulfate	286	mg/L	1.0		80	120	0.0	10	A
<b>Sample ID: R08060452-004AMS</b>	Sample Matrix Spike			Run: DIONEX_080627A			06/27/08 08:58		
Chloride	98.8	mg/L	2.2	88	80	120			
Fluoride	37.3	mg/L	0.22	86	80	120			
Nitrogen, Nitrate as N	46.5	mg/L	0.50	93	80	120			
Nitrogen, Nitrite as N	49.4	mg/L	1.2	99	80	120			
Sulfate	598	mg/L	1.3	77	80	120			S
<b>Sample ID: R08060452-004AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080627A			06/27/08 09:15		
Chloride	97.3	mg/L	2.2	87	80	120	1.5	10	
Fluoride	36.6	mg/L	0.22	84	80	120	1.9	10	
Nitrogen, Nitrate as N	45.6	mg/L	0.50	91	80	120	2.0	10	
Nitrogen, Nitrite as N	48.6	mg/L	1.2	97	80	120	1.5	10	
Sulfate	592	mg/L	1.3	75	80	120	1.0	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/20/08  
Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0485		
Sample ID: MB-GrAB-0485	Method Blank				Run: SUB-C104921			07/26/08 03:40	
Gross Alpha	2	pCi/L							
Gross Beta	-2	pCi/L							
Sample ID: UNAT-GrAB-0485	Laboratory Control Sample				Run: SUB-C104921			07/26/08 03:40	
Gross Alpha	120	pCi/L		87	70	130			
Sample ID: Cs137-GrAB-0485	Laboratory Control Sample				Run: SUB-C104921			07/26/08 03:41	
Gross Beta	100	pCi/L		108	70	130			
Sample ID: C08061318-001DMS	Sample Matrix Spike				Run: SUB-C104921			07/26/08 21:24	
Gross Alpha	168	pCi/L		119	70	130			
Sample ID: C08061318-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C104921			07/26/08 21:24	
Gross Alpha	148	pCi/L		105	70	130	12	16.3	
Sample ID: C08061318-001DMS	Sample Matrix Spike				Run: SUB-C104921			07/26/08 21:25	
Gross Beta	95.8	pCi/L		100	70	130			
Sample ID: C08061318-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C104921			07/26/08 21:25	
Gross Beta	98.1	pCi/L		102	70	130	2.3	16	
Method: E901.1							Batch: C_R104392		
Sample ID: LCS-R104392	Laboratory Control Sample				Run: SUB-C104392			07/14/08 11:00	
Cesium 137	450000	pCi/L	20	104	70	130			
Cobalt 60	330000	pCi/L	20	104	70	130			
Sample ID: MB-R104392	Method Blank				Run: SUB-C104392			07/14/08 11:00	
Gross Gamma	ND	pCi/L							
Sample ID: C08061335-006IDUP	Sample Duplicate				Run: SUB-C104392			07/14/08 11:00	
Gross Gamma	ND	pCi/L	20				0.0	30	
Sample ID: C08061372-014ADUP	Sample Duplicate				Run: SUB-C104392			07/14/08 11:00	
Gross Gamma	ND	pCi/L	20				0.0	30	U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_19014		
<b>Sample ID: R08060452-004I</b>	Sample Matrix Spike				Run: SUB-C104316		07/15/08 21:56		
Radium 226	140	pCi/L		92	70	130			
<b>Sample ID: R08060452-004I</b>	Sample Matrix Spike Duplicate				Run: SUB-C104316		07/15/08 21:56		
Radium 226	150	pCi/L		95	70	130	3.6	24.2	
<b>Sample ID: LCS-19014</b>	Laboratory Control Sample				Run: SUB-C104316		07/16/08 01:53		
Radium 226	13	pCi/L		94	70	130			
<b>Sample ID: MB-19014</b>	Method Blank				Run: SUB-C104316		07/16/08 01:53		
Radium 226	-2	pCi/L							U
<b>Method: E903.0</b>							Batch: C_RA226-2936		
<b>Sample ID: MB-RA226-2936</b>	Method Blank				Run: SUB-C104623		07/21/08 18:07		
Radium 226	-0.1	pCi/L							U
<b>Sample ID: LCS-RA226-2936</b>	Laboratory Control Sample				Run: SUB-C104623		07/22/08 00:40		
Radium 226	7.6	pCi/L		98	70	130			
<b>Sample ID: C08061394-007HMS</b>	Sample Matrix Spike				Run: SUB-C104623		07/22/08 00:40		
Radium 226	17	pCi/L		107	70	130			
<b>Sample ID: C08061394-007HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104623		07/22/08 00:40		
Radium 226	16	pCi/L		103	70	130	3.9	23.9	
<b>Method: E907.0</b>							Batch: C_19014		
<b>Sample ID: C08061394-007IMS</b>	Sample Matrix Spike				Run: SUB-C104248		07/11/08 17:06		
Thorium 230	21.4	pCi/L	0.20	92	70	130			
<b>Sample ID: C08061394-007IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	19.9	pCi/L	0.20	90	70	130	7.4	30	
<b>Sample ID: LCS-19014</b>	Laboratory Control Sample				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	46.6	pCi/L	0.20	98	70	130			
<b>Sample ID: MB-19014</b>	Method Blank				Run: SUB-C104248		07/11/08 17:07		
Thorium 230	-0.08	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0571		
<b>Sample ID: LCS-RA-TH-ISO-0571</b>	Laboratory Control Sample				Run: SUB-C104913				07/21/08 21:24
Thorium 230	6.31	pCi/L	0.20	103	70	130			
<b>Sample ID: R08060452-002H</b>	Sample Matrix Spike				Run: SUB-C104913				07/21/08 21:24
Thorium 230	15.3	pCi/L	0.20	94	70	130			
<b>Sample ID: R08060452-002H</b>	Sample Matrix Spike Duplicate				Run: SUB-C104913				07/21/08 21:24
Thorium 230	16.6	pCi/L	0.20	103	70	130	8.4	30	
<b>Sample ID: MB-RA-TH-ISO-0571</b>	Method Blank				Run: SUB-C104913				07/23/08 22:41
Thorium 230	0.03	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_19014		
<b>Sample ID: C08061394-001IMS</b>	Sample Matrix Spike				Run: SUB-C105485				07/08/08 06:20
Lead 210	150	pCi/L		52	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD are acceptable the batch is approved.									
<b>Sample ID: C08061394-001IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C105485				07/08/08 06:20
Lead 210	230	pCi/L		78	70	130	38	30	R
<b>Sample ID: MB-R105485</b>	Method Blank				Run: SUB-C105485				07/08/08 06:20
Lead 210	4	pCi/L							U
<b>Sample ID: LCS-R105485</b>	Laboratory Control Sample				Run: SUB-C105485				07/08/08 06:20
Lead 210	140	pCi/L		115	70	130			
<b>Method: E909.0M</b>							Batch: C_R105208		
<b>Sample ID: C08061394-002HMS</b>	Sample Matrix Spike				Run: SUB-C105208				07/11/08 07:20
Lead 210	310	pCi/L		53	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: C08061394-002HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C105208				07/11/08 07:20
Lead 210	360	pCi/L		61	70	130	15	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: R08060452-001H</b>	Sample Duplicate				Run: SUB-C105208				07/11/08 07:20
Lead 210	-5.5	pCi/L	1.0				0.0	30	U
<b>Sample ID: MB-R105208</b>	Method Blank				Run: SUB-C105208				07/11/08 07:20
Lead 210	-5	pCi/L							U
<b>Sample ID: LCS-R105208</b>	Laboratory Control Sample				Run: SUB-C105208				07/11/08 07:20
Lead 210	110	pCi/L		96	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/20/08

Work Order: R08060452

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_19014		
Sample ID: C08061292-001BMS	Sample Matrix Spike				Run: SUB-C106196		08/18/08 17:00		
Polonium 210	18	pCi/L	1.0	124	70	130			
Sample ID: C08061292-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C106196		08/18/08 17:00		
Polonium 210	15	pCi/L	1.0	104	70	130	18	30	
Sample ID: LCS-19014	Laboratory Control Sample				Run: SUB-C106196		08/18/08 17:00		
Polonium 210	84	pCi/L	1.0	101	70	130			
Sample ID: MB-19014	Method Blank				Run: SUB-C106196		08/18/08 17:00		
Polonium 210	1	pCi/L							
Method: RMO-3008							Batch: C_R104448		
Sample ID: C08061335-003JMS	Sample Matrix Spike				Run: SUB-C104448		07/10/08 21:30		
Polonium 210	79	pCi/L	1.0	91	70	130			
Sample ID: C08061335-003JMSD	Sample Matrix Spike Duplicate				Run: SUB-C104448		07/10/08 21:30		
Polonium 210	60	pCi/L	1.0	69	70	130	28	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MS are acceptable the batch is approved.									
Sample ID: LCS-R104448	Laboratory Control Sample				Run: SUB-C104448		07/10/08 21:30		
Polonium 210	36	pCi/L	1.0	83	70	130			
Sample ID: MB-R104448	Method Blank				Run: SUB-C104448		07/10/08 21:30		
Polonium 210	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT. Provide as much information as possible.

Company Name: <b>ES&amp;E</b>		Project Name, PWS, Permit, Etc. <b>Robert Tech Dewey Burdock</b>		Sample Origin State: _____	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Robert Tech Dewey Burdock</b>		Email: <b>605.294.4700</b>	Sampler: (Please Print) <b>Eric Lawrence</b>
Invoice Address:		Phone/Fax: <b>605.294.4700</b>		Purchase Order:	Quote/Bottle Order:
Special Report/Formats – ELL must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Number of Containers Sample Type: AWSVB O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by: Cooler Pkg: Receipt Temp <b>8.4 °C</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal Y N Intact Y N Signature Y N	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1. Dewey Burdock GWS 622		6/25/08	12:05	W	<b>SEE ATTACHED</b> Normal Turnaround (TAT) <b>H S U R</b> Comments: <b>All GW</b> Contact ELL prior to RUSH sample submittal for charges and scheduling – See Instruction Page
2. Dewey Burdock GWS 615		6/25/08	13:55	W	
3. Dewey Burdock GWS 689		6/25/08	17:30	W	
4. Dewey Burdock GWS 689		6/25/08	18:18	W	
5.					
6.					
7.					
8.					
9.					
10.					
Custody Record Holding by (print): <b>ES&amp;E</b> Signature: <b>ES&amp;E</b> Date/Time: <b>6/25/08 0930</b>		Received by (print): <b>Steve Ford</b> Signature: <b>Steve Ford</b> Date/Time: <b>6/26/08 9:30</b>		Received by Laboratory: Signature: Date/Time:	
MUST be Signed		Sample Disposal: Return to Client:		Lab Disposal:	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

August 21, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08070005

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 2 samples from RESPEC Inc on 7/1/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070005-001	DewBurd GW16	06/30/08 13:45	07/01/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08070005-002	DewBurd GW688	06/30/08 18:39	07/01/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
Linda Larson

Rapid City - Project Manager



Date: 21-Aug-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08070005

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08070216

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08070216



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070005-001  
Client Sample ID: DewBurd GW16

Report Date: 08/21/08  
Collection Date: 06/30/08 13:45  
Date Received: 07/01/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	150	mg/L		5		1	A2320 B	07/03/08 12:27/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 12:27/mb
Bicarbonate as HCO3	183	mg/L		5		1	A2320 B	07/03/08 12:27/mb
Calcium	125	mg/L		0.5		2	E200.7	07/10/08 18:43/eli-c
Chloride	4	mg/L		1		1	E300.0	07/01/08 22:19/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/01/08 22:19/jmh
Magnesium	47.0	mg/L		0.5		2	E200.7	07/10/08 18:43/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:06/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/01/08 22:19/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/01/08 22:19/jmh
Potassium	16.7	mg/L		0.5		2	E200.7	07/10/08 18:43/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	07/10/08 18:43/eli-c
Sodium	48	mg/L	D	2		2	E200.7	07/10/08 18:43/eli-c
Sulfate	401	mg/L	D	3		50	E300.0	07/01/08 22:03/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1000	umhos/cm		5.0		1	A2510 B	07/02/08 11:39/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.38	s.u.		0.01		1	A4500-H B	07/02/08 10:52/tb
Sodium Adsorption Ratio (SAR)	0.93	unitless		0.10		1	Calculation	08/21/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	780	mg/L		5		1	A2540 C	07/02/08 16:37/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/10/08 18:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/22/08 01:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 18:43/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/10/08 18:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/22/08 01:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/10/08 18:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/22/08 01:09/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/10/08 18:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/22/08 01:09/eli-c
Manganese	0.14	mg/L		0.01		2	E200.7	07/10/08 18:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/22/08 01:09/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 18:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/10/08 18:43/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:30/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/22/08 01:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070005-001  
Client Sample ID: DewBurd GW16

Report Date: 08/21/08  
Collection Date: 06/30/08 13:45  
Date Received: 07/01/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/22/08 01:09/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/22/08 01:09/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/10/08 18:43/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	07/10/08 18:43/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/21/08 12:50/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	28.3	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha precision (±)	3.5	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha MDC	2.9	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta	19.3	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta MDC	3.1	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Lead 210	2.0	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	6.4	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/22/08 11:26/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	07/22/08 11:26/eli-c
Gross Gamma	760	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.4	pCi/L	U			1	E909.0M	07/17/08 09:30/eli-c
Lead 210 precision (±)	6.3	pCi/L				1	E909.0M	07/17/08 09:30/eli-c
Lead 210 MDC	10.6	pCi/L				1	E909.0M	07/17/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	07/23/08 22:55/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

Page 2 of 6





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070005-001  
Client Sample ID: DewBurd GW16

Report Date: 08/21/08  
Collection Date: 06/30/08 13:45  
Date Received: 07/01/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 22:55/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/23/08 22:55/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/21/08 15:32/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/21/08 15:32/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	3150	pCi/L		100		1	D5072-92	07/08/08 05:45/eli-c
Radon 222 precision (±)	128	pCi/L				1	D5072-92	07/08/08 05:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 12:35/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 12:35/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 12:35/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/21/08 14:24/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:57/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 12:35/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 12:35/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 12:35/eli-c
Iron	0.26	mg/L		0.03		2	E200.7	07/09/08 03:57/eli-c
Lead	ND	mg/L	D	0.003		10	E200.8	07/08/08 12:35/eli-c
Manganese	0.13	mg/L		0.01		10	E200.8	07/08/08 12:35/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:11/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 12:35/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 12:35/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/08/08 12:35/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 12:35/eli-c
Strontium	2.7	mg/L		0.1		10	E200.8	07/08/08 12:35/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 12:35/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/08/08 12:35/eli-c
Zinc	ND	mg/L	D	0.03		10	E200.8	07/08/08 12:35/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.63	%				1	A1030 E	08/21/08 00:00/lkl
Anions	11.5	meq/L				1	A1030 E	08/21/08 00:00/lkl
Cations	12.6	meq/L				1	A1030 E	08/21/08 00:00/lkl
Solids, Total Dissolved Calculated	743	mg/L				1	A1030 E	08/21/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	08/21/08 00:00/lkl

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070005-002  
**Client Sample ID:** DewBurd GW688

**Report Date:** 08/21/08  
**Collection Date:** 06/30/08 18:39  
**Date Received:** 07/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	136	mg/L		5		1	A2320 B	07/03/08 12:36/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 12:36/mb
Bicarbonate as HCO3	156	mg/L		5		1	A2320 B	07/03/08 12:36/mb
Calcium	40.4	mg/L		0.5		2	E200.7	07/10/08 18:47/eli-c
Chloride	11	mg/L		1		1	E300.0	07/01/08 22:52/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/01/08 22:52/jmh
Magnesium	19.2	mg/L		0.5		2	E200.7	07/10/08 18:47/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:07/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/01/08 22:52/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/01/08 22:52/jmh
Potassium	12.9	mg/L		0.5		2	E200.7	07/10/08 18:47/eli-c
Silica	3.8	mg/L		0.5		2	E200.7	07/10/08 18:47/eli-c
Sodium	191	mg/L	D	2		2	E200.7	07/10/08 18:47/eli-c
Sulfate	407	mg/L	D	3		50	E300.0	07/01/08 22:36/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1140	umhos/cm		5.0		1	A2510 B	07/02/08 11:40/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	07/07/08 14:00/jmh
pH	8.60	s.u.		0.01		1	A4500-H B	07/02/08 10:52/tb
Sodium Adsorption Ratio (SAR)	6.2	unitless		0.10		1	Calculation	08/21/08 17:06/ADM
Solids, Total Dissolved TDS @ 180 C	770	mg/L		5		1	A2540 C	07/02/08 16:38/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/10/08 18:47/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/22/08 01:16/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 18:47/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/10/08 18:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/22/08 01:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/10/08 18:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/22/08 01:16/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/10/08 18:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/22/08 01:16/eli-c
Manganese	0.02	mg/L		0.01		2	E200.7	07/10/08 18:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/22/08 01:16/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 18:47/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/10/08 18:47/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/19/08 16:36/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/22/08 01:16/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070005-002  
Client Sample ID: DewBurd GW688

Report Date: 08/21/08  
Collection Date: 06/30/08 18:39  
Date Received: 07/01/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/22/08 01:16/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/22/08 01:16/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/10/08 18:47/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/10/08 18:47/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/21/08 12:57/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:40/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	13.2	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta	16.5	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Gross Beta MDC	4.5	pCi/L				1	E900.0	07/26/08 03:40/eli-c
Lead 210	-0.1	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	0.6	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/22/08 11:26/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	07/22/08 11:26/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.3	pCi/L	U			1	E909.0M	07/17/08 09:30/eli-c
Lead 210 precision (±)	6.0	pCi/L				1	E909.0M	07/17/08 09:30/eli-c
Lead 210 MDC	10.1	pCi/L				1	E909.0M	07/17/08 09:30/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	07/23/08 22:55/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070005-002  
Client Sample ID: DewBurd GW688

Report Date: 08/21/08  
Collection Date: 06/30/08 18:39  
Date Received: 07/01/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 22:55/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/23/08 22:55/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/21/08 15:33/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/21/08 15:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	426	pCi/L		100		1	D5072-92	07/08/08 05:45/eli-c
Radon 222 precision (±)	91.9	pCi/L				1	D5072-92	07/08/08 05:45/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 12:42/eli-c
Arsenic	0.003	mg/L	D	0.002		10	E200.8	07/08/08 12:42/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 12:42/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/21/08 14:38/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 04:01/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 12:42/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 12:42/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 12:42/eli-c
Iron	0.08	mg/L		0.03		2	E200.7	07/09/08 04:01/eli-c
Lead	ND	mg/L	D	0.003		10	E200.8	07/08/08 12:42/eli-c
Manganese	0.02	mg/L		0.01		10	E200.8	07/08/08 12:42/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:14/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 12:42/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 12:42/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/08/08 12:42/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 12:42/eli-c
Strontium	1.1	mg/L		0.1		10	E200.8	07/08/08 12:42/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 12:42/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/08/08 12:42/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 12:42/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.05	%				1	A1030 E	08/21/08 00:00/lkl
Anions	11.5	meq/L				1	A1030 E	08/21/08 00:00/lkl
Cations	12.3	meq/L				1	A1030 E	08/21/08 00:00/lkl
Solids, Total Dissolved Calculated	774	mg/L				1	A1030 E	08/21/08 00:00/lkl
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	08/21/08 00:00/lkl

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080703A-ALK-SEL-W		
Sample ID: LCS1_080703A	Laboratory Control Sample				Run: PH_COND1-R_080703A			07/03/08 11:24	
Alkalinity, Total as CaCO3	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080703A	Method Blank				Run: PH_COND1-R_080703A			07/03/08 11:25	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R08070005-002AMS	Sample Matrix Spike				Run: PH_COND1-R_080703A			07/03/08 12:37	
Alkalinity, Total as CaCO3	250	mg/L	5.0	108	80	120			
Sample ID: R08070005-002AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080703A			07/03/08 12:41	
Alkalinity, Total as CaCO3	242	mg/L	5.0	100	80	120	3.3	10	
Method: A2510 B							Batch: 080702_1_COND-PROBE-W		
Sample ID: LCS_COND-1_080702	Laboratory Control Sample				Run: PH_COND2-R_080702B			07/02/08 11:33	
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: LCS1-1_080702	Laboratory Control Sample				Run: PH_COND2-R_080702B			07/02/08 11:33	
Conductivity @ 25 C	148	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_080702	Laboratory Control Sample				Run: PH_COND2-R_080702B			07/02/08 11:34	
Conductivity @ 25 C	4960	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080702	Method Blank				Run: PH_COND2-R_080702B			07/02/08 11:37	
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C							Batch: 080702A-SLDS-TDS-W		
Sample ID: LCS1_080702A	Laboratory Control Sample				Run: BAL-4-R_080702A			07/02/08 16:34	
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_080702A	Method Blank				Run: BAL-4-R_080702A			07/02/08 16:35	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08060475-001BMS	Sample Matrix Spike				Run: BAL-4-R_080702A			07/02/08 16:36	
Solids, Total Dissolved TDS @ 180 C	560	mg/L	5.0	90	80	120			
Sample ID: R08060475-001BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080702A			07/02/08 16:36	
Solids, Total Dissolved TDS @ 180 C	570	mg/L	5.0	95	80	120	1.8	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 080707-ORP-ISE-W		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: PH_COND1-R_080707A		07/07/08 14:00		
Oxidation-Reduction Potential	480	mV		100	95	105			
<b>Sample ID: R08070005-001F</b>	Sample Duplicate				Run: PH_COND1-R_080707A		07/07/08 14:00		
Oxidation-Reduction Potential	230	mV					1.5	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719B		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104481		07/19/08 12:46		
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104481		07/19/08 12:48		
Selenium-IV	0.055	mg/L	0.0010	110	90	110			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike				Run: SUB-C104481		07/19/08 13:36		
Selenium-IV	0.052	mg/L	0.0010	103	85	115			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104481		07/19/08 13:38		
Selenium-IV	0.052	mg/L	0.0010	104	85	115	0.9	10	
<b>Method: A3114 B</b>							Batch: C_SE3114-080719D		
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-C104485		07/19/08 15:42		
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-106-2</b>	Laboratory Control Sample				Run: SUB-C104485		07/19/08 15:47		
Selenium	0.050	mg/L	0.0010	100	90	110			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike				Run: SUB-C104485		07/19/08 16:32		
Selenium	0.055	mg/L	0.0010	110	85	115			
<b>Sample ID: R08070005-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C104485		07/19/08 16:34		
Selenium	0.055	mg/L	0.0010	109	85	115	0.6	10	
<b>Method: A4500-H B</b>							Batch: 080702_1_PH-W		
<b>Sample ID: LCS_pH-1_080702</b>	Laboratory Control Sample				Run: PH_COND2-R_080702A		07/02/08 10:45		
pH	6.90	s.u.	0.010	101	98.55	101.45			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2008-07-12_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080712A			07/12/08 16:27
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080712A			07/12/08 16:28
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080712A			07/12/08 16:30
Nitrogen, Ammonia as N	0.27	mg/L	0.10	107	90	110			
Sample ID: R08060509-005AMS	Sample Matrix Spike					Run: TECHAA2-R_080712A			07/12/08 17:00
Nitrogen, Ammonia as N	0.24	mg/L	0.10	97	80	120			
Sample ID: R08060509-005AMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080712A			07/12/08 17:01
Nitrogen, Ammonia as N	0.24	mg/L	0.10	96	80	120	0.4	10	
Sample ID: R08070028-003BMS	Sample Matrix Spike					Run: TECHAA2-R_080712A			07/12/08 17:14
Nitrogen, Ammonia as N	0.17	mg/L	0.10	67	80	120			S
Sample ID: R08070028-003BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080712A			07/12/08 17:15
Nitrogen, Ammonia as N	0.20	mg/L	0.10	80	80	120	17	10	R
Method: D5072-92							Batch: C_R104020		
Sample ID: R08070005-002G	Sample Duplicate					Run: SUB-C104020			07/08/08 05:45
Radon 222	362	pCi/L	100				16	30	
Sample ID: MB-R104020	Method Blank					Run: SUB-C104020			07/08/08 05:45
Radon 222	-20	pCi/L							
Sample ID: LCS-R104020	Laboratory Control Sample					Run: SUB-C104020			07/08/08 05:45
Radon 222	303	pCi/L	100	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_19044
Sample ID: MB-19044	Method Blank				Run: SUB-C103914				07/09/08 03:04
Boron	0.04	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-19044	Laboratory Control Sample				Run: SUB-C103914				07/09/08 03:08
Boron	0.535	mg/L	0.10	99	85	115			
Iron	2.57	mg/L	0.030	103	85	115			
Sample ID: R08070005-002D	Sample Matrix Spike				Run: SUB-C103914				07/09/08 04:05
Boron	0.581	mg/L	0.10	105	70	130			
Iron	2.74	mg/L	0.030	106	70	130			
Sample ID: R08070005-002D	Sample Matrix Spike Duplicate				Run: SUB-C103914				07/09/08 04:09
Boron	0.570	mg/L	0.10	103	70	130	1.8	20	
Iron	2.69	mg/L	0.030	104	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104056		
Sample ID: MB-080710A	Method Blank		Run: SUB-C104056				07/10/08 15:51		
Silica	0.04	mg/L	0.02						
Aluminum	0.009	mg/L	0.004						
Barium	0.02	mg/L	0.006						
Boron	0.03	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.003	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080710A	Laboratory Fortified Blank		Run: SUB-C104056				07/10/08 15:55		
Silica	0.46	mg/L	0.10	105	85	125			
Aluminum	1.0	mg/L	0.10	101	85	125			
Barium	1.0	mg/L	0.10	100	85	125			
Boron	1.1	mg/L	0.10	105	85	125			
Calcium	54	mg/L	0.50	108	85	125			
Chromium	1.0	mg/L	0.050	104	85	125			
Iron	1.1	mg/L	0.030	112	85	125			
Magnesium	54	mg/L	0.50	108	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.0	mg/L	0.10	102	85	125			
Nickel	1.0	mg/L	0.050	102	85	125			
Potassium	46	mg/L	0.50	93	85	125			
Sodium	51	mg/L	0.77	101	85	125			
Vanadium	1.0	mg/L	0.10	105	85	125			
Zinc	1.0	mg/L	0.010	104	85	125			
Sample ID: C08061234-001BMS2	Sample Matrix Spike		Run: SUB-C104056				07/10/08 17:08		
Aluminum	2.18	mg/L	0.10	99	70	130			
Barium	2.06	mg/L	0.10	101	70	130			
Boron	4.65	mg/L	0.10	103	70	130			
Chromium	2.07	mg/L	0.050	104	70	130			
Iron	2.21	mg/L	0.030	108	70	130			
Manganese	2.06	mg/L	0.010	103	70	130			
Molybdenum	2.02	mg/L	0.10	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104056		
Sample ID: C08061234-001BMS2	Sample Matrix Spike		Run: SUB-C104056				07/10/08 17:08		
Nickel	2.03	mg/L	0.050	102	70	130			
Vanadium	2.05	mg/L	0.10	103	70	130			
Zinc	2.08	mg/L	0.010	104	70	130			
Calcium	107	mg/L	1.0	104	70	130			
Magnesium	105	mg/L	1.0	105	70	130			
Potassium	89.8	mg/L	1.0	87	70	130			
Silica	23.6	mg/L	0.10		70	130			A
Sodium	774	mg/L	1.5		70	130			A
Sample ID: C08061234-001BMSD2	Sample Matrix Spike Duplicate		Run: SUB-C104056				07/10/08 17:12		
Aluminum	2.20	mg/L	0.10	100	70	130	1.0	20	
Barium	2.07	mg/L	0.10	102	70	130	0.5	20	
Boron	4.66	mg/L	0.10	103	70	130	0.1	20	
Chromium	2.08	mg/L	0.050	104	70	130	0.4	20	
Iron	2.21	mg/L	0.030	108	70	130	0.1	20	
Manganese	2.07	mg/L	0.010	103	70	130	0.5	20	
Molybdenum	2.04	mg/L	0.10	102	70	130	1.1	20	
Nickel	2.04	mg/L	0.050	102	70	130	0.3	20	
Vanadium	2.03	mg/L	0.10	102	70	130	0.8	20	
Zinc	2.10	mg/L	0.010	105	70	130	0.8	20	
Calcium	107	mg/L	1.0	104	70	130	0.4	20	
Magnesium	106	mg/L	1.0	106	70	130	1.0	20	
Potassium	91.0	mg/L	1.0	88	70	130	1.3	20	
Silica	23.5	mg/L	0.10		70	130	0.4	20	A
Sodium	780	mg/L	1.5		70	130	0.7	20	A
Sample ID: C08061228-001BMS2	Sample Matrix Spike		Run: SUB-C104056				07/10/08 19:20		
Aluminum	4.76	mg/L	0.10	94	70	130			
Barium	5.15	mg/L	0.10	101	70	130			
Boron	5.29	mg/L	0.10	101	70	130			
Chromium	4.98	mg/L	0.050	100	70	130			
Iron	5.11	mg/L	0.044	-51	70	130			S
Manganese	5.12	mg/L	0.010	99	70	130			
Molybdenum	4.98	mg/L	0.10	100	70	130			
Nickel	4.92	mg/L	0.050	98	70	130			
Vanadium	5.09	mg/L	0.10	102	70	130			
Zinc	5.04	mg/L	0.010	101	70	130			
Calcium	665	mg/L	1.0	99	70	130			
Magnesium	361	mg/L	1.0	100	70	130			
Potassium	260	mg/L	1.0	91	70	130			
Silica	15.7	mg/L	0.10	26	70	130			S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104056		
Sample ID: C08061228-001BMS2	Sample Matrix Spike			Run: SUB-C104056			07/10/08 19:20		
Sodium	335	mg/L	2.7	98	70	130			
Sample ID: C08061228-001BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C104056			07/10/08 19:24		
Aluminum	4.90	mg/L	0.10	97	70	130	2.7	20	
Barium	5.14	mg/L	0.10	101	70	130	0.1	20	
Boron	5.36	mg/L	0.10	102	70	130	1.2	20	
Chromium	5.02	mg/L	0.050	100	70	130	0.8	20	
Iron	5.22	mg/L	0.044	-49	70	130	2.2	20	S
Manganese	5.22	mg/L	0.010	101	70	130	1.9	20	
Molybdenum	5.01	mg/L	0.10	100	70	130	0.6	20	
Nickel	4.99	mg/L	0.050	100	70	130	1.5	20	
Vanadium	5.12	mg/L	0.10	102	70	130	0.5	20	
Zinc	5.01	mg/L	0.010	100	70	130	0.6	20	
Calcium	668	mg/L	1.0	100	70	130	0.4	20	
Magnesium	364	mg/L	1.0	101	70	130	1.0	20	
Potassium	261	mg/L	1.0	92	70	130	0.6	20	
Silica	15.9	mg/L	0.10	31	70	130	1.4	20	S
Sodium	341	mg/L	2.7	100	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_19044		
<b>Sample ID: MB-19044</b>	Method Blank		Run: SUB-C103886				07/08/08 11:07		
Antimony	0.0005	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Chromium	0.002	mg/L	5E-05						
Copper	ND	mg/L	0.0001						
Lead	0.003	mg/L							
Manganese	0.0001	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	6E-05						
Selenium	0.0002	mg/L	0.0002						
Silver	6E-05	mg/L	5E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.03	mg/L	0.0003						
<b>Sample ID: LCS3-19044</b>							Laboratory Control Sample		
							Run: SUB-C103886		
							07/08/08 11:14		
Antimony	0.514	mg/L	0.050	103	85	115			
Arsenic	0.469	mg/L	0.0010	94	85	115			
Barium	0.495	mg/L	0.10	99	85	115			
Beryllium	0.229	mg/L	0.010	91	85	115			
Cadmium	0.235	mg/L	0.010	94	85	115			
Chromium	0.490	mg/L	0.050	97	85	115			
Copper	0.469	mg/L	0.010	94	85	115			
Lead	0.509	mg/L	0.050	101	85	115			
Manganese	2.53	mg/L	0.010	101	85	115			
Molybdenum	0.482	mg/L	0.10	96	85	115			
Nickel	0.473	mg/L	0.050	95	85	115			
Selenium	0.446	mg/L	0.0020	89	85	115			
Strontium	0.488	mg/L	0.10	98	85	115			
Thallium	0.485	mg/L	0.10	97	85	115			
Uranium	0.526	mg/L	0.00032	105	85	115			
Zinc	0.499	mg/L	0.010	95	85	115			
<b>Sample ID: R08070005-002D</b>							Sample Matrix Spike		
							Run: SUB-C103886		
							07/08/08 12:49		
Antimony	0.543	mg/L	0.050	109	70	130			
Arsenic	0.532	mg/L	0.0010	106	70	130			
Barium	0.566	mg/L	0.10	110	70	130			
Beryllium	0.227	mg/L	0.010	91	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19044		
Sample ID: R08070005-002D	Sample Matrix Spike			Run: SUB-C103886			07/08/08 12:49		
Cadmium	0.262	mg/L	0.010	105	70	130			
Chromium	0.513	mg/L	0.050	101	70	130			
Copper	0.508	mg/L	0.010	102	70	130			
Lead	0.528	mg/L	0.050	105	70	130			
Manganese	2.65	mg/L	0.010	105	70	130			
Molybdenum	0.522	mg/L	0.10	104	70	130			
Nickel	0.512	mg/L	0.050	102	70	130			
Selenium	0.507	mg/L	0.0020	101	70	130			
Silver	0.0468	mg/L	0.010	94	70	130			
Strontium	1.72	mg/L	0.10	118	70	130			
Thallium	0.517	mg/L	0.10	103	70	130			
Uranium	0.537	mg/L	0.00032	107	70	130			
Zinc	0.497	mg/L	0.010	99	70	130			
Sample ID: R08070005-002D	Sample Matrix Spike Duplicate			Run: SUB-C103886			07/08/08 12:56		
Antimony	0.523	mg/L	0.050	105	70	130	3.7	20	
Arsenic	0.502	mg/L	0.0010	100	70	130	5.9	20	
Barium	0.536	mg/L	0.10	104	70	130	5.6	20	
Beryllium	0.221	mg/L	0.010	88	70	130	3.1	20	
Cadmium	0.250	mg/L	0.010	100	70	130	4.9	20	
Chromium	0.491	mg/L	0.050	97	70	130	4.5	20	
Copper	0.492	mg/L	0.010	98	70	130	3.3	20	
Lead	0.505	mg/L	0.050	101	70	130	4.3	20	
Manganese	2.56	mg/L	0.010	102	70	130	3.3	20	
Molybdenum	0.506	mg/L	0.10	101	70	130	3.2	20	
Nickel	0.490	mg/L	0.050	98	70	130	4.3	20	
Selenium	0.484	mg/L	0.0020	96	70	130	4.8	20	
Silver	0.0463	mg/L	0.010	93	70	130	1.1	20	
Strontium	1.63	mg/L	0.10	99	70	130	5.5	20	
Thallium	0.501	mg/L	0.10	100	70	130	3.3	20	
Uranium	0.524	mg/L	0.00032	105	70	130	2.3	20	
Zinc	0.476	mg/L	0.010	95	70	130	4.3	20	
Sample ID: R08070005-002D	Sample Matrix Spike			Run: SUB-C104617			07/21/08 15:12		
Antimony	0.553	mg/L	0.050	110	70	130			
Arsenic	0.521	mg/L	0.0010	104	70	130			
Barium	0.525	mg/L	0.10	102	70	130			
Beryllium	0.264	mg/L	0.010	106	70	130			
Cadmium	0.251	mg/L	0.010	100	70	130			
Chromium	0.493	mg/L	0.050	98	70	130			
Copper	0.493	mg/L	0.010	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19044		
Sample ID: R08070005-002D	Sample Matrix Spike			Run: SUB-C104617			07/21/08 15:12		
Lead	0.528	mg/L	0.050	106	70	130			
Manganese	2.48	mg/L	0.010	99	70	130			
Molybdenum	0.539	mg/L	0.10	108	70	130			
Nickel	0.492	mg/L	0.050	98	70	130			
Selenium	0.504	mg/L	0.0010	101	70	130			
Silver	0.0476	mg/L	0.010	95	70	130			
Strontium	1.68	mg/L	0.10	112	70	130			
Thallium	0.521	mg/L	0.10	104	70	130			
Uranium	0.570	mg/L	0.00030	114	70	130			
Zinc	0.491	mg/L	0.010	98	70	130			
Sample ID: R08070005-002D	Sample Matrix Spike Duplicate			Run: SUB-C104617			07/21/08 15:18		
Antimony	0.562	mg/L	0.050	112	70	130	1.7	20	
Arsenic	0.511	mg/L	0.0010	101	70	130	2.0	20	
Barium	0.528	mg/L	0.10	103	70	130	0.7	20	
Beryllium	0.262	mg/L	0.010	105	70	130	0.7	20	
Cadmium	0.253	mg/L	0.010	101	70	130	1.1	20	
Chromium	0.491	mg/L	0.050	98	70	130	0.4	20	
Copper	0.476	mg/L	0.010	95	70	130	3.5	20	
Lead	0.520	mg/L	0.050	104	70	130	1.4	20	
Manganese	2.48	mg/L	0.010	99	70	130	0.0	20	
Molybdenum	0.548	mg/L	0.10	109	70	130	1.6	20	
Nickel	0.477	mg/L	0.050	95	70	130	3.0	20	
Selenium	0.485	mg/L	0.0010	97	70	130	3.7	20	
Silver	0.0474	mg/L	0.010	95	70	130	0.6	20	
Strontium	1.59	mg/L	0.10	94	70	130	5.3	20	
Thallium	0.532	mg/L	0.10	106	70	130	2.1	20	
Uranium	0.591	mg/L	0.00030	118	70	130	3.6	20	
Zinc	0.482	mg/L	0.010	96	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Analytical Run: SUB-C104609		
<b>Sample ID: CCB</b>	Continuing Calibration Blank								07/22/08 00:24
Thorium 232	2.00E-05	mg/L	0.0010						
<b>Sample ID: CCV</b>	Continuing Calibration Verification Standard								07/22/08 00:30
Thorium 232	0.0589	mg/L	0.0010	98	90	110			
<b>Method: E200.8</b>							Batch: C_R104609		
<b>Sample ID: LRB</b>	Method Blank								07/21/08 16:56
Arsenic	ND	mg/L	4E-05						
Cadmium	ND	mg/L	3E-06						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Mercury	8E-05	mg/L	1E-05						
Silver	9E-06	mg/L	7E-06						
Uranium	ND	mg/L	2E-06						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank								07/21/08 17:02
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0494	mg/L	0.0010	99	85	115			
Mercury	0.00500	mg/L	0.0010	98	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Uranium	0.0483	mg/L	0.00030	97	85	115			
<b>Sample ID: C08070162-002CMS4</b>	Post Digestion Spike								07/22/08 02:40
Arsenic	0.0518	mg/L	0.0010	100	70	130			
Cadmium	0.0487	mg/L	0.010	97	70	130			
Copper	0.0501	mg/L	0.010	97	70	130			
Lead	0.0489	mg/L	0.050	98	70	130			
Mercury	0.00503	mg/L	0.0010	101	70	130			
Silver	0.0142	mg/L	0.010	71	70	130			
Thorium 232	0.0484	mg/L	0.0010	97	70	130			
Uranium	0.0571	mg/L	0.00030	98	70	130			
<b>Sample ID: C08070162-002CMSD4</b>	Post Digestion Spike Duplicate								07/22/08 02:47
Arsenic	0.0561	mg/L	0.0010	108	70	130	8.1	20	
Cadmium	0.0527	mg/L	0.010	105	70	130	7.9	20	
Copper	0.0550	mg/L	0.010	107	70	130	9.3	20	
Lead	0.0532	mg/L	0.050	106	70	130	8.4	20	
Mercury	0.00548	mg/L	0.0010	110	70	130	8.6	20	
Silver	0.0143	mg/L	0.010	72	70	130	0.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104609		
Sample ID: C08070162-002CMSD4	Post Digestion Spike Duplicate			Run: SUB-C104609			07/22/08 02:47		
Thorium 232	0.0529	mg/L	0.0010	106	70	130	8.8	20	
Uranium	0.0613	mg/L	0.00030	106	70	130	7.0	20	
Method: E245.1							Batch: B_33449		
Sample ID: MB-33449	Method Blank			Run: SUB-B113878			07/11/08 08:53		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33449	Laboratory Fortified Blank			Run: SUB-B113878			07/11/08 08:55		
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: B08070392-001HMS	Sample Matrix Spike			Run: SUB-B113878			07/11/08 09:00		
Mercury	0.0020	mg/L	0.0010	99	70	130			
Sample ID: B08070392-001HMSD	Sample Matrix Spike Duplicate			Run: SUB-B113878			07/11/08 09:02		
Mercury	0.0019	mg/L	0.0010	97	70	130	2.1	30	
Sample ID: B08070443-001DMS	Sample Matrix Spike			Run: SUB-B113878			07/11/08 09:23		
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08070443-001DMSD	Sample Matrix Spike Duplicate			Run: SUB-B113878			07/11/08 09:26		
Mercury	0.0018	mg/L	0.0010	92	70	130	2.7	30	
Method: E245.1							Analytical Run: SUB-B113878		
Sample ID: QCS	Initial Calibration Verification Standard						07/11/08 07:20		
Mercury	0.0020	mg/L	0.0010	98	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 08/21/08  
Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R35797		
Sample ID: LFB0807011754-3	Laboratory Fortified Blank			Run: DIONEX_080701A			07/01/08 16:34		
Chloride	4.69	mg/L	0.50	94	90	110			
Fluoride	1.85	mg/L	0.10	93	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.43	mg/L	0.10	97	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
Sample ID: LFB0807011754-4	Laboratory Fortified Blank			Run: DIONEX_080701A			07/01/08 16:51		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	1.88	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.45	mg/L	0.10	98	90	110			
Sulfate	13.9	mg/L	1.0	93	90	110			
Sample ID: R08060507-001AMS	Sample Matrix Spike			Run: DIONEX_080701A			07/01/08 20:41		
Chloride	15.6	mg/L	0.50	84	80	120			
Fluoride	2.21	mg/L	0.10	93	80	120			
Nitrogen, Nitrate as N	2.54	mg/L	0.10	93	80	120			
Nitrogen, Nitrite as N	2.52	mg/L	0.10	101	80	120			
Sulfate	62.8	mg/L	1.0	71	80	120			S
Sample ID: R08060507-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080701A			07/01/08 20:57		
Chloride	15.3	mg/L	0.50	77	80	120	2.2	10	S
Fluoride	2.09	mg/L	0.10	87	80	120	5.6	10	
Nitrogen, Nitrate as N	2.37	mg/L	0.10	86	80	120	6.9	10	
Nitrogen, Nitrite as N	2.35	mg/L	0.10	94	80	120	7.0	10	
Sulfate	62.2	mg/L	1.0	67	80	120	0.8	10	S
Sample ID: R08060417-007AMS	Sample Matrix Spike			Run: DIONEX_080701A			07/01/08 23:58		
Chloride	54.2	mg/L	1.1	87	80	120			
Fluoride	18.6	mg/L	0.11	86	80	120			
Nitrogen, Nitrate as N	23.7	mg/L	0.25	90	80	120			
Nitrogen, Nitrite as N	24.7	mg/L	0.58	99	80	120			
Sulfate	608	mg/L	1.0	74	80	120			S
Sample ID: R08060417-007AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080701A			07/02/08 00:14		
Chloride	53.6	mg/L	1.1	86	80	120	1.1	10	
Fluoride	18.0	mg/L	0.11	83	80	120	2.8	10	
Nitrogen, Nitrate as N	23.0	mg/L	0.25	87	80	120	2.9	10	
Nitrogen, Nitrite as N	24.0	mg/L	0.58	96	80	120	2.8	10	
Sulfate	607	mg/L	1.0	73	80	120	0.2	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0485		
<b>Sample ID: MB-GrAB-0485</b>	Method Blank				Run: SUB-C104921			07/26/08 03:40	
Gross Alpha	2	pCi/L							
Gross Beta	-2	pCi/L							
<b>Sample ID: UNAT-GrAB-0485</b>	Laboratory Control Sample				Run: SUB-C104921			07/26/08 03:40	
Gross Alpha	120	pCi/L	87		70	130			
<b>Sample ID: Cs137-GrAB-0485</b>	Laboratory Control Sample				Run: SUB-C104921			07/26/08 03:41	
Gross Beta	100	pCi/L	108		70	130			
<b>Sample ID: C08061318-001DMS</b>	Sample Matrix Spike				Run: SUB-C104921			07/26/08 21:24	
Gross Alpha	168	pCi/L	119		70	130			
<b>Sample ID: C08061318-001DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104921			07/26/08 21:24	
Gross Alpha	148	pCi/L	105		70	130	12	16.3	
<b>Sample ID: C08061318-001DMS</b>	Sample Matrix Spike				Run: SUB-C104921			07/26/08 21:25	
Gross Beta	95.8	pCi/L	100		70	130			
<b>Sample ID: C08061318-001DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104921			07/26/08 21:25	
Gross Beta	98.1	pCi/L	102		70	130	2.3	16	
<b>Method: E901.1</b>							Batch: C_R104840		
<b>Sample ID: LCS-R104840</b>	Laboratory Control Sample				Run: SUB-C104840			07/17/08 13:12	
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
<b>Sample ID: MB-R104840</b>	Method Blank				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	ND	pCi/L						U	
<b>Sample ID: C08070215-007HDUP</b>	Sample Duplicate				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	1000	pCi/L	20				8.7	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_19031		
Sample ID: C08070134-001EMS	Sample Matrix Spike				Run: SUB-C104729		07/23/08 21:14		
Radium 226	81	pCi/L		104	70	130			
Sample ID: C08070134-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C104729		07/23/08 21:14		
Radium 226	79	pCi/L		102	70	130	2.3	24.5	
Sample ID: MB-19031	Method Blank				Run: SUB-C104729		07/23/08 22:55		
Radium 226	-0.6	pCi/L							U
Sample ID: LCS-19031	Laboratory Control Sample				Run: SUB-C104729		07/23/08 22:55		
Radium 226	15	pCi/L		97	70	130			
Method: E903.0							Batch: C_RA226-2956		
Sample ID: C08070219-001AMS	Sample Matrix Spike				Run: SUB-C105579		08/06/08 21:37		
Radium 226	17	pCi/L		97	70	130			
Sample ID: C08070219-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C105579		08/06/08 21:37		
Radium 226	20	pCi/L		118	70	130	18	25.2	
Sample ID: MB-RA226-2956	Method Blank				Run: SUB-C105579		08/06/08 23:12		
Radium 226	-0.1	pCi/L							U
Sample ID: LCS-RA226-2956	Laboratory Control Sample				Run: SUB-C105579		08/06/08 23:12		
Radium 226	8.2	pCi/L		105	70	130			
Method: E907.0							Batch: C_19031		
Sample ID: C08070118-001AMS	Sample Matrix Spike				Run: SUB-C104845		07/21/08 15:28		
Thorium 230	103	pCi/Filter	0.20	112	70	130			
Sample ID: C08070118-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C104845		07/21/08 15:30		
Thorium 230	90.4	pCi/Filter	0.20	99	70	130	13	30	
Sample ID: LCS-19031	Laboratory Control Sample				Run: SUB-C104845		07/21/08 15:33		
Thorium 230	51.6	pCi/L	0.20	104	70	130			
Sample ID: MB-19031	Method Blank				Run: SUB-C104845		07/18/08 12:39		
Thorium 230	0.3	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0571		
Sample ID: LCS-RA-TH-ISO-0571	Laboratory Control Sample				Run: SUB-C104913				07/21/08 21:24
Thorium 230	6.31	pCi/L	0.20	103	70	130			
Sample ID: C08061333-002HMS	Sample Matrix Spike				Run: SUB-C104913				07/21/08 21:24
Thorium 230	15.3	pCi/L	0.20	94	70	130			
Sample ID: C08061333-002HMSD	Sample Matrix Spike Duplicate				Run: SUB-C104913				07/21/08 21:24
Thorium 230	16.6	pCi/L	0.20	103	70	130	8.4	30	
Sample ID: MB-RA-TH-ISO-0571	Method Blank				Run: SUB-C104913				07/23/08 22:41
Thorium 230	0.03	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_R105519		
Sample ID: MB-R105519	Method Blank				Run: SUB-C105519				07/17/08 09:30
Lead 210	-4	pCi/L							U
Sample ID: LCS-R105519	Laboratory Control Sample				Run: SUB-C105519				07/17/08 09:30
Lead 210	98	pCi/L		86	70	130			
Sample ID: C08070206-002AMS	Sample Matrix Spike				Run: SUB-C105519				07/17/08 09:30
Lead 210	1020	pCi/Filter		81	70	130			
Sample ID: C08070206-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C105519				07/17/08 09:30
Lead 210	1350	pCi/Filter		110	70	130	28	30	
<b>Method: E909.0M</b>							Batch: C_R105847		
Sample ID: C08070547-001HMS	Sample Matrix Spike				Run: SUB-C105847				07/24/08 08:45
Lead 210	560	pCi/L		91	70	130			
Sample ID: C08070547-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C105847				07/24/08 08:45
Lead 210	590	pCi/L		96	70	130	5.4	30	
Sample ID: MB-R105847	Method Blank				Run: SUB-C105847				07/24/08 08:45
Lead 210	5	pCi/L							U
Sample ID: LCS-R105847	Laboratory Control Sample				Run: SUB-C105847				07/24/08 08:45
Lead 210	130	pCi/L		106	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 08/21/08

Work Order: R08070005

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b> Batch: C_R104910									
<b>Sample ID: C08070215-001HMS</b>	Sample Matrix Spike				Run: SUB-C104910				07/14/08 17:45
Polonium 210	57	pCi/L	1.0	66	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the RPD for the MS MSD pair is acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: C08070215-001HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104910				07/14/08 17:45
Polonium 210	59	pCi/L	1.0	68	70	130	3.6	30	S
- Spike response is outside of the acceptance range for this analysis. Since the RPD for the MS MSD pair is acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: LCS-R104910</b>	Laboratory Control Sample				Run: SUB-C104910				07/14/08 17:45
Polonium 210	69	pCi/L	1.0	159	70	130			S
- LCS response is outside of the acceptance range for this analysis.									
<b>Sample ID: MB-R104910</b>	Method Blank				Run: SUB-C104910				07/14/08 17:45
Polonium 210	ND	pCi/L							U
<b>Method: RMO-3008</b> Batch: C_R106180									
<b>Sample ID: C08070215-001IMS</b>	Sample Matrix Spike				Run: SUB-C106180				08/18/08 17:00
Polonium 210	19	pCi/L	1.0	94	70	130			
<b>Sample ID: C08070215-001IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C106180				08/18/08 17:00
Polonium 210	23	pCi/L	1.0	114	70	130	19	30	
<b>Sample ID: LCS-19031</b>	Laboratory Control Sample				Run: SUB-C106180				08/18/08 17:00
Polonium 210	95	pCi/L	1.0	117	70	130			
<b>Sample ID: MB-19031</b>	Method Blank				Run: SUB-C106180				08/18/08 17:00
Polonium 210	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>RiverTail Dewey Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Copy foreman response</b>		Phone/Fax: <b>605.394.6400</b>	Sampler: (Please Print) <b>Eric Keane</b>			
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:			
Special Report/Formats - EI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____  <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by: Cooler Dye: Receipt Temp <b>3.1</b> °C On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal: Y N Intact: Y N Signature: Y N Match: Y N				
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED			
1. <b>Dewey Burdock</b>		<b>6/30/08</b>	<b>13:45</b>	<b>W</b>	<b>SEE ATTACHED</b> Normal Turnaround (TAT) <b>RUSH</b> Contact EI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: <b>All GW</b> <b>Panel domestic set 11-17 set 27</b>			
2. <b>Dewey Burdock</b>		<b>6/30/08</b>	<b>18:39</b>	<b>W</b>				
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
Custody Record MUST be Signed		Relinquished by (print): <b>Eric Keane</b>	Date/Time: <b>6/30/08 20:50</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Linda Larson</b>	Date/Time: <b>6/1/08 04:45</b>	Signature: <b>[Signature]</b>	
Sample Disposal: Return to Client:		Lab Disposal:		Received by Laboratory: <b>Linda Larson</b>			Date/Time: <b>6/1/08 04:45</b>	Signature: <b>[Signature]</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

September 09, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08070035      Quote ID: R286  
Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 7/2/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070035-001	DewBurd GW693	07/01/08 19:39	07/02/08	Aqueous	Metals by ICP/CPMS, Dissolved Metals by ICP/CPMS, Suspended Metals by ICP/CPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08070035-002	DewBurd GW691	07/01/08 19:17	07/02/08	Aqueous	Same As Above
R08070035-003	DewBurd GW49	07/01/08 18:26	07/02/08	Aqueous	Same As Above
R08070035-004	DewBurd GW687	07/01/08 18:02	07/02/08	Aqueous	Same As Above
R08070035-005	DewBurd GW681	07/01/08 16:54	07/02/08	Aqueous	Same As Above
R08070035-006	DewBurd GW689	07/01/08 16:17	07/02/08	Aqueous	Same As Above
R08070035-007	DewBurd GW685	07/01/08 15:48	07/02/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.



Date: 09-Sep-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08070035

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08070215

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.  
End of comments imported for SUBBED Workorder: C08070215





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-001  
Client Sample ID: DewBurd GW693

Report Date: 09/09/08  
Collection Date: 07/01/08 19:39  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	68	mg/L		5		1	A2320 B	07/03/08 12:50/mb
Carbonate as CO3	7	mg/L		5		1	A2320 B	07/03/08 12:50/mb
Bicarbonate as HCO3	68	mg/L		5		1	A2320 B	07/03/08 12:50/mb
Calcium	73.7	mg/L		0.5		2	E200.7	07/21/08 13:55/eli-c
Chloride	38	mg/L	D	2		20	E300.0	07/03/08 00:04/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/03/08 00:21/jmh
Magnesium	35.2	mg/L		0.5		2	E200.7	07/21/08 13:55/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:23/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 00:21/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 00:21/jmh
Potassium	8.6	mg/L		0.5		2	E200.7	07/21/08 13:55/eli-c
Silica	5.0	mg/L		0.5		2	E200.7	07/21/08 13:55/eli-c
Sodium	380	mg/L	D	2		2	E200.7	07/21/08 13:55/eli-c
Sulfate	886	mg/L		1		20	E300.0	07/03/08 00:04/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1650	umhos/cm		5.0		1	A2510 B	07/02/08 11:45/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	07/07/08 14:00/jmh
pH	9.03	s.u.		0.01		1	A4500-H B	07/02/08 10:53/tb
Sodium Adsorption Ratio (SAR)	9.1	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	1400	mg/L		5		1	A2540 C	07/02/08 16:38/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 13:55/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/23/08 16:55/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 13:55/eli-c
Boron	1.0	mg/L		0.1		2	E200.7	07/21/08 13:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 16:55/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 13:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 16:55/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	07/21/08 13:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 16:55/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/21/08 13:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 16:55/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 13:55/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 13:55/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 14:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-001  
Client Sample ID: DewBurd GW693

Report Date: 09/09/08  
Collection Date: 07/01/08 19:39  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 16:55/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/23/08 16:55/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 13:55/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 13:55/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:03/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:19/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2.8	pCi/L	U			1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	6.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	2.7	pCi/L	U			1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	4.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	6.6	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	1.3	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	0.6	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/03/08 18:40/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	08/03/08 18:40/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1.3	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	07/23/08 12:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-001  
Client Sample ID: DewBurd GW693

Report Date: 09/09/08  
Collection Date: 07/01/08 19:39  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/29/08 09:57/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:57/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	424	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	49.7	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 11:28/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	07/08/08 11:28/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 11:28/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/08/08 11:28/eli-c
Boron	1.1	mg/L		0.1		2	E200.7	07/09/08 03:12/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 11:28/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 11:28/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 11:28/eli-c
Iron	1.44	mg/L		0.03		2	E200.7	07/09/08 03:12/eli-c
Lead	ND	mg/L	D	0.003		10	E200.8	07/08/08 11:28/eli-c
Manganese	0.01	mg/L		0.01		10	E200.8	07/08/08 11:28/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:21/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:33/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 11:28/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 11:28/eli-c
Selenium	0.005	mg/L	D	0.002		10	E200.8	07/08/08 11:28/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 11:28/eli-c
Strontium	2.1	mg/L		0.1		10	E200.8	07/08/08 11:28/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 11:28/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/08/08 11:28/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 11:28/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.47	%				1	A1030 E	09/05/08 00:00/jmh
Anions	20.9	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	23.3	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	1480	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	09/05/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-002  
Client Sample ID: DewBurd GW691

Report Date: 09/09/08  
Collection Date: 07/01/08 19:17  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	1160	mg/L		5		1	A2320 B	07/03/08 12:59/mb
Carbonate as CO3	19	mg/L		5		1	A2320 B	07/03/08 12:59/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	07/03/08 12:59/mb
Calcium	251	mg/L		0.5		2	E200.7	07/21/08 14:07/eli-c
Chloride	113	mg/L	D	5		50	E300.0	07/03/08 00:37/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	07/03/08 00:54/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	07/21/08 14:07/eli-c
Nitrogen, Ammonia as N	1.2	mg/L		0.1		2	A4500-NH3 G	07/12/08 18:08/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 00:54/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 00:54/jmh
Potassium	16.7	mg/L		0.5		2	E200.7	07/21/08 14:07/eli-c
Silica	0.8	mg/L		0.5		2	E200.7	07/21/08 14:07/eli-c
Sodium	373	mg/L	D	2		2	E200.7	07/21/08 14:07/eli-c
Sulfate	159	mg/L	D	3		50	E300.0	07/03/08 00:37/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5360	umhos/cm		5.0		1	A2510 B	07/02/08 11:46/tb
Oxidation-Reduction Potential	24	mV				1	A2580 B	07/07/08 14:00/jmh
pH	12.4	s.u.		0.01		1	A4500-H B	07/02/08 10:54/tb
Sodium Adsorption Ratio (SAR)	6.5	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	1500	mg/L		5		1	A2540 C	07/02/08 16:38/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:07/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/23/08 17:02/eli-c
Barium	0.5	mg/L		0.1		2	E200.7	07/21/08 14:07/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/21/08 14:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 14:45/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 17:02/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:07/eli-c
Lead	0.011	mg/L		0.001		1	E200.8	07/23/08 17:02/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/21/08 14:07/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:02/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:07/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:07/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 14:45/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070035-002  
**Client Sample ID:** DewBurd GW691

**Report Date:** 09/09/08  
**Collection Date:** 07/01/08 19:17  
**Date Received:** 07/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:02/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/23/08 17:02/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:07/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/21/08 14:07/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:07/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:26/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	2.9	pCi/L	U			1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	6.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	9.9	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	15.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	5.7	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	9.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	0.5	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	1.2	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/03/08 18:40/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/03/08 18:40/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	2.2	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	07/23/08 12:43/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-002  
Client Sample ID: DewBurd GW691

Report Date: 09/09/08  
Collection Date: 07/01/08 19:17  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/29/08 09:57/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:57/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	119	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	45.7	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 11:34/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 11:34/eli-c
Barium	0.5	mg/L		0.1		10	E200.8	07/08/08 11:34/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/08/08 11:34/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:20/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 11:34/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 11:34/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 11:34/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	07/09/08 03:20/eli-c
Lead	0.035	mg/L		0.001		10	E200.8	07/08/08 11:34/eli-c
Manganese	ND	mg/L		0.01		10	E200.8	07/08/08 11:34/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:28/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:36/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 11:34/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 11:34/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/08/08 11:34/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 11:34/eli-c
Strontium	5.3	mg/L		0.1		10	E200.8	07/08/08 11:34/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 11:34/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/08/08 11:34/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 11:34/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.590	%				1	A1030 E	09/05/08 00:00/jmh
Anions	29.6	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	29.3	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	1610	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	09/05/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-003  
Client Sample ID: DewBurd GW49

Report Date: 09/09/08  
Collection Date: 07/01/08 18:26  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	07/03/08 13:03/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 13:03/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	07/03/08 13:03/mb
Calcium	62.2	mg/L		0.5		2	E200.7	07/21/08 14:15/eli-c
Chloride	12	mg/L		1		1	E300.0	07/03/08 01:59/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/03/08 01:59/jmh
Magnesium	25.2	mg/L		0.5		2	E200.7	07/21/08 14:15/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:24/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 01:59/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 01:59/jmh
Potassium	10.4	mg/L		0.5		2	E200.7	07/21/08 14:15/eli-c
Silica	4.6	mg/L		0.5		2	E200.7	07/21/08 14:15/eli-c
Sodium	226	mg/L	D	2		2	E200.7	07/21/08 14:15/eli-c
Sulfate	465	mg/L		1		20	E300.0	07/03/08 01:10/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1200	umhos/cm		5.0		1	A2510 B	07/02/08 11:47/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.91	s.u.		0.01		1	A4500-H B	07/02/08 10:57/tb
Sodium Adsorption Ratio (SAR)	6.1	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	07/02/08 16:38/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:15/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/23/08 17:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 14:15/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 14:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 17:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 17:09/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 17:09/eli-c
Manganese	0.14	mg/L		0.01		2	E200.7	07/21/08 14:15/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:09/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:15/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:15/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 14:52/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-003  
Client Sample ID: DewBurd GW49

Report Date: 09/09/08  
Collection Date: 07/01/08 18:26  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:09/eli-c
Uranium	0.0011	mg/L		0.0003		1	E200.8	07/23/08 17:09/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:15/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 14:15/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:11/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:28/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	8.2	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	3.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	7.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	1.6	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	2.2	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/03/08 18:40/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/03/08 18:40/eli-c
Gross Gamma	920	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1.3	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	07/23/08 12:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-003  
Client Sample ID: DewBurd GW49

Report Date: 09/09/08  
Collection Date: 07/01/08 18:26  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	07/29/08 09:57/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:57/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	477	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	50.8	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 11:41/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 11:41/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 11:41/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/08/08 11:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:24/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 11:41/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 11:41/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 11:41/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	07/09/08 03:24/eli-c
Lead	ND	mg/L	D	0.003		10	E200.8	07/08/08 11:41/eli-c
Manganese	0.12	mg/L		0.01		10	E200.8	07/08/08 11:41/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:30/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:38/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 11:41/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 11:41/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/08/08 11:41/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 11:41/eli-c
Strontium	1.1	mg/L		0.1		10	E200.8	07/08/08 11:41/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 11:41/eli-c
Uranium	0.0011	mg/L		0.0003		10	E200.8	07/08/08 11:41/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 11:41/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	6.51	%				1	A1030 E	09/05/08 00:00/jmh
Anions	13.4	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	15.3	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	915	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	09/05/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-004  
Client Sample ID: DewBurd GW687

Report Date: 09/09/08  
Collection Date: 07/01/08 18:02  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	184	mg/L		5		1	A2320 B	07/03/08 13:07/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 13:07/mb
Bicarbonate as HCO3	224	mg/L		5		1	A2320 B	07/03/08 13:07/mb
Calcium	76.7	mg/L		0.5		2	E200.7	07/21/08 14:19/eli-
Chloride	11	mg/L		1		1	E300.0	07/03/08 03:05/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/03/08 03:05/jmh
Magnesium	29.9	mg/L		0.5		2	E200.7	07/21/08 14:19/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:25/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 03:05/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 03:05/jmh
Potassium	10.7	mg/L		0.5		2	E200.7	07/21/08 14:19/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	07/21/08 14:19/eli-c
Sodium	208	mg/L	D	2		2	E200.7	07/21/08 14:19/eli-c
Sulfate	458	mg/L		1		20	E300.0	07/03/08 02:16/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	07/02/08 11:48/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	07/02/08 10:59/tb
Sodium Adsorption Ratio (SAR)	5.1	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	07/02/08 16:39/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:19/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/23/08 17:15/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 14:19/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 14:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 17:15/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 17:15/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 17:15/eli-c
Manganese	0.11	mg/L		0.01		2	E200.7	07/21/08 14:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:15/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:19/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:19/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 20:28/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070035-004  
**Client Sample ID:** DewBurd GW687

**Report Date:** 09/09/08  
**Collection Date:** 07/01/08 18:02  
**Date Received:** 07/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:15/eli-c
Uranium	0.0040	mg/L		0.0003		1	E200.8	07/23/08 17:15/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:19/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 14:19/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:32/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:30/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	114	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	7.5	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	33.5	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	3.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	3.9	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.8	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	25.7	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	1	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/03/08 18:40/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	08/03/08 18:40/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-4.0	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.8	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.48	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070035-004  
**Client Sample ID:** DewBurd GW687

**Report Date:** 09/09/08  
**Collection Date:** 07/01/08 18:02  
**Date Received:** 07/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/29/08 09:57/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:57/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	3380	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	79.9	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 11:48/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 11:48/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 11:48/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/08/08 11:48/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:28/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 11:48/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 11:48/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 11:48/eli-c
Iron	0.11	mg/L		0.03		2	E200.7	07/09/08 03:28/eli-c
Lead	ND	mg/L	D	0.003		10	E200.8	07/08/08 11:48/eli-c
Manganese	0.10	mg/L		0.01		10	E200.8	07/08/08 11:48/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:33/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:40/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 11:48/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 11:48/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/08/08 11:48/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 11:48/eli-c
Strontium	1.4	mg/L		0.1		10	E200.8	07/08/08 11:48/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 11:48/eli-c
Uranium	0.0042	mg/L		0.0003		10	E200.8	07/08/08 11:48/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 11:48/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.13	%				1	A1030 E	09/05/08 00:00/jmh
Anions	13.6	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	15.6	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	918	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	09/05/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-005  
Client Sample ID: DewBurd GW681

Report Date: 09/09/08  
Collection Date: 07/01/08 16:54  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	07/03/08 13:14/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 13:14/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	07/03/08 13:14/mb
Calcium	67.4	mg/L		0.5		2	E200.7	07/21/08 14:23/eli-c
Chloride	16	mg/L		1		1	E300.0	07/03/08 03:38/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/03/08 03:38/jmh
Magnesium	25.8	mg/L		0.5		2	E200.7	07/21/08 14:23/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:27/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 03:38/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 03:38/jmh
Potassium	9.7	mg/L		0.5		2	E200.7	07/21/08 14:23/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	07/21/08 14:23/eli-c
Sodium	218	mg/L	D	2		2	E200.7	07/21/08 14:23/eli-c
Sulfate	457	mg/L		1		20	E300.0	07/03/08 03:21/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	07/02/08 11:49/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.85	s.u.		0.01		1	A4500-H B	07/02/08 11:00/tb
Sodium Adsorption Ratio (SAR)	5.7	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	07/02/08 16:39/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:23/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/23/08 17:22/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 14:23/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 14:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 17:22/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:23/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 17:22/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 17:22/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	07/21/08 14:23/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:22/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:23/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:23/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 21:02/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-005  
Client Sample ID: DewBurd GW681

Report Date: 09/09/08  
Collection Date: 07/01/08 16:54  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:22/eli-c
Uranium	0.0094	mg/L		0.0003		1	E200.8	07/23/08 17:22/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:23/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 14:23/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:32/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1180	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	23.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	326	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	6.3	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	30.0	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	5.1	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	357	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	3.9	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/03/08 18:40/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	08/03/08 18:40/eli-c
Gross Gamma	1500	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	5.3	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	6.0	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.71	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	1.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-005  
Client Sample ID: DewBurd GW681

Report Date: 09/09/08  
Collection Date: 07/01/08 16:54  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	07/29/08 09:58/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:58/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	281000	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	609	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 12:15/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 12:15/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 12:15/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/21/08 14:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:32/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 12:15/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 12:15/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 12:15/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	07/09/08 03:32/eli-c
Lead	0.006	mg/L	D	0.004		10	E200.8	07/08/08 12:15/eli-c
Manganese	0.08	mg/L		0.01		10	E200.8	07/08/08 12:15/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:35/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:43/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 12:15/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 12:15/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/08/08 12:15/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 12:15/eli-c
Strontium	1.2	mg/L		0.1		10	E200.8	07/08/08 12:15/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 12:15/eli-c
Uranium	0.0092	mg/L		0.0003		10	E200.8	07/08/08 12:15/eli-c
Zinc	0.09	mg/L	D	0.03		10	E200.8	07/08/08 12:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	6.24	%				1	A1030 E	09/05/08 00:00/jmh
Anions	13.4	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	15.2	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	910	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	09/05/08 00:00/jmh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

U - Not detected at minimum detectable concentration



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-006  
Client Sample ID: DewBurd GW689

Report Date: 09/09/08  
Collection Date: 07/01/08 16:17  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	150	mg/L		5		1	A2320 B	07/03/08 13:16/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 13:16/mb
Bicarbonate as HCO3	183	mg/L		5		1	A2320 B	07/03/08 13:16/mb
Calcium	49.6	mg/L		0.5		2	E200.7	07/21/08 14:39/eli-
Chloride	5	mg/L		1		1	E300.0	07/03/08 04:11/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/03/08 04:11/jmh
Magnesium	16.9	mg/L		0.5		2	E200.7	07/21/08 14:39/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 04:11/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 04:11/jmh
Potassium	7.8	mg/L		0.5		2	E200.7	07/21/08 14:39/eli-c
Silica	5.0	mg/L		0.5		2	E200.7	07/21/08 14:39/eli-c
Sodium	179	mg/L	D	2		2	E200.7	07/21/08 14:39/eli-c
Sulfate	354	mg/L		1		20	E300.0	07/03/08 03:54/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1010	umhos/cm		5.0		1	A2510 B	07/02/08 11:51/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.84	s.u.		0.01		1	A4500-H B	07/02/08 11:01/tb
Sodium Adsorption Ratio (SAR)	5.6	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	710	mg/L		5		1	A2540 C	07/02/08 16:39/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:39/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/25/08 21:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 14:39/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 14:39/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 21:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/25/08 21:09/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:39/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 17:29/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	07/21/08 14:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:29/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:39/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:39/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 21:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-006  
Client Sample ID: DewBurd GW689

Report Date: 09/09/08  
Collection Date: 07/01/08 16:17  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:29/eli-c
Uranium	0.0032	mg/L		0.0003		1	E200.8	07/23/08 17:29/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:39/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 14:39/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:40/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	33.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	3.9	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	14.7	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	3.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	1.1	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	7.7	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	08/04/08 00:44/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/04/08 00:44/eli-c
Gross Gamma	930	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3.9	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.8	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.9	pCi/L				1	E903.0	07/23/08 12:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070035-006  
**Client Sample ID:** DewBurd GW689

**Report Date:** 09/09/08  
**Collection Date:** 07/01/08 16:17  
**Date Received:** 07/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	07/29/08 09:58/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/29/08 09:58/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1820	pCi/L		100		1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	66.7	pCi/L				1	D5072-92	07/03/08 16:32/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/08/08 12:22/eli-c
Arsenic	ND	mg/L	D	0.002		10	E200.8	07/08/08 12:22/eli-c
Barium	ND	mg/L		0.1		10	E200.8	07/08/08 12:22/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/21/08 14:11/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/09/08 03:36/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/08/08 12:22/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/08/08 12:22/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/08/08 12:22/eli-c
Iron	2.23	mg/L		0.03		2	E200.7	07/09/08 03:36/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/08/08 12:22/eli-c
Manganese	0.09	mg/L		0.01		10	E200.8	07/08/08 12:22/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 09:37/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:45/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	07/08/08 12:22/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/08/08 12:22/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/08/08 12:22/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/08/08 12:22/eli-c
Strontium	0.9	mg/L		0.1		10	E200.8	07/08/08 12:22/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/08/08 12:22/eli-c
Uranium	0.0073	mg/L		0.0003		10	E200.8	07/08/08 12:22/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	07/08/08 12:22/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.87	%				1	A1030 E	09/05/08 00:00/jmh
Anions	10.6	meq/L				1	A1030 E	09/05/08 00:00/jmh
Cations	11.9	meq/L				1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	717	mg/L				1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	09/05/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-007  
Client Sample ID: DewBurd GW685

Report Date: 09/09/08  
Collection Date: 07/01/08 15:48  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	162	mg/L		5		1	A2320 B	07/03/08 13:18/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/03/08 13:18/mb
Bicarbonate as HCO3	197	mg/L		5		1	A2320 B	07/03/08 13:18/mb
Calcium	71.9	mg/L		0.5		2	E200.7	07/21/08 14:43/eli-c
Chloride	11	mg/L		1		1	E300.0	07/03/08 05:16/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/03/08 05:16/jmh
Magnesium	26.2	mg/L		0.5		2	E200.7	07/21/08 14:43/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/12/08 17:31/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/03/08 05:16/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/03/08 05:16/jmh
Potassium	9.9	mg/L		0.5		2	E200.7	07/21/08 14:43/eli-c
Silica	4.5	mg/L		0.5		2	E200.7	07/21/08 14:43/eli-c
Sodium	206	mg/L	D	2		2	E200.7	07/21/08 14:43/eli-c
Sulfate	460	mg/L		1		20	E300.0	07/03/08 04:27/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1150	umhos/cm		5.0		1	A2510 B	07/02/08 11:53/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	07/07/08 14:00/jmh
pH	7.91	s.u.		0.01		1	A4500-H B	07/02/08 11:02/tb
Sodium Adsorption Ratio (SAR)	5.3	unitless		0.10		1	Calculation	09/05/08 14:46/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	07/02/08 16:40/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/21/08 14:43/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	07/23/08 17:35/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 14:43/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 14:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 21:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 14:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 17:35/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/21/08 14:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 17:35/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	07/21/08 14:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 17:35/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 14:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 14:43/eli-c
Selenium	0.003	mg/L		0.001		1	A3114 B	07/28/08 15:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 21:16/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070035-007  
**Client Sample ID:** DewBurd GW685

**Report Date:** 09/09/08  
**Collection Date:** 07/01/08 15:48  
**Date Received:** 07/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 17:35/eli-c
Uranium	0.0057	mg/L		0.0003		1	E200.8	07/23/08 17:35/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/21/08 14:43/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 14:43/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 14:44/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	0.003	mg/L		0.001		1	A3114 B	07/28/08 13:40/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	23.8	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta	12.0	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Gross Beta MDC	4.4	pCi/L				1	E900.0	08/02/08 23:41/eli-c
Lead 210	5.9	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.8	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/14/08 17:45/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	07/14/08 17:45/eli-c
Radium 226	2.3	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/04/08 00:44/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/04/08 00:44/eli-c
Gross Gamma	940	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-1.1	pCi/L	U			1	E909.0M	07/22/08 11:00/eli-c
Lead 210 precision (±)	5.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Lead 210 MDC	9.9	pCi/L				1	E909.0M	07/22/08 11:00/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.48	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	0.3	pCi/L				1	E903.0	07/23/08 12:43/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070035-007  
Client Sample ID: DewBurd GW685

Report Date: 09/09/08  
Collection Date: 07/01/08 15:48  
Date Received: 07/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	07/23/08 12:43/eli-c
Radium 226 MDC	0.3	pCi/L					1	E903.0	07/23/08 12:43/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	07/29/08 09:57/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	07/29/08 09:57/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	9460	pCi/L		100			1	D5072-92	07/03/08 16:32/eli-c
Radon 222 precision (±)	121	pCi/L					1	D5072-92	07/03/08 16:32/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			10	E200.8	07/08/08 12:29/eli-c
Arsenic	0.005	mg/L	D	0.002			10	E200.8	07/08/08 12:29/eli-c
Barium	ND	mg/L		0.1			10	E200.8	07/08/08 12:29/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	07/21/08 14:17/eli-c
Boron	ND	mg/L		0.1			2	E200.7	07/09/08 03:41/eli-c
Cadmium	ND	mg/L		0.005			10	E200.8	07/08/08 12:29/eli-c
Chromium	ND	mg/L		0.05			10	E200.8	07/08/08 12:29/eli-c
Copper	ND	mg/L		0.01			10	E200.8	07/08/08 12:29/eli-c
Iron	ND	mg/L		0.03			2	E200.7	07/09/08 03:41/eli-c
Lead	ND	mg/L	D	0.003			10	E200.8	07/08/08 12:29/eli-c
Manganese	0.08	mg/L		0.01			10	E200.8	07/08/08 12:29/eli-c
Mercury	ND	mg/L		0.0002			1	E245.1	07/11/08 09:40/eli-b
Mercury	ND	mg/L		0.0001			1	E245.1	07/11/08 10:01/eli-b
Molybdenum	ND	mg/L		0.1			10	E200.8	07/08/08 12:29/eli-c
Nickel	ND	mg/L		0.05			10	E200.8	07/08/08 12:29/eli-c
Selenium	0.005	mg/L	D	0.002			10	E200.8	07/08/08 12:29/eli-c
Silver	ND	mg/L		0.005			10	E200.8	07/08/08 12:29/eli-c
Strontium	1.2	mg/L		0.1			10	E200.8	07/08/08 12:29/eli-c
Thallium	ND	mg/L		0.001			10	E200.8	07/08/08 12:29/eli-c
Uranium	0.0056	mg/L		0.0003			10	E200.8	07/08/08 12:29/eli-c
Zinc	ND	mg/L		0.01			10	E200.8	07/08/08 12:29/eli-c
DATA QUALITY									
A/C Balance (± 5)	6.47	%					1	A1030 E	09/05/08 00:00/jmh
Anions	13.2	meq/L					1	A1030 E	09/05/08 00:00/jmh
Cations	15.0	meq/L					1	A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	896	mg/L					1	A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.04						1	A1030 E	09/05/08 00:00/jmh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080703A-ALK-SEL-W							
Sample ID: LCS1_080703A	Laboratory Control Sample					Run: PH_COND1-R_080703A			07/03/08 11:24
Alkalinity, Total as CaCO <sub>3</sub>	948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080703A	Method Blank					Run: PH_COND1-R_080703A			07/03/08 11:25
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08070005-002AMS	Sample Matrix Spike					Run: PH_COND1-R_080703A			07/03/08 12:37
Alkalinity, Total as CaCO <sub>3</sub>	250	mg/L	5.0	108	80	120			
Sample ID: R08070005-002AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080703A			07/03/08 12:41
Alkalinity, Total as CaCO <sub>3</sub>	242	mg/L	5.0	100	80	120	3.3	10	
Sample ID: R08070071-001AMS	Sample Matrix Spike					Run: PH_COND1-R_080703A			07/03/08 13:25
Alkalinity, Total as CaCO <sub>3</sub>	216	mg/L	5.0	113	80	120			
Sample ID: R08070071-001AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080703A			07/03/08 14:07
Alkalinity, Total as CaCO <sub>3</sub>	194	mg/L	5.0	92	80	120	11	10	R
Method: A2510 B		Batch: 080702_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080702	Laboratory Control Sample					Run: PH_COND2-R_080702B			07/02/08 11:33
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: LCS1-1_080702	Laboratory Control Sample					Run: PH_COND2-R_080702B			07/02/08 11:33
Conductivity @ 25 C	148	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_080702	Laboratory Control Sample					Run: PH_COND2-R_080702B			07/02/08 11:34
Conductivity @ 25 C	4960	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080702	Method Blank					Run: PH_COND2-R_080702B			07/02/08 11:37
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08070035-006ADUP	Sample Duplicate					Run: PH_COND2-R_080702B			07/02/08 11:52
Conductivity @ 25 C	1000	umhos/cm	5.0				1.0	10	
Sample ID: R08070035-007ADUP	Sample Duplicate					Run: PH_COND2-R_080702B			07/02/08 11:54
Conductivity @ 25 C	1140	umhos/cm	5.0				0.9	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 080702A-SLDS-TDS-W		
Sample ID: LCS1_080702A	Laboratory Control Sample				Run: BAL-4-R_080702A				07/02/08 16:34
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_080702A	Method Blank				Run: BAL-4-R_080702A				07/02/08 16:35
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08060475-001BMS	Sample Matrix Spike				Run: BAL-4-R_080702A				07/02/08 16:36
Solids, Total Dissolved TDS @ 180 C	560	mg/L	5.0	90	80	120			
Sample ID: R08060475-001BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080702A				07/02/08 16:36
Solids, Total Dissolved TDS @ 180 C	570	mg/L	5.0	95	80	120	1.8	10	
Sample ID: R08070035-006AMS	Sample Matrix Spike				Run: BAL-4-R_080702A				07/02/08 16:40
Solids, Total Dissolved TDS @ 180 C	920	mg/L	5.0	108	80	120			
Sample ID: R08070035-006AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080702A				07/02/08 16:40
Solids, Total Dissolved TDS @ 180 C	920	mg/L	5.0	107	80	120	0.2	10	
Method: A2580 B							Batch: 080707-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080707A				07/07/08 14:00
Oxidation-Reduction Potential	480	mV		100	95	105			
Sample ID: R08070005-001F	Sample Duplicate				Run: PH_COND1-R_080707A				07/07/08 14:00
Oxidation-Reduction Potential	230	mV					1.5	10	
Method: A3114 B							Batch: C_SE3114-080728B		
Sample ID: MBLK	Method Blank				Run: SUB-C104944				07/28/08 13:15
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-106-2	Laboratory Control Sample				Run: SUB-C104944				07/28/08 13:17
Selenium-IV	0.054	mg/L	0.0010	108	90	110			
Sample ID: R08070035-001E	Sample Matrix Spike				Run: SUB-C104944				07/28/08 13:21
Selenium-IV	0.053	mg/L	0.0010	106	85	115			
Sample ID: R08070035-001E	Sample Matrix Spike Duplicate				Run: SUB-C104944				07/28/08 13:23
Selenium-IV	0.053	mg/L	0.0010	105	85	115	0.5	10	
Sample ID: C08070737-004EMS	Sample Matrix Spike				Run: SUB-C104944				07/28/08 13:51
Selenium-IV	0.050	mg/L	0.0010	99	85	115			
Sample ID: C08070737-004EMSD	Sample Matrix Spike Duplicate				Run: SUB-C104944				07/28/08 13:53
Selenium-IV	0.051	mg/L	0.0010	101	85	115	2.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080728C		
Sample ID: MBLK	Method Blank				Run: SUB-C104959			07/28/08 15:28	
Selenium	ND	mg/L	6E-05						
Sample ID: 288-106-2	Laboratory Control Sample				Run: SUB-C104959			07/28/08 15:30	
Selenium	0.055	mg/L	0.0010	109	90	110			
Sample ID: R08070035-001E	Sample Matrix Spike				Run: SUB-C104959			07/28/08 15:34	
Selenium	0.052	mg/L	0.0010	104	85	115			
Sample ID: R08070035-001E	Sample Matrix Spike Duplicate				Run: SUB-C104959			07/28/08 15:37	
Selenium	0.050	mg/L	0.0010	100	85	115	3.4	10	
Sample ID: C08070737-004EMS	Sample Matrix Spike				Run: SUB-C104959			07/28/08 16:04	
Selenium	0.048	mg/L	0.0010	95	85	115			
Sample ID: C08070737-004EMSD	Sample Matrix Spike Duplicate				Run: SUB-C104959			07/28/08 16:06	
Selenium	0.048	mg/L	0.0010	97	85	115	1.8	10	
Method: A4500-H B							Batch: 080702_1_PH-W		
Sample ID: LCS_pH-1_080702	Laboratory Control Sample				Run: PH_COND2-R_080702A			07/02/08 10:45	
pH	6.90	s.u.	0.010	101	98.55	101.45			
Sample ID: R08070035-002ADUP	Sample Duplicate				Run: PH_COND2-R_080702A			07/02/08 10:55	
pH	12.3	s.u.	0.010				0.6	1.25	
Sample ID: R08070035-007ADUP	Sample Duplicate				Run: PH_COND2-R_080702A			07/02/08 11:04	
pH	7.93	s.u.	0.010				0.3	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b> Batch: A2008-07-12_2_NH3_01									
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01				Run: TECHAA2-R_080712A		07/12/08 16:27
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.26	mg/L	0.10	104	90	110	Run: TECHAA2-R_080712A		07/12/08 16:28
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.27	mg/L	0.10	107	90	110	Run: TECHAA2-R_080712A		07/12/08 16:30
<b>Sample ID: R08070028-003BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.17	mg/L	0.10	67	80	120	Run: TECHAA2-R_080712A		07/12/08 17:14 S
<b>Sample ID: R08070028-003BMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.20	mg/L	0.10	80	80	120	Run: TECHAA2-R_080712A	17	07/12/08 17:15 10 R
<b>Sample ID: R08070035-005BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.33	mg/L	0.10	104	80	120	Run: TECHAA2-R_080712A		07/12/08 17:28
<b>Sample ID: R08070035-005BMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.34	mg/L	0.10	105	80	120	Run: TECHAA2-R_080712A	0.9	07/12/08 17:29 10
<b>Sample ID: R08070071-001BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.22	mg/L	0.10	88	80	120	Run: TECHAA2-R_080712A		07/12/08 18:11
<b>Sample ID: R08070071-001BMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.23	mg/L	0.10	93	80	120	Run: TECHAA2-R_080712A	4.9	07/12/08 18:12 10
<b>Method: D5072-92</b> Batch: C_R103780									
<b>Sample ID: R08070035-007G</b> Radon 222	Sample Duplicate 9480	pCi/L	100				Run: SUB-C103780	0.2	07/03/08 16:32 30
<b>Sample ID: MB-R103780</b> Radon 222	Method Blank 20	pCi/L					Run: SUB-C103780		07/03/08 16:32
<b>Sample ID: LCS-R103780</b> Radon 222	Laboratory Control Sample 303	pCi/L	100	94	70	130	Run: SUB-C103780		07/03/08 16:32

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19044		
Sample ID: MB-19044	Method Blank				Run: SUB-C103914		07/09/08 03:04		
Boron	0.04	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-19044	Laboratory Control Sample				Run: SUB-C103914		07/09/08 03:08		
Boron	0.535	mg/L	0.10	99	85	115			
Iron	2.57	mg/L	0.030	103	85	115			
Sample ID: C08070216-002DMS3	Sample Matrix Spike				Run: SUB-C103914		07/09/08 04:05		
Boron	0.581	mg/L	0.10	105	70	130			
Iron	2.74	mg/L	0.030	106	70	130			
Sample ID: C08070216-002DMSD3	Sample Matrix Spike Duplicate				Run: SUB-C103914		07/09/08 04:09		
Boron	0.570	mg/L	0.10	103	70	130	1.8	20	
Iron	2.69	mg/L	0.030	104	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104583		
Sample ID: MB-080721A	Method Blank		Run: SUB-C104583				07/21/08 13:46		
Silica	0.05	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080721A	Laboratory Fortified Blank		Run: SUB-C104583				07/21/08 13:51		
Silica	0.48	mg/L	0.10	106	85	125			
Aluminum	0.96	mg/L	0.10	96	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	1.00	mg/L	0.10	100	85	125			
Calcium	55	mg/L	0.50	110	85	125			
Chromium	1.0	mg/L	0.050	101	85	125			
Iron	1.1	mg/L	0.030	107	85	125			
Magnesium	54	mg/L	0.50	108	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.00	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	100	85	125			
Potassium	48	mg/L	0.50	95	85	125			
Sodium	52	mg/L	0.77	103	85	125			
Vanadium	1.1	mg/L	0.10	108	85	125			
Zinc	1.0	mg/L	0.010	102	85	125			
Sample ID: R08070035-001C	Sample Matrix Spike		Run: SUB-C104583				07/21/08 13:59		
Aluminum	2.07	mg/L	0.10	103	70	130			
Barium	2.07	mg/L	0.10	103	70	130			
Boron	3.05	mg/L	0.10	100	70	130			
Chromium	2.18	mg/L	0.050	108	70	130			
Iron	2.70	mg/L	0.030	132	70	130			S
Manganese	2.10	mg/L	0.010	104	70	130			
Molybdenum	2.07	mg/L	0.10	102	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104583		
Sample ID: R08070035-001C	Sample Matrix Spike			Run: SUB-C104583			07/21/08 13:59		
Nickel	2.09	mg/L	0.050	105	70	130			
Vanadium	2.26	mg/L	0.10	112	70	130			
Zinc	2.09	mg/L	0.010	104	70	130			
Calcium	183	mg/L	1.0	110	70	130			
Magnesium	146	mg/L	1.0	111	70	130			
Potassium	100	mg/L	1.0	92	70	130			
Silica	5.78	mg/L	0.10		70	130			A
Sodium	474	mg/L	1.5	94	70	130			
Sample ID: R08070035-001C	Sample Matrix Spike Duplicate			Run: SUB-C104583			07/21/08 14:03		
Aluminum	2.12	mg/L	0.10	106	70	130	2.4	20	
Barium	2.07	mg/L	0.10	103	70	130	0.2	20	
Boron	3.14	mg/L	0.10	105	70	130	2.8	20	
Chromium	2.16	mg/L	0.050	107	70	130	1.1	20	
Iron	2.64	mg/L	0.030	129	70	130	2.0	20	
Manganese	2.16	mg/L	0.010	107	70	130	2.8	20	
Molybdenum	2.09	mg/L	0.10	103	70	130	1.2	20	
Nickel	2.33	mg/L	0.050	116	70	130	11	20	
Vanadium	2.33	mg/L	0.10	115	70	130	3.1	20	
Zinc	2.13	mg/L	0.010	106	70	130	2.1	20	
Calcium	185	mg/L	1.0	111	70	130	0.9	20	
Magnesium	149	mg/L	1.0	114	70	130	1.9	20	
Potassium	101	mg/L	1.0	92	70	130	0.7	20	
Silica	5.74	mg/L	0.10		70	130	0.6	20	A
Sodium	469	mg/L	1.5	90	70	130	1.0	20	
Sample ID: C08070559-001BMS2	Sample Matrix Spike			Run: SUB-C104583			07/21/08 15:03		
Aluminum	19.2	mg/L	0.10	96	70	130			
Barium	20.2	mg/L	0.12	98	70	130			
Boron	232	mg/L	0.17		70	130			A
Chromium	19.5	mg/L	0.050	98	70	130			
Iron	21.2	mg/L	0.095	106	70	130			
Manganese	21.7	mg/L	0.010	98	70	130			
Molybdenum	19.4	mg/L	0.10	97	70	130			
Nickel	19.4	mg/L	0.086	97	70	130			
Vanadium	21.2	mg/L	0.10	106	70	130			
Zinc	19.7	mg/L	0.044	99	70	130			
Calcium	6230	mg/L	2.1		70	130			A
Magnesium	2070	mg/L	1.0	102	70	130			
Potassium	947	mg/L	1.0	91	70	130			
Silica	18.2	mg/L	0.41	92	70	130			

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104583		
Sample ID: C08070559-001BMS2	Sample Matrix Spike			Run: SUB-C104583			07/21/08 15:03		
Sodium	1030	mg/L	15	97	70	130			
Sample ID: C08070559-001BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C104583			07/21/08 15:08		
Aluminum	19.4	mg/L	0.10	97	70	130	1.1	20	
Barium	20.0	mg/L	0.12	97	70	130	0.8	20	
Boron	234	mg/L	0.17		70	130	0.8	20	A
Chromium	19.7	mg/L	0.050	98	70	130	0.6	20	
Iron	21.2	mg/L	0.095	106	70	130	0.1	20	
Manganese	21.7	mg/L	0.010	98	70	130	0.1	20	
Molybdenum	19.4	mg/L	0.10	97	70	130	0.4	20	
Nickel	19.6	mg/L	0.086	98	70	130	1.0	20	
Vanadium	21.3	mg/L	0.10	106	70	130	0.2	20	
Zinc	19.8	mg/L	0.044	99	70	130	0.3	20	
Calcium	6230	mg/L	2.1		70	130	0.1	20	A
Magnesium	2090	mg/L	1.0	104	70	130	1.0	20	
Potassium	939	mg/L	1.0	90	70	130	0.9	20	
Silica	18.1	mg/L	0.41	92	70	130	0.1	20	
Sodium	1020	mg/L	15	96	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19044		
Sample ID: MB-19044	Method Blank		Run: SUB-C103886				07/08/08 11:07		
Antimony	0.0005	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Chromium	0.002	mg/L	5E-05						
Copper	ND	mg/L	0.0001						
Lead	0.003	mg/L							
Manganese	0.0001	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	6E-05						
Selenium	0.0002	mg/L	0.0002						
Silver	6E-05	mg/L	5E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.03	mg/L	0.0003						
Sample ID: LCS3-19044	Laboratory Control Sample		Run: SUB-C103886				07/08/08 11:14		
Antimony	0.514	mg/L	0.050	103	85	115			
Arsenic	0.469	mg/L	0.0010	94	85	115			
Barium	0.495	mg/L	0.10	99	85	115			
Beryllium	0.229	mg/L	0.010	91	85	115			
Cadmium	0.235	mg/L	0.010	94	85	115			
Chromium	0.490	mg/L	0.050	97	85	115			
Copper	0.469	mg/L	0.010	94	85	115			
Lead	0.509	mg/L	0.050	101	85	115			
Manganese	2.53	mg/L	0.010	101	85	115			
Molybdenum	0.482	mg/L	0.10	96	85	115			
Nickel	0.473	mg/L	0.050	95	85	115			
Selenium	0.446	mg/L	0.0020	89	85	115			
Strontium	0.488	mg/L	0.10	98	85	115			
Thallium	0.485	mg/L	0.10	97	85	115			
Uranium	0.526	mg/L	0.00032	105	85	115			
Zinc	0.499	mg/L	0.010	95	85	115			
Sample ID: C08070216-002DMS3	Sample Matrix Spike		Run: SUB-C103886				07/08/08 12:49		
Antimony	0.543	mg/L	0.050	109	70	130			
Arsenic	0.532	mg/L	0.0010	106	70	130			
Barium	0.566	mg/L	0.10	110	70	130			
Beryllium	0.227	mg/L	0.010	91	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19044		
Sample ID: C08070216-002DMS3	Sample Matrix Spike			Run: SUB-C103886			07/08/08 12:49		
Cadmium	0.262	mg/L	0.010	105	70	130			
Chromium	0.513	mg/L	0.050	101	70	130			
Copper	0.508	mg/L	0.010	102	70	130			
Lead	0.528	mg/L	0.050	105	70	130			
Manganese	2.65	mg/L	0.010	105	70	130			
Molybdenum	0.522	mg/L	0.10	104	70	130			
Nickel	0.512	mg/L	0.050	102	70	130			
Selenium	0.507	mg/L	0.0020	101	70	130			
Silver	0.0468	mg/L	0.010	94	70	130			
Strontium	1.72	mg/L	0.10	118	70	130			
Thallium	0.517	mg/L	0.10	103	70	130			
Uranium	0.537	mg/L	0.00032	107	70	130			
Zinc	0.497	mg/L	0.010	99	70	130			
Sample ID: C08070216-002DMSD3	Sample Matrix Spike Duplicate			Run: SUB-C103886			07/08/08 12:56		
Antimony	0.523	mg/L	0.050	105	70	130	3.7	20	
Arsenic	0.502	mg/L	0.0010	100	70	130	5.9	20	
Barium	0.536	mg/L	0.10	104	70	130	5.6	20	
Beryllium	0.221	mg/L	0.010	88	70	130	3.1	20	
Cadmium	0.250	mg/L	0.010	100	70	130	4.9	20	
Chromium	0.491	mg/L	0.050	97	70	130	4.5	20	
Copper	0.492	mg/L	0.010	98	70	130	3.3	20	
Lead	0.505	mg/L	0.050	101	70	130	4.3	20	
Manganese	2.56	mg/L	0.010	102	70	130	3.3	20	
Molybdenum	0.506	mg/L	0.10	101	70	130	3.2	20	
Nickel	0.490	mg/L	0.050	98	70	130	4.3	20	
Selenium	0.484	mg/L	0.0020	96	70	130	4.8	20	
Silver	0.0463	mg/L	0.010	93	70	130	1.1	20	
Strontium	1.63	mg/L	0.10	99	70	130	5.5	20	
Thallium	0.501	mg/L	0.10	100	70	130	3.3	20	
Uranium	0.524	mg/L	0.00032	105	70	130	2.3	20	
Zinc	0.476	mg/L	0.010	95	70	130	4.3	20	
Sample ID: C08070216-002DMS3	Sample Matrix Spike			Run: SUB-C104617			07/21/08 15:12		
Antimony	0.553	mg/L	0.050	110	70	130			
Arsenic	0.521	mg/L	0.0010	104	70	130			
Barium	0.525	mg/L	0.10	102	70	130			
Beryllium	0.264	mg/L	0.010	106	70	130			
Cadmium	0.251	mg/L	0.010	100	70	130			
Chromium	0.493	mg/L	0.050	98	70	130			
Copper	0.493	mg/L	0.010	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19044		
Sample ID: C08070216-002DMS3	Sample Matrix Spike			Run: SUB-C104617			07/21/08 15:12		
Lead	0.528	mg/L	0.050	106	70	130			
Manganese	2.48	mg/L	0.010	99	70	130			
Molybdenum	0.539	mg/L	0.10	108	70	130			
Nickel	0.492	mg/L	0.050	98	70	130			
Selenium	0.504	mg/L	0.0010	101	70	130			
Silver	0.0476	mg/L	0.010	95	70	130			
Strontium	1.68	mg/L	0.10	112	70	130			
Thallium	0.521	mg/L	0.10	104	70	130			
Uranium	0.570	mg/L	0.00030	114	70	130			
Zinc	0.491	mg/L	0.010	98	70	130			
Sample ID: C08070216-002DMSD3	Sample Matrix Spike Duplicate			Run: SUB-C104617			07/21/08 15:18		
Antimony	0.562	mg/L	0.050	112	70	130	1.7	20	
Arsenic	0.511	mg/L	0.0010	101	70	130	2.0	20	
Barium	0.528	mg/L	0.10	103	70	130	0.7	20	
Beryllium	0.262	mg/L	0.010	105	70	130	0.7	20	
Cadmium	0.253	mg/L	0.010	101	70	130	1.1	20	
Chromium	0.491	mg/L	0.050	98	70	130	0.4	20	
Copper	0.476	mg/L	0.010	95	70	130	3.5	20	
Lead	0.520	mg/L	0.050	104	70	130	1.4	20	
Manganese	2.48	mg/L	0.010	99	70	130	0.0	20	
Molybdenum	0.548	mg/L	0.10	109	70	130	1.6	20	
Nickel	0.477	mg/L	0.050	95	70	130	3.0	20	
Selenium	0.485	mg/L	0.0010	97	70	130	3.7	20	
Silver	0.0474	mg/L	0.010	95	70	130	0.6	20	
Strontium	1.59	mg/L	0.10	94	70	130	5.3	20	
Thallium	0.532	mg/L	0.10	106	70	130	2.1	20	
Uranium	0.591	mg/L	0.00030	118	70	130	3.6	20	
Zinc	0.482	mg/L	0.010	96	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_19124
Sample ID: MB-19124	Method Blank					Run: SUB-C104829			07/24/08 13:55
Uranium	ND	mg/L	2E-05						
Sample ID: LCS1-19124	Laboratory Control Sample					Run: SUB-C104829			07/24/08 13:59
Uranium	0.0500	mg/L	0.00030	95	80	120			
Sample ID: R08070035-007I	Post Digestion Spike					Run: SUB-C104829			07/24/08 14:48
Uranium	0.0115	mg/L	0.00030	92	70	130			
Sample ID: R08070035-007I	Post Digestion Spike Duplicate					Run: SUB-C104829			07/24/08 14:53
Uranium	0.0102	mg/L	0.00030	81	70	130	13	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Analytical Run: SUB-C104758		
<b>Sample ID: CCB</b>	Continuing Calibration Blank								07/23/08 16:28
Thorium 232	1.00E-05	mg/L	0.0010						
<b>Sample ID: CCV</b>	Continuing Calibration Verification Standard								07/23/08 16:35
Thorium 232	0.0579	mg/L	0.0010	97	90	110			
<b>Method: E200.8</b>							Batch: C_R104758		
<b>Sample ID: LRB</b>	Method Blank			Run: SUB-C104758			07/23/08 12:27		
Arsenic	ND	mg/L	4E-05						
Cadmium	ND	mg/L	3E-06						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Mercury	ND	mg/L	1E-05						
Uranium	4E-06	mg/L	2E-06						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank			Run: SUB-C104758			07/23/08 12:34		
Arsenic	0.0497	mg/L	0.0010	99	85	115			
Cadmium	0.0506	mg/L	0.0010	101	85	115			
Copper	0.0512	mg/L	0.0010	102	85	115			
Lead	0.0492	mg/L	0.0010	98	85	115			
Mercury	0.00498	mg/L	0.0010	100	85	115			
Uranium	0.0488	mg/L	0.00030	98	85	115			
<b>Sample ID: C08061324-001KMS4</b>	Post Digestion Spike			Run: SUB-C104758			07/23/08 14:14		
Arsenic	0.0504	mg/L	0.0010	101	70	130			
Cadmium	0.0485	mg/L	0.010	97	70	130			
Copper	0.0498	mg/L	0.010	98	70	130			
Lead	0.0486	mg/L	0.050	97	70	130			
Mercury	0.00508	mg/L	0.0010	101	70	130			
Thorium 232	0.0484	mg/L	0.0010	97	70	130			
Uranium	0.276	mg/L	0.00030		70	130			A
<b>Sample ID: C08061324-001KMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C104758			07/23/08 14:21		
Arsenic	0.0526	mg/L	0.0010	105	70	130	4.3	20	
Cadmium	0.0505	mg/L	0.010	101	70	130	4.0	20	
Copper	0.0520	mg/L	0.010	102	70	130	4.2	20	
Lead	0.0498	mg/L	0.050	100	70	130	0.0	20	
Mercury	0.00545	mg/L	0.0010	109	70	130	7.1	20	
Thorium 232	0.0501	mg/L	0.0010	100	70	130	3.6	20	
Uranium	0.276	mg/L	0.00030		70	130	0.2	20	A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: C08070151-010BMS4	Post Digestion Spike			Run: SUB-C104758			07/23/08 16:01		
Arsenic	0.0510	mg/L	0.0010	100	70	130			
Cadmium	0.0481	mg/L	0.010	95	70	130			
Copper	0.0494	mg/L	0.010	98	70	130			
Lead	0.0474	mg/L	0.050	95	70	130			
Mercury	0.00504	mg/L	0.0010	101	70	130			
Thorium 232	0.0463	mg/L	0.0010	93	70	130			
Uranium	0.0503	mg/L	0.00030	93	70	130			
Sample ID: C08070151-010BMSD4	Post Digestion Spike Duplicate			Run: SUB-C104758			07/23/08 16:08		
Arsenic	0.0517	mg/L	0.0010	101	70	130	1.3	20	
Cadmium	0.0493	mg/L	0.010	98	70	130	2.5	20	
Copper	0.0499	mg/L	0.010	99	70	130	1.1	20	
Lead	0.0478	mg/L	0.050	96	70	130	0.0	20	
Mercury	0.00522	mg/L	0.0010	104	70	130	3.6	20	
Thorium 232	0.0470	mg/L	0.0010	94	70	130	1.5	20	
Uranium	0.0509	mg/L	0.00030	95	70	130	1.1	20	
Sample ID: C08070217-001KMS4	Post Digestion Spike			Run: SUB-C104758			07/23/08 18:15		
Arsenic	0.0595	mg/L	0.0010	102	70	130			
Cadmium	0.0473	mg/L	0.010	95	70	130			
Copper	0.0487	mg/L	0.010	97	70	130			
Lead	0.0476	mg/L	0.050	95	70	130			
Mercury	0.00492	mg/L	0.0010	98	70	130			
Thorium 232	0.0474	mg/L	0.0010	95	70	130			
Uranium	0.212	mg/L	0.00030	104	70	130			
Sample ID: C08070217-001KMSD4	Post Digestion Spike Duplicate			Run: SUB-C104758			07/23/08 18:22		
Arsenic	0.0596	mg/L	0.0010	102	70	130	0.1	20	
Cadmium	0.0478	mg/L	0.010	96	70	130	1.0	20	
Copper	0.0491	mg/L	0.010	98	70	130	0.8	20	
Lead	0.0479	mg/L	0.050	96	70	130	0.0	20	
Mercury	0.00503	mg/L	0.0010	100	70	130	2.3	20	
Thorium 232	0.0477	mg/L	0.0010	95	70	130	0.8	20	
Uranium	0.212	mg/L	0.00030	104	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104854		
Sample ID: LRB	Method Blank		Run: SUB-C104854				07/25/08 12:43		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Silver	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104854				07/25/08 12:50		
Arsenic	0.0511	mg/L	0.0010	102	85	115			
Cadmium	0.0522	mg/L	0.0010	104	85	115			
Copper	0.0509	mg/L	0.0010	102	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Sample ID: C08070230-001KMS4	Post Digestion Spike		Run: SUB-C104854				07/25/08 14:31		
Arsenic	0.0503	mg/L	0.0010	98	70	130			
Cadmium	0.0486	mg/L	0.010	97	70	130			
Copper	0.0462	mg/L	0.010	91	70	130			
Silver	0.0148	mg/L	0.010	74	70	130			
Sample ID: C08070230-001KMSD4	Post Digestion Spike Duplicate		Run: SUB-C104854				07/25/08 14:38		
Arsenic	0.0507	mg/L	0.0010	99	70	130	1.0	20	
Cadmium	0.0483	mg/L	0.010	97	70	130	0.7	20	
Copper	0.0463	mg/L	0.010	91	70	130	0.2	20	
Silver	0.0128	mg/L	0.010	64	70	130	15	20	S
Sample ID: C08070217-001KMS4	Post Digestion Spike		Run: SUB-C104854				07/25/08 21:29		
Arsenic	0.0589	mg/L	0.0010	100	70	130			
Cadmium	0.0468	mg/L	0.010	94	70	130			
Copper	0.0470	mg/L	0.010	94	70	130			
Silver	0.0109	mg/L	0.010	54	70	130			S
Sample ID: C08070217-001KMSD4	Post Digestion Spike Duplicate		Run: SUB-C104854				07/25/08 21:36		
Arsenic	0.0580	mg/L	0.0010	98	70	130	1.5	20	
Cadmium	0.0468	mg/L	0.010	94	70	130	0.0	20	
Copper	0.0463	mg/L	0.010	92	70	130	1.5	20	
Silver	0.0109	mg/L	0.010	55	70	130	0.5	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: B_33449		
Sample ID: MB-33449	Method Blank					Run: SUB-B113878			07/11/08 08:53
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33449	Laboratory Fortified Blank					Run: SUB-B113878			07/11/08 08:55
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: B08070443-001DMS	Sample Matrix Spike					Run: SUB-B113878			07/11/08 09:23
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08070443-001DMSD	Sample Matrix Spike Duplicate					Run: SUB-B113878			07/11/08 09:26
Mercury	0.0018	mg/L	0.0010	92	70	130	2.7	30	
Method: E245.1							Analytical Run: SUB-B113878		
Sample ID: QCS	Initial Calibration Verification Standard								07/11/08 07:20
Mercury	0.0020	mg/L	0.0010	98	90	110			
Method: E245.1							Batch: C_B_33393		
Sample ID: MB-33393	Method Blank					Run: SUB-C104002			07/09/08 11:37
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33393	Laboratory Fortified Blank					Run: SUB-C104002			07/09/08 11:39
Mercury	0.0020	mg/L	0.0010	101	85	115			
Sample ID: B08070638-001BMS	Sample Matrix Spike					Run: SUB-C104002			07/09/08 12:07
Mercury	0.0022	mg/L	0.0010	108	70	130			
Sample ID: B08070638-001BMSD	Sample Matrix Spike Duplicate					Run: SUB-C104002			07/09/08 12:10
Mercury	0.0021	mg/L	0.0010	103	70	130	4.2	30	
Method: E245.1							Batch: C_B_33449		
Sample ID: MB-33449	Method Blank					Run: SUB-C104076			07/11/08 08:53
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33449	Laboratory Fortified Blank					Run: SUB-C104076			07/11/08 08:55
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: B08070443-001DMS	Sample Matrix Spike					Run: SUB-C104076			07/11/08 09:23
Mercury	0.0019	mg/L	0.0010	94	70	130			
Sample ID: B08070443-001DMSD	Sample Matrix Spike Duplicate					Run: SUB-C104076			07/11/08 09:26
Mercury	0.0018	mg/L	0.0010	92	70	130	2.7	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Analytical Run: SUB-C104076		
Sample ID: QCS	Initial Calibration Verification Standard						07/11/08 07:20		
Mercury	0.0020	mg/L	0.0010	98	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R35848		
<b>Sample ID: LFB0807024202-3</b>	Laboratory Fortified Blank			Run: DIONEX_080702A			07/02/08 18:52		
Chloride	4.66	mg/L	0.50	93	90	110			
Fluoride	1.86	mg/L	0.10	93	90	110			
Nitrogen, Nitrate as N	2.29	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
<b>Sample ID: LFB0807024202-4</b>	Laboratory Fortified Blank			Run: DIONEX_080702A			07/02/08 19:09		
Chloride	4.54	mg/L	0.50	91	90	110			
Fluoride	1.82	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.25	mg/L	0.10	90	90	110			
Nitrogen, Nitrite as N	2.39	mg/L	0.10	96	90	110			
Sulfate	13.7	mg/L	1.0	91	90	110			
<b>Sample ID: R08070031-001AMS</b>	Sample Matrix Spike			Run: DIONEX_080702A			07/02/08 22:59		
Chloride	24.6	mg/L	0.50		80	120			A
Fluoride	2.11	mg/L	0.10	91	80	120			
Nitrogen, Nitrate as N	2.32	mg/L	0.10	93	80	120			
Nitrogen, Nitrite as N	2.45	mg/L	0.10	98	80	120			
Sulfate	36.8	mg/L	1.0	81	80	120			
<b>Sample ID: R08070031-001AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080702A			07/02/08 23:15		
Chloride	24.5	mg/L	0.50		80	120	0.5	10	A
Fluoride	2.06	mg/L	0.10	89	80	120	2.4	10	
Nitrogen, Nitrate as N	2.27	mg/L	0.10	91	80	120	2.2	10	
Nitrogen, Nitrite as N	2.39	mg/L	0.10	96	80	120	2.5	10	
Sulfate	36.4	mg/L	1.0	79	80	120	0.9	10	S
<b>Sample ID: R08070035-004AMS</b>	Sample Matrix Spike			Run: DIONEX_080702A			07/03/08 02:32		
Chloride	105	mg/L	2.2	88	80	120			
Fluoride	35.9	mg/L	0.22	83	80	120			
Nitrogen, Nitrate as N	46.1	mg/L	0.50	92	80	120			
Nitrogen, Nitrite as N	48.9	mg/L	1.2	98	80	120			
Sulfate	715	mg/L	1.3	86	80	120			
<b>Sample ID: R08070035-004AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080702A			07/03/08 02:49		
Chloride	103	mg/L	2.2	86	80	120	2.3	10	
Fluoride	35.3	mg/L	0.22	81	80	120	1.7	10	
Nitrogen, Nitrate as N	45.4	mg/L	0.50	91	80	120	1.6	10	
Nitrogen, Nitrite as N	48.0	mg/L	1.2	96	80	120	1.7	10	
Sulfate	713	mg/L	1.3	85	80	120	0.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/09/08  
Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R35848		
Sample ID: R08070041-001CMS	Sample Matrix Spike		Run: DIONEX_080702A				07/03/08 05:49		
Chloride	177	mg/L	0.50		80	120			A
Fluoride	2.74	mg/L	0.10	90	80	120			
Nitrogen, Nitrate as N	2.75	mg/L	0.10	90	80	120			
Nitrogen, Nitrite as N	2.83	mg/L	0.10	93	80	120			
Sulfate	660	mg/L	1.0		80	120			A
Sample ID: R08070041-001CMSD	Sample Matrix Spike Duplicate		Run: DIONEX_080702A				07/03/08 06:06		
Chloride	177	mg/L	0.50		80	120	0.4	10	A
Fluoride	2.68	mg/L	0.10	87	80	120	2.2	10	
Nitrogen, Nitrate as N	2.68	mg/L	0.10	88	80	120	2.6	10	
Nitrogen, Nitrite as N	2.76	mg/L	0.10	90	80	120	2.5	10	
Sulfate	661	mg/L	1.0		80	120	0.2	10	A
Method: E900.0							Batch: C_GrAB-0492		
Sample ID: MB-GrAB-0492	Method Blank		Run: SUB-C105435				08/02/08 23:41		
Gross Alpha	0.2	pCi/L							U
Gross Beta	3	pCi/L							
Sample ID: UNAT-GrAB-0492	Laboratory Control Sample		Run: SUB-C105435				08/02/08 23:41		
Gross Alpha	140	pCi/L		102	70	130			
Sample ID: Cs137-GrAB-0492	Laboratory Control Sample		Run: SUB-C105435				08/02/08 23:41		
Gross Beta	96	pCi/L		98	70	130			
Sample ID: C08070267-002AMS	Sample Matrix Spike		Run: SUB-C105435				08/02/08 23:41		
Gross Alpha	173	pCi/L		124	70	130			
Sample ID: C08070267-002AMSD	Sample Matrix Spike Duplicate		Run: SUB-C105435				08/02/08 23:41		
Gross Alpha	172	pCi/L		123	70	130	0.5	15.6	
Sample ID: C08070267-002AMS	Sample Matrix Spike		Run: SUB-C105435				08/03/08 17:55		
Gross Beta	83.0	pCi/L		90	70	130			
Sample ID: C08070267-002AMSD	Sample Matrix Spike Duplicate		Run: SUB-C105435				08/03/08 17:55		
Gross Beta	92.5	pCi/L		100	70	130	11	16.1	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R104840		
<b>Sample ID: LCS-R104840</b>	Laboratory Control Sample				Run: SUB-C104840		07/17/08 13:12		
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
<b>Sample ID: MB-R104840</b>	Method Blank				Run: SUB-C104840		07/17/08 13:12		
Gross Gamma	ND	pCi/L							U
<b>Sample ID: R08070035-007H</b>	Sample Duplicate				Run: SUB-C104840		07/17/08 13:12		
Gross Gamma	1000	pCi/L	20				8.7	30	
<b>Method: E903.0</b>							Batch: C_19124		
<b>Sample ID: C08070377-005AMS</b>	Sample Matrix Spike				Run: SUB-C104725		07/23/08 14:56		
Radium 226	74.6	pCi/Filter		94	70	130			
<b>Sample ID: C08070377-005AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C104725		07/23/08 14:56		
Radium 226	70.5	pCi/Filter		90	70	130	5.7	22	
<b>Sample ID: LCS-19124</b>	Laboratory Control Sample				Run: SUB-C104725		07/23/08 14:56		
Radium 226	14	pCi/L		83	70	130			
<b>Sample ID: MB-19124</b>	Method Blank				Run: SUB-C104725		07/23/08 14:56		
Radium 226	0.2	pCi/L							U
<b>Method: E903.0</b>							Batch: C_RA226-2956		
<b>Sample ID: C08070219-001AMS</b>	Sample Matrix Spike				Run: SUB-C105579		08/06/08 21:37		
Radium 226	17	pCi/L		97	70	130			
<b>Sample ID: C08070219-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C105579		08/06/08 21:37		
Radium 226	20	pCi/L		118	70	130	18	25.2	
<b>Sample ID: MB-RA226-2956</b>	Method Blank				Run: SUB-C105579		08/06/08 23:12		
Radium 226	-0.1	pCi/L							U
<b>Sample ID: LCS-RA226-2956</b>	Laboratory Control Sample				Run: SUB-C105579		08/06/08 23:12		
Radium 226	8.2	pCi/L		105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_19124		
Sample ID: C08070112-006AMS	Sample Matrix Spike				Run: SUB-C105076		07/28/08 20:10		
Thorium 230	177	pCi/Filter	0.20	106	70	130			
Sample ID: C08070112-006AMS2	Sample Matrix Spike				Run: SUB-C105076		07/29/08 09:57		
Thorium 230	87.3	pCi/Filter	0.20	94	70	130			
- Sample reported as a second spike, not an MSD, due to being spiked with a different amount of standard than the MS.									
Sample ID: LCS-19124	Laboratory Control Sample				Run: SUB-C105076		07/29/08 09:58		
Thorium 230	41.5	pCi/Filter	0.20	85	70	130			
Sample ID: MB-19124	Method Blank				Run: SUB-C105076		07/29/08 19:59		
Thorium 230	-0.1	pCi/Filter							U
Method: E907.0							Batch: C_RA-TH-ISO-0585		
Sample ID: LCS-RA-TH-ISO-0585	Laboratory Control Sample				Run: SUB-C105285		08/03/08 18:39		
Thorium 230	5.75	pCi/L	0.20	94	70	130			
Sample ID: R08070035-005H	Sample Matrix Spike				Run: SUB-C105285		08/04/08 00:44		
Thorium 230	14.5	pCi/L	0.20	88	70	130			
Sample ID: R08070035-005H	Sample Matrix Spike Duplicate				Run: SUB-C105285		08/04/08 00:44		
Thorium 230	17.2	pCi/L	0.20	105	70	130	17	30	
Sample ID: MB-RA-TH-ISO-0585	Method Blank				Run: SUB-C105285		08/04/08 00:44		
Thorium 230	0.05	pCi/L							U
Method: E909.0M							Batch: C_19124		
Sample ID: C08070112-003AMS	Sample Matrix Spike				Run: SUB-C105681		07/22/08 11:00		
Lead 210	2870	pCi/Filter		119	70	130			
Sample ID: C08070112-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C105681		07/22/08 11:00		
Lead 210	2290	pCi/Filter		69	70	130	23	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: MB-R105681	Method Blank				Run: SUB-C105681		07/22/08 11:00		
Lead 210	2	pCi/L							U
Sample ID: LCS-R105681	Laboratory Control Sample				Run: SUB-C105681		07/22/08 11:00		
Lead 210	120	pCi/L		97	70	130			

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R105847		
Sample ID: C08070547-001HMS	Sample Matrix Spike				Run: SUB-C105847			07/24/08 08:45	
Lead 210	560	pCi/L		91	70	130			
Sample ID: C08070547-001HMSD	Sample Matrix Spike Duplicate				Run: SUB-C105847			07/24/08 08:45	
Lead 210	590	pCi/L		96	70	130	5.4	30	
Sample ID: MB-R105847	Method Blank				Run: SUB-C105847			07/24/08 08:45	
Lead 210	5	pCi/L							U
Sample ID: LCS-R105847	Laboratory Control Sample				Run: SUB-C105847			07/24/08 08:45	
Lead 210	130	pCi/L		106	70	130			
Method: RMO-3008							Batch: C_R104910		
Sample ID: R08070035-001H	Sample Matrix Spike				Run: SUB-C104910			07/14/08 17:45	
Polonium 210	57	pCi/L	1.0	66	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the RPD for the MS MSD pair is acceptable, the response is considered to be matrix related. Th batch is approved.									
Sample ID: R08070035-001H	Sample Matrix Spike Duplicate				Run: SUB-C104910			07/14/08 17:45	
Polonium 210	59	pCi/L	1.0	68	70	130	3.6	30	S
- Spike response is outside of the acceptance range for this analysis. Since the RPD for the MS MSD pair is acceptable, the response is considered to be matrix related. Th batch is approved.									
Sample ID: LCS-R104910	Laboratory Control Sample				Run: SUB-C104910			07/14/08 17:45	
Polonium 210	69	pCi/L	1.0	159	70	130			S
- LCS response is outside of the acceptance range for this analysis.									
Sample ID: MB-R104910	Method Blank				Run: SUB-C104910			07/14/08 17:45	
Polonium 210	ND	pCi/L							U
Method: RMO-3008							Batch: C_R106180		
Sample ID: R08070035-001I	Sample Matrix Spike				Run: SUB-C106180			08/18/08 17:00	
Polonium 210	19	pCi/L	1.0	94	70	130			
Sample ID: R08070035-001I	Sample Matrix Spike Duplicate				Run: SUB-C106180			08/18/08 17:00	
Polonium 210	23	pCi/L	1.0	114	70	130	19	30	
Sample ID: LCS-19031	Laboratory Control Sample				Run: SUB-C106180			08/18/08 17:00	
Polonium 210	95	pCi/L	1.0	117	70	130			
Sample ID: MB-19031	Method Blank				Run: SUB-C106180			08/18/08 17:00	
Polonium 210	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/09/08

Work Order: R08070035

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A							Analytical Run: SUB-C104002		
Sample ID: QCS		Initial Calibration Verification Standard						07/09/08 07:00	
Mercury	0.0020	mg/L	0.0010	101	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## ANALYTICAL SUMMARY REPORT

September 12, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08070115

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 7/8/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070115-001	DewBurd GW692	07/07/08 13:39	07/08/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08070115-002	DewBurd GW680	07/07/08 13:29	07/08/08	Aqueous	Same As Above
R08070115-003	DewBurd GW682	07/07/08 15:22	07/08/08	Aqueous	Same As Above
R08070115-004	DewBurd GW684	07/07/08 17:22	07/08/08	Aqueous	Same As Above
R08070115-005	DewBurd GW690	07/07/08 18:10	07/08/08	Aqueous	Same As Above
R08070115-006	DewBurd GW688	07/07/08 18:49	07/08/08	Aqueous	Same As Above
R08070115-007	DewBurd GW686	07/07/08 19:03	07/08/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08070115

Date: 12-Sep-08

## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by RESPEC Inc on 7/8/2008 9:50:00 AM. These samples were assigned ELI Workorder Number R08070115.

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08070547

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08070547



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-001  
Client Sample ID: DewBurd GW692

Report Date: 09/12/08  
Collection Date: 07/07/08 13:39  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	186	mg/L		5		1	A2320 B	07/15/08 14:24/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 14:24/mb
Bicarbonate as HCO3	227	mg/L		5		1	A2320 B	07/15/08 14:24/mb
Calcium	131	mg/L		0.5		2	E200.7	07/24/08 17:27/eli-c
Chloride	8	mg/L		1		1	E300.0	07/08/08 19:58/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/08/08 19:58/jmh
Magnesium	46.5	mg/L		0.5		2	E200.7	07/24/08 17:27/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:31/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/08/08 19:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 19:58/jmh
Potassium	14.7	mg/L		0.5		2	E200.7	07/24/08 17:27/eli-c
Silica	4.8	mg/L		0.5		2	E200.7	07/24/08 17:27/eli-c
Sodium	105	mg/L	D	2		2	E200.7	07/24/08 17:27/eli-c
Sulfate	483	mg/L	D	3		50	E300.0	07/08/08 19:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1260	umhos/cm		5.0		1	A2510 B	07/10/08 09:46/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	07/11/08 00:00/kh
pH	7.60	s.u.		0.01		1	A4500-H B	07/10/08 11:03/tb
Sodium Adsorption Ratio (SAR)	2.0	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	07/11/08 13:20/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 08:09/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/24/08 08:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/24/08 08:09/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/24/08 17:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/24/08 08:09/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/24/08 08:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/24/08 08:09/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/24/08 17:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 08:09/eli-c
Manganese	0.14	mg/L		0.01		1	E200.8	07/24/08 08:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 08:09/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/24/08 08:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/24/08 08:09/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	08/05/08 16:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 18:02/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 08:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070115-001  
**Client Sample ID:** DewBurd GW692

**Report Date:** 09/12/08  
**Collection Date:** 07/07/08 13:39  
**Date Received:** 07/08/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0135	mg/L		0.0003		1	E200.8	07/24/08 08:09/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/24/08 08:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/24/08 08:09/eli-c
METALS - SUSPENDED								
Uranium	0.0067	mg/L		0.0003		1	E200.8	07/27/08 03:29/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 14:51/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1450	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Gross Alpha precision (±)	26.0	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Gross Beta	447	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Gross Beta precision (±)	7.3	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Gross Beta MDC	4.5	pCi/L				1	E900.0	08/09/08 00:01/eli-c
Lead 210	22.5	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	3.5	pCi/L		1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	2.1	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	484	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	4.2	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/10/08 16:43/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/10/08 16:43/eli-c
Gross Gamma	2400	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	260	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	125	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	14.5	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	12	pCi/L		1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	3.4	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	96.1	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	3.5	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 13:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-001  
Client Sample ID: DewBurd GW692

Report Date: 09/12/08  
Collection Date: 07/07/08 13:39  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	2.6	pCi/L		0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.7	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	590000	pCi/L		100		1	D5072-92	07/12/08 12:07/eli-c
Radon 222 precision (±)	920	pCi/L				1	D5072-92	07/12/08 12:07/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 01:00/eli-c
Arsenic	0.005	mg/L		0.001		1	E200.8	07/29/08 01:00/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 17:35/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 01:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 17:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 01:00/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 17:35/eli-c
Copper	0.01	mg/L		0.01		2	E200.7	07/21/08 17:35/eli-c
Iron	7.24	mg/L		0.03		2	E200.7	07/21/08 17:35/eli-c
Lead	0.006	mg/L		0.001		1	E200.8	07/29/08 01:00/eli-c
Manganese	0.24	mg/L		0.01		2	E200.7	07/21/08 17:35/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 16:42/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:11/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 17:35/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 17:35/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	07/29/08 01:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 01:00/eli-c
Strontium	3.2	mg/L		0.1		2	E200.7	07/21/08 17:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 01:00/eli-c
Uranium	0.0202	mg/L		0.0003		1	E200.8	07/29/08 01:00/eli-c
Zinc	0.03	mg/L		0.01		2	E200.7	07/21/08 17:35/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.52	%				1	A1030 E	09/11/08 00:00/jmh
Anions	14.0	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	15.4	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	914	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-002  
Client Sample ID: DewBurd GW680

Report Date: 09/12/08  
Collection Date: 07/07/08 13:29  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	248	mg/L		5		1	A2320 B	07/15/08 14:28/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 14:28/mb
Bicarbonate as HCO3	302	mg/L		5		1	A2320 B	07/15/08 14:28/mb
Calcium	404	mg/L		0.5		2	E200.7	07/24/08 17:35/eli-c
Chloride	12	mg/L		1		1	E300.0	07/08/08 20:31/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/08/08 20:31/jmh
Magnesium	126	mg/L		0.5		2	E200.7	07/24/08 17:35/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:32/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/08/08 20:31/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 20:31/jmh
Potassium	19.4	mg/L		0.5		2	E200.7	07/24/08 17:35/eli-c
Silica	4.3	mg/L		0.5		2	E200.7	07/24/08 17:35/eli-c
Sodium	131	mg/L	D	2		2	E200.7	07/24/08 17:35/eli-c
Sulfate	1260	mg/L	D	3		50	E300.0	07/08/08 20:15/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2490	umhos/cm		5.0		1	A2510 B	07/10/08 09:48/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	07/11/08 00:00/kh
pH	7.27	s.u.		0.01		1	A4500-H B	07/10/08 11:04/tb
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	07/11/08 13:21/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	07/24/08 17:35/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/26/08 04:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 04:43/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/24/08 17:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 04:43/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 17:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 04:43/eli-c
Iron	0.20	mg/L		0.03		2	E200.7	07/24/08 17:35/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 04:43/eli-c
Manganese	0.44	mg/L		0.01		1	E200.8	07/26/08 04:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 04:43/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 04:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 17:35/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	08/05/08 17:00/eli-c
Silver	ND	mg/L	D	0.01		2	E200.7	07/24/08 17:35/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 04:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-002  
Client Sample ID: DewBurd GW680

Report Date: 09/12/08  
Collection Date: 07/07/08 13:29  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0186	mg/L		0.0003		1	E200.8	07/26/08 04:43/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 17:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/26/08 04:43/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 03:33/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 14:57/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4280	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha precision (±)	68.1	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha MDC	8.8	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta	1090	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta precision (±)	16.0	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta MDC	9.2	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Lead 210	26.5	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	5.1	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.97	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	1280	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	6.7	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/08/08 11:01/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/08/08 11:01/eli-c
Gross Gamma	2300	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	270	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.2	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	1.7	pCi/L		1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	5.0	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 13:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-002  
Client Sample ID: DewBurd GW680

Report Date: 09/12/08  
Collection Date: 07/07/08 13:29  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	72000	pCi/L		100		1	D5072-92	07/12/08 13:49/eli-c
Radon 222 precision (±)	325	pCi/L				1	D5072-92	07/12/08 13:49/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 01:07/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	07/29/08 01:07/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 17:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 01:07/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 17:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 01:07/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 17:43/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/21/08 17:43/eli-c
Iron	0.31	mg/L		0.03		2	E200.7	07/21/08 17:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/29/08 01:07/eli-c
Manganese	0.47	mg/L		0.01		2	E200.7	07/21/08 17:43/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 16:57/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:18/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 17:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 17:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	07/29/08 01:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 01:07/eli-c
Strontium	7.6	mg/L		0.1		2	E200.7	07/21/08 17:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 01:07/eli-c
Uranium	0.0208	mg/L		0.0003		1	E200.8	07/29/08 01:07/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 17:43/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.57	%				1	A1030 E	09/11/08 00:00/jmh
Anions	31.6	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	36.8	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	2120	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.10					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-003  
Client Sample ID: DewBurd GW682

Report Date: 09/12/08  
Collection Date: 07/07/08 15:22  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	242	mg/L		5		1	A2320 B	07/15/08 14:31/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 14:31/mb
Bicarbonate as HCO3	295	mg/L		5		1	A2320 B	07/15/08 14:31/mb
Calcium	365	mg/L		0.5		1	E200.7	07/22/08 15:38/eli-c
Chloride	12	mg/L		1		1	E300.0	07/08/08 21:04/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/08/08 21:04/jmh
Magnesium	109	mg/L		0.5		1	E200.7	07/22/08 15:38/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:33/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/08/08 21:04/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 21:04/jmh
Potassium	22.9	mg/L		0.5		1	E200.7	07/22/08 15:38/eli-c
Silica	2.1	mg/L		0.5		1	E200.7	07/22/08 15:38/eli-c
Sodium	113	mg/L		0.5		1	E200.7	07/22/08 15:38/eli-c
Sulfate	1170	mg/L	D	3		50	E300.0	07/08/08 20:47/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2360	umhos/cm		5.0		1	A2510 B	07/10/08 09:49/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	07/11/08 00:00/kh
pH	7.30	s.u.		0.01		1	A4500-H B	07/10/08 11:05/tb
Sodium Adsorption Ratio (SAR)	1.3	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	07/11/08 13:21/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	07/22/08 15:38/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/26/08 04:49/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 04:49/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	07/22/08 15:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 04:49/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 04:49/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 04:49/eli-c
Iron	ND	mg/L		0.03		1	E200.8	07/26/08 04:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 04:49/eli-c
Manganese	0.51	mg/L		0.01		1	E200.8	07/26/08 04:49/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 04:49/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 04:49/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 04:49/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/05/08 17:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 18:43/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 04:49/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-003  
Client Sample ID: DewBurd GW682

Report Date: 09/12/08  
Collection Date: 07/07/08 15:22  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0198	mg/L		0.0003		1	E200.8	07/26/08 04:49/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 04:49/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/26/08 04:49/eli-c
METALS - SUSPENDED								
Uranium	0.0004	mg/L		0.0003		1	E200.8	07/27/08 03:37/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 14:59/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	50.3	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Alpha precision (±)	7.6	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Alpha MDC	7.0	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta	14.0	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta precision (±)	6.8	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta MDC	11.0	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Lead 210	2.4	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	3.4	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/08/08 11:01/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/08/08 11:01/eli-c
Gross Gamma	790	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-9.2	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.6	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.61	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.7	pCi/L				1	E903.0	08/06/08 13:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-003  
Client Sample ID: DewBurd GW682

Report Date: 09/12/08  
Collection Date: 07/07/08 15:22  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.3	pCi/L		0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1380	pCi/L		100		1	D5072-92	07/12/08 14:40/eli-c
Radon 222 precision (±)	65.5	pCi/L				1	D5072-92	07/12/08 14:40/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 01:14/eli-c
Arsenic	0.010	mg/L		0.001		1	E200.8	07/29/08 01:14/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 17:47/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 01:14/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 17:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 01:14/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 17:47/eli-c
Copper	0.01	mg/L		0.01		2	E200.7	07/21/08 17:47/eli-c
Iron	1.15	mg/L		0.03		2	E200.7	07/21/08 17:47/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	07/29/08 01:14/eli-c
Manganese	0.55	mg/L		0.01		2	E200.7	07/21/08 17:47/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 17:04/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:20/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 17:47/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 17:47/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	07/29/08 01:14/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 01:14/eli-c
Strontium	6.6	mg/L		0.1		2	E200.7	07/21/08 17:47/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 01:14/eli-c
Uranium	0.0227	mg/L		0.0003		1	E200.8	07/29/08 01:14/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/21/08 17:47/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.13	%				1	A1030 E	09/11/08 00:00/jmh
Anions	29.5	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	32.7	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	1940	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.940					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070115-004  
**Client Sample ID:** DewBurd GW684

**Report Date:** 09/12/08  
**Collection Date:** 07/07/08 17:22  
**Date Received:** 07/08/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	274	mg/L		5		1	A2320 B	07/15/08 14:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 14:53/mb
Bicarbonate as HCO3	334	mg/L		5		1	A2320 B	07/15/08 14:53/mb
Calcium	375	mg/L		0.5		1	E200.7	07/22/08 15:42/eli-c
Chloride	11	mg/L		1		1	E300.0	07/08/08 22:09/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/08/08 22:09/jmh
Magnesium	119	mg/L		0.5		1	E200.7	07/22/08 15:42/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:34/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/08/08 22:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 22:09/jmh
Potassium	24.5	mg/L		0.5		1	E200.7	07/22/08 15:42/eli-c
Silica	2.7	mg/L		0.5		1	E200.7	07/22/08 15:42/eli-c
Sodium	127	mg/L		0.5		1	E200.7	07/22/08 15:42/eli-c
Sulfate	1280	mg/L	D	3		50	E300.0	07/08/08 21:20/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2510	umhos/cm		5.0		1	A2510 B	07/10/08 09:52/tb
Oxidation-Reduction Potential	300	mV				1	A2580 B	07/11/08 00:00/kh
pH	7.43	s.u.		0.01		1	A4500-H B	07/10/08 11:07/tb
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	07/11/08 13:22/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	07/22/08 15:42/eli-c
Arsenic	0.030	mg/L		0.001		1	E200.8	07/26/08 04:56/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 04:56/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	07/22/08 15:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 04:56/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 04:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 04:56/eli-c
Iron	0.47	mg/L		0.03		1	E200.7	07/22/08 15:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 04:56/eli-c
Manganese	0.54	mg/L		0.01		1	E200.8	07/26/08 04:56/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 04:56/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 04:56/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 04:56/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/05/08 17:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 18:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 04:56/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-004  
Client Sample ID: DewBurd GW684

Report Date: 09/12/08  
Collection Date: 07/07/08 17:22  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0667	mg/L		0.0003		1	E200.8	07/26/08 04:56/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 04:56/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/26/08 04:56/eli-c
METALS - SUSPENDED								
Uranium	0.177	mg/L		0.0003		1	E200.8	07/27/08 03:41/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 15:01/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1890	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha precision (±)	45.6	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha MDC	8.8	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta	556	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta precision (±)	12.0	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta MDC	9.2	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Lead 210	29.0	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	5.1	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	5.1	pCi/L		1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	2.0	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	543	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	4.2	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.8	pCi/L		0.2		1	E907.0	08/10/08 16:44/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	08/10/08 16:44/eli-c
Gross Gamma	1800	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	240	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	94.6	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	14.1	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	56	pCi/L		1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	13	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	44.1	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	2.5	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 13:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-004  
Client Sample ID: DewBurd GW684

Report Date: 09/12/08  
Collection Date: 07/07/08 17:22  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	65.9	pCi/L		0.2		1	E907.0	08/06/08 15:14/eli-c
Thorium 230 precision (±)	10	pCi/L				1	E907.0	08/06/08 15:14/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	234000	pCi/L		100		1	D5072-92	07/12/08 15:31/eli-c
Radon 222 precision (±)	572	pCi/L				1	D5072-92	07/12/08 15:31/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 01:21/eli-c
Arsenic	0.040	mg/L		0.001		1	E200.8	07/29/08 01:21/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 17:51/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 01:21/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/21/08 17:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 01:21/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 17:51/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/21/08 17:51/eli-c
Iron	1.68	mg/L		0.03		2	E200.7	07/21/08 17:51/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	07/29/08 01:21/eli-c
Manganese	0.63	mg/L		0.01		2	E200.7	07/21/08 17:51/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 17:07/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:23/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 17:51/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 17:51/eli-c
Selenium	0.005	mg/L		0.001		1	E200.8	07/29/08 01:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 01:21/eli-c
Strontium	7.6	mg/L		0.1		2	E200.7	07/21/08 17:51/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 01:21/eli-c
Uranium	0.336	mg/L		0.0003		1	E200.8	07/29/08 01:21/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 17:51/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.15	%				1	A1030 E	09/11/08 00:00/jmh
Anions	32.6	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	34.7	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	2110	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.07					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-005  
Client Sample ID: DewBurd GW690

Report Date: 09/12/08  
Collection Date: 07/07/08 18:10  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	38	mg/L		5		1	A2320 B	07/15/08 14:55/mb
Carbonate as CO3	7	mg/L		5		1	A2320 B	07/15/08 14:55/mb
Bicarbonate as HCO3	32	mg/L		5		1	A2320 B	07/15/08 14:55/mb
Calcium	42.1	mg/L		0.5		1	E200.7	07/22/08 15:55/eli-c
Chloride	30	mg/L		1		5	E300.0	07/12/08 00:49/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/08/08 23:15/jmh
Magnesium	25.4	mg/L		0.5		1	E200.7	07/22/08 15:55/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:38/jmh
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	07/08/08 23:15/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 23:15/jmh
Potassium	14.0	mg/L		0.5		1	E200.7	07/22/08 15:55/eli-c
Silica	ND	mg/L		0.5		1	E200.7	07/22/08 15:55/eli-c
Sodium	342	mg/L		0.5		1	E200.7	07/22/08 15:55/eli-c
Sulfate	807	mg/L	D	3		50	E300.0	07/08/08 22:26/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2000	umhos/cm		5.0		1	A2510 B	07/10/08 09:52/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	07/11/08 00:00/kh
pH	9.27	s.u.		0.01		1	A4500-H B	07/10/08 11:07/tb
Sodium Adsorption Ratio (SAR)	10	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	1400	mg/L		5		1	A2540 C	07/11/08 14:28/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 08:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/24/08 08:16/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/24/08 08:16/eli-c
Boron	0.7	mg/L		0.1		1	E200.7	07/22/08 15:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/24/08 08:16/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/24/08 08:16/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/24/08 08:16/eli-c
Iron	ND	mg/L		0.03		1	E200.7	07/22/08 15:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 08:16/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	07/24/08 08:16/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 08:16/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/24/08 08:16/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/24/08 08:16/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/05/08 17:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 18:56/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 08:16/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-005  
Client Sample ID: DewBurd GW690

Report Date: 09/12/08  
Collection Date: 07/07/08 18:10  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 08:16/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/24/08 08:16/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/24/08 08:16/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 03:45/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 15:03/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.8	pCi/L	U			1	E900.0	08/09/08 12:18/eli-c
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha MDC	5.4	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta	6.1	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta precision (±)	3.4	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta MDC	5.5	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Lead 210	1.8	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/08/08 11:01/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/08/08 11:01/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	210	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-5.7	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	08/06/08 13:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-005  
Client Sample ID: DewBurd GW690

Report Date: 09/12/08  
Collection Date: 07/07/08 18:10  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	194	pCi/L		100		1	D5072-92	07/12/08 16:22/eli-c
Radon 222 precision (±)	50.0	pCi/L				1	D5072-92	07/12/08 16:22/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 03:03/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/29/08 03:03/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 18:07/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 03:03/eli-c
Boron	0.7	mg/L		0.1		2	E200.7	07/21/08 18:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 03:03/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 18:07/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/21/08 18:07/eli-c
Iron	1.48	mg/L		0.03		2	E200.7	07/21/08 18:07/eli-c
Lead	0.019	mg/L		0.001		1	E200.8	07/29/08 03:03/eli-c
Manganese	0.02	mg/L		0.01		2	E200.7	07/21/08 18:07/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 17:09/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:25/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 18:07/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 18:07/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	07/29/08 03:03/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/31/08 16:39/eli-c
Strontium	2.6	mg/L		0.1		2	E200.7	07/21/08 18:07/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 03:03/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/29/08 03:03/eli-c
Zinc	0.20	mg/L		0.01		2	E200.7	07/21/08 18:07/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.66	%				1	A1030 E	09/11/08 00:00/jmh
Anions	18.4	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	19.4	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	1280	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.09					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-006  
Client Sample ID: DewBurd GW688

Report Date: 09/12/08  
Collection Date: 07/07/08 18:49  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	07/15/08 14:58/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 14:58/mb
Bicarbonate as HCO3	190	mg/L		5		1	A2320 B	07/15/08 14:58/mb
Calcium	49.3	mg/L		0.5		1	E200.7	07/22/08 16:03/eli-c
Chloride	11	mg/L		1		1	E300.0	07/08/08 23:48/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/08/08 23:48/jmh
Magnesium	20.0	mg/L		0.5		1	E200.7	07/22/08 16:03/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:54/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/08/08 23:48/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/08/08 23:48/jmh
Potassium	15.6	mg/L		0.5		1	E200.7	07/22/08 16:03/eli-c
Silica	1.9	mg/L		0.5		1	E200.7	07/22/08 16:03/eli-c
Sodium	177	mg/L		0.5		1	E200.7	07/22/08 16:03/eli-c
Sulfate	413	mg/L	D	3		50	E300.0	07/08/08 23:32/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1170	umhos/cm		5.0		1	A2510 B	07/10/08 09:53/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	07/11/08 00:00/kh
pH	8.33	s.u.		0.01		1	A4500-H B	07/10/08 11:08/tb
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	780	mg/L		5		1	A2540 C	07/11/08 14:29/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	07/22/08 16:03/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/26/08 05:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 05:08/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/22/08 16:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 05:08/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 05:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 05:08/eli-c
Iron	0.03	mg/L		0.03		1	E200.8	07/26/08 05:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 05:08/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	07/26/08 05:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 05:08/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 05:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 05:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/05/08 17:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 19:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 05:08/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-006  
Client Sample ID: DewBurd GW688

Report Date: 09/12/08  
Collection Date: 07/07/08 18:49  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/26/08 05:08/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 05:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/26/08 05:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 03:49/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 15:05/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	29.8	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha precision (±)	4.1	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha MDC	3.4	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta	14.1	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta MDC	3.5	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Lead 210	-0.4	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.88	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	6.7	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/08/08 11:01/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	08/08/08 11:01/eli-c
Gross Gamma	990	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-6	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	08/06/08 13:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-006  
Client Sample ID: DewBurd GW688

Report Date: 09/12/08  
Collection Date: 07/07/08 18:49  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	227	pCi/L		100		1	D5072-92	07/12/08 17:13/eli-c
Radon 222 precision (±)	50.3	pCi/L				1	D5072-92	07/12/08 17:13/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 03:09/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	07/29/08 03:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 18:11/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 03:09/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 18:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 03:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 18:11/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/21/08 18:11/eli-c
Iron	0.18	mg/L		0.03		2	E200.7	07/21/08 18:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/29/08 03:09/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	07/21/08 18:11/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 17:11/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:27/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 18:11/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 18:11/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	07/29/08 03:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/31/08 16:46/eli-c
Strontium	1.4	mg/L		0.1		2	E200.7	07/21/08 18:11/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 03:09/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/29/08 03:09/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 18:11/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.430	%				1	A1030 E	09/11/08 00:00/jmh
Anions	12.1	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	12.2	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	788	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-007  
Client Sample ID: DewBurd GW686

Report Date: 09/12/08  
Collection Date: 07/07/08 19:03  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	42	mg/L		5		1	A2320 B	07/15/08 15:01/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 15:01/mb
Bicarbonate as HCO3	51	mg/L		5		1	A2320 B	07/15/08 15:01/mb
Calcium	150	mg/L		0.5		1	E200.7	07/22/08 16:08/eli-c
Chloride	13	mg/L		1		1	E300.0	07/09/08 00:21/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	07/09/08 00:21/jmh
Magnesium	49.5	mg/L		0.5		1	E200.7	07/22/08 16:08/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	07/14/08 14:55/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/09/08 00:21/jmh
Nitrogen, Nitrite as N	0.1	mg/L		0.1		1	E300.0	07/09/08 00:21/jmh
Potassium	27.7	mg/L		0.5		1	E200.7	07/22/08 16:08/eli-c
Silica	1.7	mg/L		0.5		1	E200.7	07/22/08 16:08/eli-c
Sodium	176	mg/L		0.5		1	E200.7	07/22/08 16:08/eli-c
Sulfate	812	mg/L	D	3		50	E300.0	07/09/08 00:04/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1720	umhos/cm		5.0		1	A2510 B	07/10/08 09:54/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	07/11/08 00:00/kh
pH	8.68	s.u.		0.01		1	A4500-H B	07/10/08 11:09/tb
Sodium Adsorption Ratio (SAR)	3.2	unitless		0.10		1	Calculation	09/11/08 08:58/ADM
Solids, Total Dissolved TDS @ 180 C	1300	mg/L		5		1	A2540 C	07/14/08 14:54/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	07/22/08 16:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/26/08 05:15/eli-c
Barium	ND	mg/L		0.1		1	E200.7	07/22/08 16:08/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/22/08 16:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 19:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/29/08 19:10/eli-c
Copper	ND	mg/L		0.01		1	E200.7	07/22/08 16:08/eli-c
Iron	ND	mg/L		0.03		1	E200.7	07/22/08 16:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 05:15/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	07/29/08 19:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 05:15/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/22/08 16:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/29/08 19:10/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	08/05/08 17:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/29/08 19:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 05:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070115-007  
**Client Sample ID:** DewBurd GW686

**Report Date:** 09/12/08  
**Collection Date:** 07/07/08 19:03  
**Date Received:** 07/08/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0012	mg/L		0.0003		1	E200.8	07/26/08 05:15/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/29/08 19:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/29/08 19:10/eli-c
METALS - SUSPENDED								
Uranium	0.0004	mg/L		0.0003		1	E200.8	07/27/08 03:53/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/05/08 15:15/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	11.3	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Alpha MDC	4.2	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta	16.4	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Gross Beta MDC	5.6	pCi/L				1	E900.0	08/30/08 22:33/eli-c
Lead 210	6.1	pCi/L	U			1	E909.0M	07/24/08 08:45/eli-c
Lead 210 precision (±)	4.8	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Lead 210 MDC	7.9	pCi/L				1	E909.0M	07/24/08 08:45/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.52	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	3.3	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/05/08 16:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/08/08 11:01/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/08/08 11:01/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.3	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.37	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 13:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070115-007  
Client Sample ID: DewBurd GW686

Report Date: 09/12/08  
Collection Date: 07/07/08 19:03  
Date Received: 07/08/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	467	pCi/L		100		1	D5072-92	07/12/08 18:03/eli-c
Radon 222 precision (±)	53.4	pCi/L				1	D5072-92	07/12/08 18:03/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/29/08 03:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/29/08 03:16/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/21/08 18:15/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	07/29/08 03:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/21/08 18:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/29/08 03:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/21/08 18:15/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/21/08 18:15/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	07/21/08 18:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/29/08 03:16/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/21/08 18:15/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/11/08 17:14/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/21/08 10:30/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/21/08 18:15/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/21/08 18:15/eli-c
Selenium	0.008	mg/L		0.001		1	E200.8	07/29/08 03:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/31/08 17:20/eli-c
Strontium	4.4	mg/L		0.1		2	E200.7	07/21/08 18:15/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/29/08 03:16/eli-c
Uranium	0.0072	mg/L		0.0003		1	E200.8	07/29/08 03:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/21/08 18:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.80	%				1	A1030 E	09/11/08 00:00/jmh
Anions	18.1	meq/L				1	A1030 E	09/11/08 00:00/jmh
Cations	20.0	meq/L				1	A1030 E	09/11/08 00:00/jmh
Solids, Total Dissolved Calculated	1260	mg/L				1	A1030 E	09/11/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	09/11/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080715A-ALK-SEL-W							
Sample ID: LCS1_080715A	Laboratory Control Sample					Run: PH_COND1-R_080715A			07/15/08 14:16
Alkalinity, Total as CaCO <sub>3</sub>	952	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080715A	Method Blank					Run: PH_COND1-R_080715A			07/15/08 14:17
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08070130-003AMS	Sample Matrix Spike					Run: PH_COND1-R_080715A			07/15/08 15:23
Alkalinity, Total as CaCO <sub>3</sub>	218	mg/L	5.0	96	80	120			
Sample ID: R08070130-003AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080715A			07/15/08 15:26
Alkalinity, Total as CaCO <sub>3</sub>	218	mg/L	5.0	96	80	120	0	10	
Method: A2510 B		Batch: 080710_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080710	Laboratory Control Sample					Run: PH_COND2-R_080710A			07/10/08 09:29
Conductivity @ 25 C	1440	umhos/cm	5.0	102	90	110			
Sample ID: LCS1-1_080710	Laboratory Control Sample					Run: PH_COND2-R_080710A			07/10/08 09:29
Conductivity @ 25 C	157	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_080710	Laboratory Control Sample					Run: PH_COND2-R_080710A			07/10/08 09:31
Conductivity @ 25 C	5060	umhos/cm	5.0	101	90	110			
Sample ID: MBLK-1_080710	Method Blank					Run: PH_COND2-R_080710A			07/10/08 09:40
Conductivity @ 25 C	5	umhos/cm	5						
Sample ID: R08070115-007ADUP	Sample Duplicate					Run: PH_COND2-R_080710A			07/10/08 09:55
Conductivity @ 25 C	1750	umhos/cm	5.0				1.7	10	
Method: A2540 C		Batch: 080710A-SLDS-TDS-W							
Sample ID: LCS1_080710A	Laboratory Control Sample					Run: BAL-4-R_080710B			07/11/08 13:11
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080710A	Method Blank					Run: BAL-4-R_080710B			07/11/08 13:12
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08070104-010AMS	Sample Matrix Spike					Run: BAL-4-R_080710B			07/11/08 13:19
Solids, Total Dissolved TDS @ 180 C	380	mg/L	5.0	99	80	120			
Sample ID: R08070104-010AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080710B			07/11/08 13:19
Solids, Total Dissolved TDS @ 180 C	380	mg/L	5.0	99	80	120	0	10	
Sample ID: R08070130-003AMS	Sample Matrix Spike					Run: BAL-4-R_080710B			07/14/08 14:57
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0	108	80	120			
Sample ID: R08070130-003AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080710B			07/14/08 14:57
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0	107	80	120	0.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080711-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080711A		07/11/08 00:00		
Oxidation-Reduction Potential	470	mV		99	95	105			
Sample ID: R08070115-007F	Sample Duplicate				Run: PH_COND1-R_080711A		07/11/08 00:00		
Oxidation-Reduction Potential	200	mV					2	10	
Method: A3114 B							Batch: C_SE3114-080805B		
Sample ID: MBLK	Method Blank				Run: SUB-C105358		08/05/08 14:47		
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-114-6	Laboratory Control Sample				Run: SUB-C105358		08/05/08 14:49		
Selenium-IV	0.050	mg/L	0.0010	99	90	110			
Sample ID: R08070115-001E	Sample Matrix Spike				Run: SUB-C105358		08/05/08 14:53		
Selenium-IV	0.052	mg/L	0.0010	103	85	115			
Sample ID: R08070115-001E	Sample Matrix Spike Duplicate				Run: SUB-C105358		08/05/08 14:55		
Selenium-IV	0.052	mg/L	0.0010	103	85	115	0	10	
Sample ID: C08070631-001CMS	Sample Matrix Spike				Run: SUB-C105358		08/05/08 15:22		
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
Sample ID: C08070631-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-C105358		08/05/08 15:24		
Selenium-IV	0.046	mg/L	0.0010	93	85	115	0.9	10	
Method: A3114 B							Batch: C_SE3114-080805C		
Sample ID: MBLK	Method Blank				Run: SUB-C105366		08/05/08 16:49		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-114-6	Laboratory Control Sample				Run: SUB-C105366		08/05/08 16:51		
Selenium	0.050	mg/L	0.0010	99	90	110			
Sample ID: R08070115-001E	Sample Matrix Spike				Run: SUB-C105366		08/05/08 16:56		
Selenium	0.053	mg/L	0.0010	102	85	115			
Sample ID: R08070115-001E	Sample Matrix Spike Duplicate				Run: SUB-C105366		08/05/08 16:58		
Selenium	0.054	mg/L	0.0010	104	85	115	1.1	10	
Method: A4500-H B							Batch: 080710_1-PH-W		
Sample ID: LCS_pH-1_080710	Laboratory Control Sample				Run: PH_COND2-R_080710B		07/10/08 11:01		
pH	6.85	s.u.	0.010	100	98.55	101.45			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2008-07-14_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080714A		07/14/08 12:01	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080714A		07/14/08 12:33	
Nitrogen, Ammonia as N	0.27	mg/L	0.10	107	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080714A		07/14/08 12:54	
Nitrogen, Ammonia as N	0.22	mg/L	0.10	89	90	110			S
Sample ID: R08070115-005BMS	Sample Matrix Spike					Run: TECHAA2-R_080714A		07/14/08 14:39	
Nitrogen, Ammonia as N	0.61	mg/L	0.10	107	80	120			
Sample ID: R08070115-005BMDS	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080714A		07/14/08 14:40	
Nitrogen, Ammonia as N	0.57	mg/L	0.10	90	80	120	7.1	10	
Method: D5072-92							Batch: C_R104163		
Sample ID: R08070115-001G	Sample Duplicate					Run: SUB-C104163		07/12/08 12:58	
Radon 222	520000	pCi/L	100				13	30	
Sample ID: MB-R104163	Method Blank					Run: SUB-C104163		07/12/08 01:21	
Radon 222	20	pCi/L							
Sample ID: LCS-R104163	Laboratory Control Sample					Run: SUB-C104163		07/12/08 02:16	
Radon 222	303	pCi/L	100	91	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19130		
Sample ID: MB-19130	Method Blank			Run: SUB-C104583			07/21/08 17:27		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.002	mg/L	0.001						
Sample ID: LCS3-19130	Laboratory Control Sample			Run: SUB-C104583			07/21/08 17:31		
Barium	0.511	mg/L	0.10	102	85	115			
Boron	0.504	mg/L	0.10	101	85	115			
Chromium	0.512	mg/L	0.050	102	85	115			
Copper	0.512	mg/L	0.010	102	85	115			
Iron	2.60	mg/L	0.030	104	85	115			
Manganese	2.55	mg/L	0.010	102	85	115			
Molybdenum	0.502	mg/L	0.10	100	85	115			
Nickel	0.506	mg/L	0.050	101	85	115			
Strontium	0.519	mg/L	0.10	104	85	115			
Zinc	0.517	mg/L	0.010	103	85	115			
Sample ID: C08070562-001HMS3	Sample Matrix Spike			Run: SUB-C104583			07/21/08 18:32		
Barium	0.543	mg/L	0.10	104	70	130			
Boron	0.716	mg/L	0.10	104	70	130			
Chromium	0.511	mg/L	0.050	102	70	130			
Copper	0.517	mg/L	0.010	103	70	130			
Iron	3.71	mg/L	0.030	103	70	130			
Manganese	2.67	mg/L	0.010	103	70	130			
Molybdenum	0.499	mg/L	0.10	100	70	130			
Nickel	0.511	mg/L	0.050	102	70	130			
Strontium	1.71	mg/L	0.10	97	70	130			
Zinc	0.529	mg/L	0.010	104	70	130			
Sample ID: C08070562-001HMSD3	Sample Matrix Spike Duplicate			Run: SUB-C104583			07/21/08 18:36		
Barium	0.531	mg/L	0.10	101	70	130	2.2	20	
Boron	0.715	mg/L	0.10	104	70	130	0.1	20	
Chromium	0.505	mg/L	0.050	101	70	130	1.2	20	
Copper	0.511	mg/L	0.010	102	70	130	1.2	20	
Iron	3.72	mg/L	0.030	104	70	130	0.2	20	
Manganese	2.62	mg/L	0.010	101	70	130	1.8	20	
Molybdenum	0.508	mg/L	0.10	102	70	130	1.9	20	
Nickel	0.506	mg/L	0.050	101	70	130	1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19130		
Sample ID: C08070562-001HMSD3	Sample Matrix Spike Duplicate			Run: SUB-C104583			07/21/08 18:36		
Strontium	1.76	mg/L	0.10	107	70	130	2.7	20	
Zinc	0.518	mg/L	0.010	102	70	130	2.1	20	
Method: E200.7							Batch: C_R104679		
Sample ID: MB-080722	Method Blank			Run: SUB-C104679			07/22/08 11:40		
Aluminum	0.1	mg/L	0.0001						
Boron	0.06	mg/L	0.02						
Copper	0.004	mg/L	6E-05						
Iron	0.2	mg/L	0.005						
Molybdenum	ND	mg/L	0.0001						
Calcium	0.7	mg/L	0.04						
Magnesium	0.6	mg/L	0.06						
Potassium	0.6	mg/L	0.05						
Silica	ND	mg/L	0.1						
Sodium	ND	mg/L	0.07						
Sample ID: R08070115-004C	Sample Matrix Spike			Run: SUB-C104679			07/22/08 15:46		
Aluminum	0.561	mg/L	0.10	112	70	130			
Boron	0.657	mg/L	0.10	99	70	130			
Copper	0.553	mg/L	0.010	109	70	130			
Iron	0.941	mg/L	0.031	94	70	130			
Molybdenum	0.548	mg/L	0.10	110	70	130			
Sample ID: R08070115-004C	Sample Matrix Spike Duplicate			Run: SUB-C104679			07/22/08 15:51		
Aluminum	0.544	mg/L	0.10	109	70	130	3.1	20	
Boron	0.649	mg/L	0.10	98	70	130	1.2	20	
Copper	0.541	mg/L	0.010	107	70	130	2.2	20	
Iron	0.933	mg/L	0.031	93	70	130	0.9	20	
Molybdenum	0.530	mg/L	0.10	106	70	130	3.3	20	
Sample ID: C08070893-002BDUP	Sample Duplicate			Run: SUB-C104679			07/23/08 01:34		
Aluminum	0.0270	mg/L	0.10				0	20	
Boron	ND	mg/L	0.10				0	20	
Copper	ND	mg/L	0.010				0	20	
Iron	ND	mg/L	0.030				0	20	
Molybdenum	ND	mg/L	0.10				0	20	
Calcium	0.149	mg/L	1.0				0	20	
Magnesium	ND	mg/L	1.0				0	20	
Potassium	0.551	mg/L	1.0				0	20	
Silica	ND	mg/L	0.10						
Sodium	0.164	mg/L	1.0				0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104799		
Sample ID: MB-080724A	Method Blank		Run: SUB-C104799				07/24/08 13:13		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Boron	0.02	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Silver	ND	mg/L	0.006						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Sample ID: LFB-080724A	Laboratory Fortified Blank		Run: SUB-C104799				07/24/08 13:17		
Silica	0.39	mg/L	0.10	99	85	125			
Aluminum	1.0	mg/L	0.10	100	85	125			
Boron	1.1	mg/L	0.10	105	85	125			
Calcium	54	mg/L	0.50	108	85	125			
Chromium	1.0	mg/L	0.050	105	85	125			
Iron	1.1	mg/L	0.030	109	85	125			
Magnesium	54	mg/L	0.50	108	85	125			
Nickel	1.0	mg/L	0.050	104	85	125			
Potassium	46	mg/L	0.50	93	85	125			
Silver	1.0	mg/L	0.010	102	85	125			
Sodium	50	mg/L	0.77	99	85	125			
Vanadium	1.1	mg/L	0.10	106	85	125			
Sample ID: C08070339-001JMS2	Sample Matrix Spike		Run: SUB-C104799				07/24/08 17:19		
Aluminum	1.95	mg/L	0.10	98	70	130			
Boron	2.25	mg/L	0.10	103	70	130			
Chromium	2.05	mg/L	0.050	102	70	130			
Iron	2.13	mg/L	0.030	106	70	130			
Nickel	2.02	mg/L	0.050	101	70	130			
Silver	2.00	mg/L	0.012	100	70	130			
Vanadium	2.17	mg/L	0.10	108	70	130			
Calcium	263	mg/L	1.0	103	70	130			
Magnesium	153	mg/L	1.0	103	70	130			
Potassium	105	mg/L	1.0	90	70	130			
Silica	7.85	mg/L	0.10		70	130			A
Sodium	144	mg/L	1.5	99	70	130			
Sample ID: C08070339-001JMSD2	Sample Matrix Spike Duplicate		Run: SUB-C104799				07/24/08 17:23		
Aluminum	1.97	mg/L	0.10	98	70	130	0.8	20	
Boron	2.23	mg/L	0.10	102	70	130	0.9	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104799		
Sample ID: C08070339-001JMSD2	Sample Matrix Spike Duplicate			Run: SUB-C104799			07/24/08 17:23		
Chromium	2.02	mg/L	0.050	101	70	130	1.5	20	
Iron	2.10	mg/L	0.030	105	70	130	1.3	20	
Nickel	1.98	mg/L	0.050	99	70	130	1.7	20	
Silver	2.00	mg/L	0.012	100	70	130	0.1	20	
Vanadium	2.07	mg/L	0.10	103	70	130	4.5	20	
Calcium	259	mg/L	1.0	99	70	130	1.5	20	
Magnesium	150	mg/L	1.0	100	70	130	1.8	20	
Potassium	106	mg/L	1.0	90	70	130	0.6	20	
Silica	7.77	mg/L	0.10		70	130	1	20	A
Sodium	141	mg/L	1.5	97	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_19130		
<b>Sample ID: MB-19130</b>	Method Blank		Run: SUB-C104980				07/28/08 12:37		
Antimony	0.0003	mg/L	0.0002						
Arsenic	0.0005	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	ND	mg/L	5E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	5E-05	mg/L	4E-05						
Thallium	ND	mg/L	3E-05						
Uranium	0.0002	mg/L	3E-05						
<b>Sample ID: LCS3-19130</b>	Laboratory Control Sample		Run: SUB-C104980				07/28/08 12:44		
Antimony	0.53	mg/L	0.0018	106	85	115			
Arsenic	0.52	mg/L	0.0010	105	85	115			
Beryllium	0.26	mg/L	0.0011	103	85	115			
Cadmium	0.26	mg/L	0.0010	102	85	115			
Lead	0.51	mg/L	0.0010	102	85	115			
Selenium	0.51	mg/L	0.0020	103	85	115			
Silver	0.048	mg/L	0.0010	96	85	115			
Thallium	0.50	mg/L	0.0010	101	85	115			
Uranium	0.52	mg/L	0.00032	104	85	115			
<b>Sample ID: C08070562-001HMS3</b>	Sample Matrix Spike		Run: SUB-C104980				07/28/08 13:59		
Antimony	0.61	mg/L	0.0010	122	70	130			
Arsenic	0.54	mg/L	0.0010	106	70	130			
Beryllium	0.27	mg/L	0.0010	107	70	130			
Cadmium	0.27	mg/L	0.0010	106	70	130			
Lead	0.57	mg/L	0.0010	113	70	130			
Selenium	0.50	mg/L	0.0010	101	70	130			
Silver	0.050	mg/L	0.0010	100	70	130			
Thallium	0.57	mg/L	0.0010	113	70	130			
Uranium	0.63	mg/L	0.00030	60	70	130			S
<b>Sample ID: C08070562-001HMSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C104980				07/28/08 14:06		
Antimony	0.59	mg/L	0.0010	119	70	130	3	20	
Arsenic	0.52	mg/L	0.0010	103	70	130	3.3	20	
Beryllium	0.26	mg/L	0.0010	104	70	130	3.3	20	
Cadmium	0.26	mg/L	0.0010	103	70	130	2.8	20	
Lead	0.55	mg/L	0.0010	110	70	130	2.5	20	
Selenium	0.48	mg/L	0.0010	97	70	130	4	20	
Silver	0.048	mg/L	0.0010	96	70	130	4	20	
Thallium	0.54	mg/L	0.0010	108	70	130	4.8	20	
Uranium	0.60	mg/L	0.00030	58	70	130	3.8	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_19224
Sample ID: MB-19224	Method Blank					Run: SUB-C104868			07/27/08 03:08
Uranium	2E-05	mg/L							
Sample ID: LCS1-19224	Laboratory Control Sample					Run: SUB-C104868			07/27/08 03:12
Uranium	0.0471	mg/L	0.00030	90	80	120			
Sample ID: C08070737-009IMS4	Post Digestion Spike					Run: SUB-C104868			07/27/08 04:50
Uranium	0.0115	mg/L	0.00030	92	70	130			
Sample ID: C08070737-009IMSD4	Post Digestion Spike Duplicate					Run: SUB-C104868			07/27/08 04:54
Uranium	0.0115	mg/L	0.00030	91	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: LRB	Method Blank		Run: SUB-C104758				07/23/08 12:27		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	4E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Mercury	ND	mg/L	1E-05						
Molybdenum	ND	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Uranium	4E-06	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0001	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104758				07/23/08 12:34		
Aluminum	0.0509	mg/L	0.0010	102	85	115			
Arsenic	0.0497	mg/L	0.0010	99	85	115			
Barium	0.0490	mg/L	0.0010	98	85	115			
Cadmium	0.0506	mg/L	0.0010	101	85	115			
Chromium	0.0503	mg/L	0.0010	101	85	115			
Copper	0.0512	mg/L	0.0010	102	85	115			
Lead	0.0492	mg/L	0.0010	98	85	115			
Manganese	0.0495	mg/L	0.0010	99	85	115			
Mercury	0.00498	mg/L	0.0010	100	85	115			
Molybdenum	0.0497	mg/L	0.0010	99	85	115			
Nickel	0.0499	mg/L	0.0010	100	85	115			
Uranium	0.0488	mg/L	0.00030	98	85	115			
Vanadium	0.0492	mg/L	0.0010	98	85	115			
Zinc	0.0533	mg/L	0.0010	106	85	115			
Sample ID: R08070115-005C	Post Digestion Spike		Run: SUB-C104758				07/24/08 08:23		
Aluminum	0.0537	mg/L	0.10	105	70	130			
Arsenic	0.0485	mg/L	0.0010	97	70	130			
Barium	0.0765	mg/L	0.10	96	70	130			
Cadmium	0.0455	mg/L	0.010	91	70	130			
Chromium	0.0460	mg/L	0.050	92	70	130			
Copper	0.0480	mg/L	0.010	95	70	130			
Lead	0.0490	mg/L	0.050	98	70	130			
Manganese	0.0553	mg/L	0.010	95	70	130			
Mercury	0.00565	mg/L	0.0010	113	70	130			
Molybdenum	0.0565	mg/L	0.10	96	70	130			
Nickel	0.0473	mg/L	0.050	95	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: R08070115-005C	Post Digestion Spike			Run: SUB-C104758			07/24/08 08:23		
Thorium 232	0.0490	mg/L	0.0010	98	70	130			
Uranium	0.0489	mg/L	0.00030	98	70	130			
Vanadium	0.0475	mg/L	0.10	95	70	130			
Zinc	0.0476	mg/L	0.010	93	70	130			
Sample ID: R08070115-005C	Post Digestion Spike Duplicate			Run: SUB-C104758			07/24/08 08:30		
Aluminum	0.0549	mg/L	0.10	107	70	130	0	20	
Arsenic	0.0484	mg/L	0.0010	97	70	130	0.3	20	
Barium	0.0764	mg/L	0.10	96	70	130	0	20	
Cadmium	0.0459	mg/L	0.010	92	70	130	0.9	20	
Chromium	0.0463	mg/L	0.050	93	70	130	0	20	
Copper	0.0484	mg/L	0.010	96	70	130	0.9	20	
Lead	0.0491	mg/L	0.050	98	70	130	0	20	
Manganese	0.0556	mg/L	0.010	95	70	130	0.6	20	
Mercury	0.00533	mg/L	0.0010	106	70	130	5.9	20	
Molybdenum	0.0569	mg/L	0.10	96	70	130	0	20	
Nickel	0.0479	mg/L	0.050	96	70	130	0	20	
Thorium 232	0.0494	mg/L	0.0010	99	70	130	1	20	
Uranium	0.0493	mg/L	0.00030	98	70	130	0.8	20	
Vanadium	0.0481	mg/L	0.10	96	70	130	0	20	
Zinc	0.0493	mg/L	0.010	96	70	130	3.5	20	
Sample ID: LRB	Method Blank			Run: SUB-C104758			07/23/08 12:27		
Thorium 232	3E-05	mg/L							
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C104758			07/23/08 12:34		
Thorium 232	0.0485	mg/L	0.0010	97	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: LRB	Method Blank		Run: SUB-C104869				07/25/08 17:21		
Arsenic	ND	mg/L	4E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	3E-05						
Iron	ND	mg/L	0.0002						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Mercury	8E-05	mg/L	1E-05						
Molybdenum	ND	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Uranium	ND	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0002	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104869				07/25/08 17:28		
Arsenic	0.0515	mg/L	0.0010	103	85	115			
Barium	0.0513	mg/L	0.0010	102	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0515	mg/L	0.0010	103	85	115			
Copper	0.0520	mg/L	0.0010	104	85	115			
Iron	1.30	mg/L	0.0010	87	85	115			
Lead	0.0514	mg/L	0.0010	103	85	115			
Manganese	0.0516	mg/L	0.0010	103	85	115			
Mercury	0.00522	mg/L	0.0010	103	85	115			
Molybdenum	0.0492	mg/L	0.0010	98	85	115			
Nickel	0.0514	mg/L	0.0010	103	85	115			
Uranium	0.0473	mg/L	0.00030	95	85	115			
Vanadium	0.0513	mg/L	0.0010	102	85	115			
Zinc	0.0545	mg/L	0.0010	109	85	115			
Sample ID: R08070115-001C	Post Digestion Spike		Run: SUB-C104869				07/26/08 02:58		
Arsenic	0.0487	mg/L	0.0010	93	70	130			
Barium	0.0884	mg/L	0.10	100	70	130			
Cadmium	0.0498	mg/L	0.010	100	70	130			
Chromium	0.0436	mg/L	0.050	87	70	130			
Copper	0.0444	mg/L	0.010	89	70	130			
Iron	1.19	mg/L	0.030	373	70	130			S
Lead	0.0503	mg/L	0.050	100	70	130			
Manganese	0.202	mg/L	0.010	103	70	130			
Mercury	0.00503	mg/L	0.0010	101	70	130			
Molybdenum	0.0509	mg/L	0.10	100	70	130			
Nickel	0.0464	mg/L	0.050	89	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 09/12/08

Project: Edgemont

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: R08070115-001C	Post Digestion Spike			Run: SUB-C104869			07/26/08 02:58		
Thorium 232	0.0536	mg/L	0.0010	107	70	130			
Uranium	0.0663	mg/L	0.00030	108	70	130			
Vanadium	0.0461	mg/L	0.10	92	70	130			
Zinc	0.0480	mg/L	0.010	92	70	130			
Sample ID: R08070115-001C	Post Digestion Spike Duplicate			Run: SUB-C104869			07/26/08 03:04		
Arsenic	0.0497	mg/L	0.0010	95	70	130	2.2	20	
Barium	0.0901	mg/L	0.10	103	70	130	0	20	
Cadmium	0.0513	mg/L	0.010	103	70	130	3	20	
Chromium	0.0451	mg/L	0.050	90	70	130	0	20	
Copper	0.0458	mg/L	0.010	91	70	130	3	20	
Iron	1.20	mg/L	0.030	378	70	130	1.3	20	S
Lead	0.0526	mg/L	0.050	105	70	130	4.4	20	
Manganese	0.203	mg/L	0.010	106	70	130	0.6	20	
Mercury	0.00528	mg/L	0.0010	106	70	130	4.8	20	
Molybdenum	0.0530	mg/L	0.10	104	70	130	0	20	
Nickel	0.0475	mg/L	0.050	91	70	130	0	20	
Thorium 232	0.0558	mg/L	0.0010	112	70	130	4	20	
Uranium	0.0682	mg/L	0.00030	111	70	130	2.8	20	
Vanadium	0.0473	mg/L	0.10	95	70	130	0	20	
Zinc	0.0498	mg/L	0.010	95	70	130	3.8	20	
Sample ID: C08070597-001AMS4	Post Digestion Spike			Run: SUB-C104869			07/26/08 06:13		
Arsenic	0.0519	mg/L	0.0010	103	70	130			
Barium	0.0621	mg/L	0.10	103	70	130			
Cadmium	0.0476	mg/L	0.010	93	70	130			
Chromium	0.0502	mg/L	0.050	100	70	130			
Copper	0.0480	mg/L	0.010	95	70	130			
Iron	1.30	mg/L	0.030	406	70	130			S
Lead	0.0508	mg/L	0.050	101	70	130			
Manganese	2.21	mg/L	0.010		70	130			A
Mercury	0.00560	mg/L	0.0010	111	70	130			
Molybdenum	0.0566	mg/L	0.10	103	70	130			
Nickel	0.0622	mg/L	0.050	96	70	130			
Thorium 232	0.0541	mg/L	0.0010	108	70	130			
Uranium	0.116	mg/L	0.00030	101	70	130			
Vanadium	0.0515	mg/L	0.10	103	70	130			
Zinc	0.0552	mg/L	0.010	93	70	130			
Sample ID: C08070597-001AMSD4	Post Digestion Spike Duplicate			Run: SUB-C104869			07/26/08 06:20		
Arsenic	0.0492	mg/L	0.0010	98	70	130	5.3	20	
Barium	0.0620	mg/L	0.10	103	70	130	0	20	
Cadmium	0.0482	mg/L	0.010	95	70	130	1.3	20	
Chromium	0.0462	mg/L	0.050	92	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: C08070597-001AMSD4	Post Digestion Spike Duplicate			Run: SUB-C104869				07/26/08 06:20	
Copper	0.0452	mg/L	0.010	90	70	130	6	20	
Iron	1.42	mg/L	0.030	442	70	130	8.3	20	S
Lead	0.0511	mg/L	0.050	102	70	130	0.6	20	
Manganese	2.20	mg/L	0.010		70	130	0.1	20	A
Mercury	0.00559	mg/L	0.0010	110	70	130	0.3	20	
Molybdenum	0.0572	mg/L	0.10	104	70	130	0	20	
Nickel	0.0623	mg/L	0.050	96	70	130	0.2	20	
Thorium 232	0.0550	mg/L	0.0010	109	70	130	1.5	20	
Uranium	0.117	mg/L	0.00030	103	70	130	0.9	20	
Vanadium	0.0484	mg/L	0.10	97	70	130	0	20	
Zinc	0.0495	mg/L	0.010	82	70	130	11	20	
Sample ID: LRB	Method Blank			Run: SUB-C104869				07/25/08 17:21	
Thorium 232	4E-05	mg/L							
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C104869				07/25/08 17:28	
Thorium 232	0.0473	mg/L	0.0010	95	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R105057		
Sample ID: LRB	Method Blank		Run: SUB-C105057				07/29/08 12:44		
Cadmium	ND	mg/L	1E-05						
Chromium	ND	mg/L	4E-05						
Manganese	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Vanadium	4E-05	mg/L	3E-05						
Zinc	ND	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C105057				07/29/08 12:51		
Cadmium	0.0498	mg/L	0.0010	100	85	115			
Chromium	0.0483	mg/L	0.0010	97	85	115			
Manganese	0.0486	mg/L	0.0010	97	85	115			
Nickel	0.0495	mg/L	0.0010	99	85	115			
Silver	0.0194	mg/L	0.0010	97	85	115			
Vanadium	0.0488	mg/L	0.0010	97	85	115			
Zinc	0.0508	mg/L	0.0010	102	85	115			
Sample ID: C08070597-004AMS4	Post Digestion Spike		Run: SUB-C105057				07/29/08 20:11		
Cadmium	0.0509	mg/L	0.010	102	70	130			
Chromium	0.0509	mg/L	0.050	101	70	130			
Manganese	0.0528	mg/L	0.010	101	70	130			
Nickel	0.0495	mg/L	0.050	97	70	130			
Silver	0.0121	mg/L	0.010	61	70	130			S
Vanadium	0.0515	mg/L	0.10	102	70	130			
Zinc	0.0755	mg/L	0.010	104	70	130			
Sample ID: C08070597-004AMSD4	Post Digestion Spike Duplicate		Run: SUB-C105057				07/29/08 20:18		
Cadmium	0.0504	mg/L	0.010	101	70	130	1	20	
Chromium	0.0486	mg/L	0.050	96	70	130	0	20	
Manganese	0.0502	mg/L	0.010	96	70	130	4.9	20	
Nickel	0.0487	mg/L	0.050	96	70	130	0	20	
Silver	0.0134	mg/L	0.010	67	70	130	9.6	20	S
Vanadium	0.0483	mg/L	0.10	96	70	130	0	20	
Zinc	0.0736	mg/L	0.010	100	70	130	2.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 09/12/08  
Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: B_33468		
Sample ID: MB-33468	Method Blank					Run: SUB-B113943			07/11/08 15:24
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33468	Laboratory Fortified Blank					Run: SUB-B113943			07/11/08 15:36
Mercury	0.0040	mg/L	0.0010	100	85	115			
Sample ID: B08070660-001HMS	Sample Matrix Spike					Run: SUB-B113943			07/11/08 15:41
Mercury	0.0041	mg/L	0.0010	102	70	130			
Sample ID: B08070660-001HMSD	Sample Matrix Spike Duplicate					Run: SUB-B113943			07/11/08 15:43
Mercury	0.0043	mg/L	0.0010	107	70	130	5.3	30	
Method: E245.1							Batch: B_33469		
Sample ID: MB-33469	Method Blank					Run: SUB-B113943			07/11/08 16:53
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33469	Laboratory Fortified Blank					Run: SUB-B113943			07/11/08 16:55
Mercury	0.0019	mg/L	0.0010	93	85	115			
Sample ID: B08071042-002DMS	Sample Matrix Spike					Run: SUB-B113943			07/11/08 17:00
Mercury	0.0019	mg/L	0.0010	93	70	130			
Sample ID: B08071042-002DMSD	Sample Matrix Spike Duplicate					Run: SUB-B113943			07/11/08 17:02
Mercury	0.0020	mg/L	0.0010	100	70	130	7.8	30	
Method: E245.1							Analytical Run: SUB-B113943		
Sample ID: QCS	Initial Calibration Verification Standard								07/11/08 15:17
Mercury	0.0020	mg/L	0.0010	102	90	110			
Method: E245.1							Batch: C_B_33540		
Sample ID: MB-33540	Method Blank					Run: SUB-C104653			07/21/08 09:03
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33540	Laboratory Fortified Blank					Run: SUB-C104653			07/21/08 09:05
Mercury	0.0018	mg/L	0.0010	90	85	115			
Sample ID: B08071382-002AMS	Sample Matrix Spike					Run: SUB-C104653			07/21/08 10:02
Mercury	0.0024	mg/L	0.0010	110	70	130			
Sample ID: B08071382-002AMSD	Sample Matrix Spike Duplicate					Run: SUB-C104653			07/21/08 10:04
Mercury	0.0024	mg/L	0.0010	109	70	130	0.4	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R35925		
Sample ID: LFB0807081629-3	Laboratory Fortified Blank			Run: DIONEX_080708A			07/08/08 18:20		
Chloride	4.61	mg/L	0.50	92	90	110			
Fluoride	1.89	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N	2.28	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
Sample ID: LFB0807081629-4	Laboratory Fortified Blank			Run: DIONEX_080708A			07/08/08 18:36		
Chloride	4.58	mg/L	0.50	92	90	110			
Fluoride	1.90	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N	2.27	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sulfate	13.5	mg/L	1.0	90	90	110			
Sample ID: R08070115-005AMS	Sample Matrix Spike			Run: DIONEX_080708A			07/08/08 22:42		
Chloride	249	mg/L	5.4	71	80	120			S
Fluoride	94.1	mg/L	0.56	87	80	120			
Nitrogen, Nitrate as N	111	mg/L	1.3	89	80	120			
Nitrogen, Nitrite as N	117	mg/L	2.9	93	80	120			
Sulfate	1420	mg/L	3.4	82	80	120			
Sample ID: R08070115-005AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080708A			07/08/08 22:59		
Chloride	247	mg/L	5.4	70	80	120	0.8	10	S
Fluoride	93.6	mg/L	0.56	87	80	120	0.5	10	
Nitrogen, Nitrate as N	111	mg/L	1.3	88	80	120	0.5	10	
Nitrogen, Nitrite as N	116	mg/L	2.9	93	80	120	0.4	10	
Sulfate	1400	mg/L	3.4	79	80	120	1.6	10	S
Method: E300.0							Batch: R35984		
Sample ID: LFB0807113912-3	Laboratory Fortified Blank			Run: DIONEX_080711A			07/11/08 12:14		
Chloride	4.72	mg/L	0.50	94	90	110			
Sample ID: LFB0807113912-4	Laboratory Fortified Blank			Run: DIONEX_080711A			07/11/08 12:30		
Chloride	4.73	mg/L	0.50	95	90	110			
Sample ID: R08070043-006HMS	Sample Matrix Spike			Run: DIONEX_080711A			07/11/08 23:11		
Chloride	926	mg/L	5.4	114	80	120			
Sample ID: R08070043-006HMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080711A			07/11/08 23:27		
Chloride	917	mg/L	5.4	111	80	120	1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0496		
Sample ID: MB-GrAB-0496	Method Blank				Run: SUB-C105636		08/09/08 00:01		
Gross Alpha	-0.04	pCi/L							U
Gross Beta	-2	pCi/L							U
Sample ID: UNAT-GrAB-0496	Laboratory Control Sample				Run: SUB-C105636		08/09/08 00:01		
Gross Alpha	140	pCi/L	104		70	130			
Sample ID: Cs137-GrAB-0496	Laboratory Control Sample				Run: SUB-C105636		08/09/08 00:01		
Gross Beta	91	pCi/L	99		70	130			
Sample ID: C08071218-007DMS	Sample Matrix Spike				Run: SUB-C105636		08/09/08 00:01		
Gross Alpha	149	pCi/L	90		70	130			
Sample ID: C08071218-007DMSD	Sample Matrix Spike Duplicate				Run: SUB-C105636		08/09/08 00:01		
Gross Alpha	158	pCi/L	96		70	130	5.8	19.9	
Sample ID: C08071218-007DMS	Sample Matrix Spike				Run: SUB-C105636		08/09/08 00:01		
Gross Beta	113	pCi/L	91		70	130			
Sample ID: C08071218-007DMSD	Sample Matrix Spike Duplicate				Run: SUB-C105636		08/09/08 00:01		
Gross Beta	117	pCi/L	95		70	130	2.9	15.8	
Method: E900.0							Batch: C_GrAB-0509		
Sample ID: MB-GrAB-0509	Method Blank				Run: SUB-C106863		08/30/08 03:22		
Gross Alpha	0.5	pCi/L							
Gross Beta	-2	pCi/L							
Sample ID: UNAT-GrAB-0509	Laboratory Control Sample				Run: SUB-C106863		08/30/08 03:22		
Gross Alpha	110	pCi/L	77		70	130			
Sample ID: C08071077-001JMS	Sample Matrix Spike				Run: SUB-C106863		08/30/08 03:22		
Gross Alpha	120	pCi/L	89		70	130			
Sample ID: C08071077-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-C106863		08/30/08 03:22		
Gross Alpha	140	pCi/L	100		70	130	11	17.2	
Sample ID: Cs137-GrAB-0509	Laboratory Control Sample				Run: SUB-C106863		08/30/08 03:22		
Gross Beta	90	pCi/L	99		70	130			
Sample ID: C08071077-001JMS	Sample Matrix Spike				Run: SUB-C106863		08/30/08 03:22		
Gross Beta	94	pCi/L	104		70	130			
Sample ID: C08071077-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-C106863		08/30/08 22:33		
Gross Beta	77	pCi/L	86		70	130	20	16.5	R

- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R104840		
Sample ID: LCS-R104840	Laboratory Control Sample				Run: SUB-C104840			07/17/08 13:12	
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
Sample ID: MB-R104840	Method Blank				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	ND	pCi/L						U	
Sample ID: C08061394-007HDUP	Sample Duplicate				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	ND	pCi/L	20				0	30	
Method: E903.0							Batch: C_19224		
Sample ID: C08070719-001EMS	Sample Matrix Spike				Run: SUB-C105486			08/06/08 15:36	
Radium 226	140	pCi/L		87	70	130			
Sample ID: C08070719-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C105486			08/06/08 15:36	
Radium 226	130	pCi/L		79	70	130	7.8	29.9	
Sample ID: MB-19224	Method Blank				Run: SUB-C105486			08/06/08 17:08	
Radium 226	-2	pCi/L						U	
Sample ID: LCS-19224	Laboratory Control Sample				Run: SUB-C105486			08/06/08 17:08	
Radium 226	58	pCi/L		76	70	130			
Method: E903.0							Batch: C_RA226-2961		
Sample ID: MB-RA226-2961	Method Blank				Run: SUB-C105461			08/06/08 08:16	
Radium 226	-0.08	pCi/L						U	
Sample ID: LCS-RA226-2961	Laboratory Control Sample				Run: SUB-C105461			08/06/08 08:16	
Radium 226	16	pCi/L		100	70	130			
Sample ID: C08070540-001EMS	Sample Matrix Spike				Run: SUB-C105461			07/29/08 00:00	
Radium 226	16	pCi/L		103	70	130			
Sample ID: C08070540-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C105461			07/29/08 00:00	
Radium 226	16	pCi/L		104	70	130	0.9	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_19224		
Sample ID: C08070680-001IMS	Sample Matrix Spike				Run: SUB-C105794		08/04/08 22:05		
Thorium 230	19.8	pCi/L	0.20	88	70	130			
Sample ID: C08070680-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C105794		08/04/08 22:05		
Thorium 230	23.7	pCi/L	0.20	103	70	130	18	30	
Sample ID: LCS-19224	Laboratory Control Sample				Run: SUB-C105794		08/05/08 12:51		
Thorium 230	44.9	pCi/L	0.20	92	70	130			
Sample ID: MB-19224	Method Blank				Run: SUB-C105794		08/05/08 12:51		
Thorium 230	0.04	pCi/L							U
Method: E907.0							Batch: C_RA-TH-ISO-0592		
Sample ID: LCS-RA-TH-ISO-0592	Laboratory Control Sample				Run: SUB-C105766		08/10/08 16:42		
Thorium 230	6.23	pCi/L	0.20	103	70	130			
Sample ID: R08070115-006H	Sample Matrix Spike				Run: SUB-C105766		08/10/08 16:46		
Thorium 230	17.2	pCi/L	0.20	105	70	130			
Sample ID: R08070115-006H	Sample Matrix Spike Duplicate				Run: SUB-C105766		08/10/08 16:47		
Thorium 230	16.0	pCi/L	0.20	98	70	130	7.3	30	
Sample ID: MB-RA-TH-ISO-0592	Method Blank				Run: SUB-C105766		08/08/08 23:51		
Thorium 230	-0.05	pCi/L							U
Method: E909.0M							Batch: C_19224		
Sample ID: R08070115-007I	Sample Matrix Spike				Run: SUB-C106081		07/29/08 09:30		
Lead 210	930	pCi/L		79	70	130			
Sample ID: R08070115-007I	Sample Matrix Spike Duplicate				Run: SUB-C106081		07/29/08 09:30		
Lead 210	1400	pCi/L		117	70	130	39	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R106081	Method Blank				Run: SUB-C106081		07/29/08 09:30		
Lead 210	5	pCi/L							U
Sample ID: LCS-R106081	Laboratory Control Sample				Run: SUB-C106081		07/29/08 09:30		
Lead 210	110	pCi/L		87	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R105847		
Sample ID: R08070115-001H	Sample Matrix Spike				Run: SUB-C105847				07/24/08 08:45
Lead 210	560	pCi/L		91	70	130			
Sample ID: R08070115-001H	Sample Matrix Spike Duplicate				Run: SUB-C105847				07/24/08 08:45
Lead 210	590	pCi/L		96	70	130	5.4	30	
Sample ID: MB-R105847	Method Blank				Run: SUB-C105847				07/24/08 08:45
Lead 210	5	pCi/L							U
Sample ID: LCS-R105847	Laboratory Control Sample				Run: SUB-C105847				07/24/08 08:45
Lead 210	130	pCi/L		106	70	130			
Sample ID: R08070115-005H	Sample Duplicate				Run: SUB-C105847				07/24/08 08:45
Lead 210	6.3	pCi/L					110	30	UR
Lead 210 MDC	7.9	pCi/L							
- High RPD is irrelevant since both samples are below the MDC.									
Method: RMO-3008							Batch: C_19224		
Sample ID: C08070737-009IMS	Sample Matrix Spike				Run: SUB-C105583				07/31/08 14:15
Polonium 210	50	pCi/L	1.0	119	70	130			
Sample ID: C08070737-009IMSD	Sample Matrix Spike Duplicate				Run: SUB-C105583				07/31/08 14:15
Polonium 210	44	pCi/L	1.0	104	70	130	14	30	
Sample ID: LCS-R105583	Laboratory Control Sample				Run: SUB-C105583				07/31/08 14:15
Polonium 210	80	pCi/L	1.0	93	70	130			
Sample ID: MB-R105583	Method Blank				Run: SUB-C105583				07/31/08 14:15
Polonium 210	0.2	pCi/L							U
Method: RMO-3008							Batch: C_R106670		
Sample ID: R08070115-004H	Sample Matrix Spike				Run: SUB-C106670				08/21/08 17:30
Polonium 210	80	pCi/L	1.0	72	70	130			
Sample ID: R08070115-004H	Sample Matrix Spike Duplicate				Run: SUB-C106670				08/21/08 17:30
Polonium 210	95	pCi/L	1.0	84	70	130	17	30	
Sample ID: LCS-R106670	Laboratory Control Sample				Run: SUB-C106670				08/21/08 17:30
Polonium 210	42	pCi/L	1.0	76	70	130			
Sample ID: MB-R106670	Method Blank				Run: SUB-C106670				08/21/08 17:30
Polonium 210	0.1	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 09/12/08

Work Order: R08070115

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A							Analytical Run: SUB-C104653		
Sample ID: QCS		Initial Calibration Verification Standard							07/21/08 08:38
Mercury	0.0020	mg/L	0.0010	100	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>DESPEZ</b>		Project Name, PWS, Permit, Etc. <b>Powder Mill Dairy Land</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Corey Foreman</b> Phone/Fax:		Email:	Sampler: (Please Print) <b>Eric Krantz</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:					
<div><div><input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: <input type="checkbox"/> Other:</div><div><input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC</div></div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other
1. <b>DeBurd GW 680</b>		<b>7/7/08</b>	<b>13:39</b>	<b>W</b>	<b>ANALYSIS REQUESTED</b>  <b>As per Quote</b>  <b>SEE ATTACHED</b> Normal Turnaround (TAT)  <b>RUSH</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments:  Receipt Temp <b>5.3 °C</b> On Ice: <input checked="" type="radio"/> Yes <input type="radio"/> No Custody Seal Intact Signature Match Y N Y N Y N
2. <b>DeBurd GW 680</b>		<b>7/7/08</b>	<b>13:29</b>	<b>W</b>	
3. <b>DeBurd GW 682</b>		<b>7/7/08</b>	<b>15:22</b>	<b>W</b>	
4. <b>DeBurd GW 684</b>		<b>7/7/08</b>	<b>17:22</b>	<b>W</b>	
5. <b>DeBurd GW 690</b>		<b>7/7/08</b>	<b>18:10</b>	<b>W</b>	
6. <b>DeBurd GW 688</b>		<b>7/7/08</b>	<b>18:58</b>	<b>W</b>	
7. <b>DeBurd GW 686</b>		<b>7/7/08</b>	<b>18:55</b>	<b>W</b>	
8. <b>DeBurd GW 688</b>		<b>7/7/08</b>	<b>18:49</b>	<b>W</b>	
9. <b>DeBurd GW 686</b>		<b>7/7/08</b>	<b>19:03</b>	<b>W</b>	
10. <b>DeBurd GW 686</b>		<b>7/7/08</b>	<b>19:03</b>	<b>W</b>	
Custody Record Relinquished by (print): <b>Eric Krantz</b> Date/Time: <b>7/8/08 09:50</b> Signature: <b>[Signature]</b>		Received by (print): <b>Steve Froland</b> Date/Time: <b>7-8-08 9:50</b> Signature: <b>[Signature]</b>		LABORATORY USE ONLY	
Signed		Sample Disposal: Return to Client: Lab Disposal:		Received by Laboratory: Date/Time: Signature:	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

October 01, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08070220

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 7/14/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070220-001	DewBurd GW3026	07/13/08 15:28	07/14/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson  
Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070220-001  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 10/01/08  
**Collection Date:** 07/13/08 15:28  
**Date Received:** 07/14/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	184	mg/L		5		1	A2320 B	07/15/08 17:41/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 17:41/mb
Bicarbonate as HCO3	224	mg/L		5		1	A2320 B	07/15/08 17:41/mb
Calcium	466	mg/L		0.5		1	E200.7	07/22/08 16:48/eli-c
Chloride	15	mg/L		1		1	E300.0	07/16/08 10:34/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/16/08 10:34/jmh
Magnesium	138	mg/L		0.5		1	E200.7	07/22/08 16:48/eli-c
Nitrogen, Ammonia as N	0.7	mg/L		0.1		1	A4500-NH3 G	07/17/08 15:58/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 10:34/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 10:34/jmh
Potassium	30.6	mg/L		0.5		1	E200.7	07/22/08 16:48/eli-c
Silica	1.4	mg/L		0.5		1	E200.7	07/22/08 16:48/eli-c
Sodium	168	mg/L		0.5		1	E200.7	07/22/08 16:48/eli-c
Sulfate	1700	mg/L	D	3		50	E300.0	07/16/08 09:45/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	3070	umhos/cm		5.0		1	A2510 B	07/17/08 10:22/tb
Oxidation-Reduction Potential	-15.5	mV				1	A2580 B	07/16/08 00:00/kh
pH	6.57	s.u.		0.01		1	A4500-H B	07/16/08 15:44/tb
Sodium Adsorption Ratio (SAR)	1.8	unitless		0.10		1	Calculation	09/24/08 08:30/ADM
Solids, Total Dissolved TDS @ 180 C	2800	mg/L		5		1	A2540 C	07/14/08 15:38/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/26/08 07:52/eli-c
Arsenic	0.016	mg/L		0.001		1	E200.8	07/26/08 07:52/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 07:52/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	07/22/08 16:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 07:52/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 07:52/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 07:52/eli-c
Iron	21.2	mg/L		0.03		1	E200.7	07/22/08 16:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 07:52/eli-c
Manganese	1.47	mg/L		0.01		1	E200.8	07/26/08 07:52/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 07:52/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 07:52/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 07:52/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/05/08 17:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/31/08 18:07/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 07:52/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 1 of 3



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070220-001  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 10/01/08  
**Collection Date:** 07/13/08 15:28  
**Date Received:** 07/14/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0128	mg/L		0.0003		1	E200.8	07/26/08 07:52/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 07:52/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	07/26/08 07:52/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 03:57/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	08/05/08 15:17/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/05/08 17:40/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	80.1	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha precision (±)	11.8	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Alpha MDC	10.4	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta	32.6	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta precision (±)	7.2	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Gross Beta MDC	11.0	pCi/L				1	E900.0	08/09/08 12:18/eli-c
Lead 210	3.1	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.6	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.46	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	10.1	pCi/L				1	E903.0	08/06/08 12:47/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	08/06/08 12:47/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/08/08 23:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/08/08 23:51/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	07/17/08 13:12/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. This value should not be used for regulatory reporting purposes.								
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-10	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.6	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.28	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	08/06/08 13:33/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 13:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070220-001  
Client Sample ID: DewBurd GW3026

Report Date: 10/01/08  
Collection Date: 07/13/08 15:28  
Date Received: 07/14/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 13:33/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/04/08 22:05/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. This value should not be used for regulatory reporting purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	560	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	63.0	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	08/01/08 01:01/eli-c
Arsenic	0.044	mg/L		0.001		10	E200.8	08/01/08 01:01/eli-c
Barium	ND	mg/L		0.1		10	E200.8	08/01/08 01:01/eli-c
Beryllium	0.001	mg/L		0.001		10	E200.8	08/01/08 01:01/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	07/18/08 12:52/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	08/01/08 01:01/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	08/01/08 01:01/eli-c
Copper	0.01	mg/L		0.01		10	E200.8	08/01/08 01:01/eli-c
Iron	22.0	mg/L		0.03		2	E200.7	07/18/08 12:52/eli-c
Lead	ND	mg/L		0.001		10	E200.8	08/01/08 01:01/eli-c
Manganese	1.57	mg/L		0.01		10	E200.8	08/02/08 02:35/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 08:42/eli-b
Mercury	ND	mg/L		0.0001		1	E245.1	07/22/08 10:48/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	08/01/08 01:01/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	08/01/08 01:01/eli-c
Selenium	ND	mg/L		0.001		10	E200.8	08/01/08 01:01/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/02/08 02:35/eli-c
Strontium	7.7	mg/L		0.1		10	E200.8	08/01/08 01:01/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	08/01/08 01:01/eli-c
Uranium	0.0151	mg/L		0.0003		10	E200.8	08/01/08 01:01/eli-c
Zinc	0.03	mg/L		0.01		10	E200.8	08/01/08 01:01/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.04	%				1	A1030 E	09/24/08 00:00/jmh
Anions	39.4	meq/L				1	A1030 E	09/24/08 00:00/jmh
Cations	43.6	meq/L				1	A1030 E	09/24/08 00:00/jmh
Solids, Total Dissolved Calculated	2630	mg/L				1	A1030 E	09/24/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	09/24/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080715A-ALK-SEL-W							
Sample ID: LCS1_080715A	Laboratory Control Sample				Run: PH_COND1-R_080715A				07/15/08 14:16
Alkalinity, Total as CaCO <sub>3</sub>	952	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080715A	Method Blank				Run: PH_COND1-R_080715A				07/15/08 14:17
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08070173-004AMS	Sample Matrix Spike				Run: PH_COND1-R_080715A				07/15/08 17:15
Alkalinity, Total as CaCO <sub>3</sub>	278	mg/L	5.0	102	80	120			
Sample ID: R08070173-004AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080715A				07/15/08 17:20
Alkalinity, Total as CaCO <sub>3</sub>	282	mg/L	5.0	106	80	120	1.4	10	
Sample ID: R08070238-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080715A				07/15/08 18:02
Alkalinity, Total as CaCO <sub>3</sub>	274	mg/L	5.0	102	80	120			
Sample ID: R08070238-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080715A				07/15/08 18:03
Alkalinity, Total as CaCO <sub>3</sub>	276	mg/L	5.0	104	80	120	0.7	10	
Method: A2510 B		Batch: 080717_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B				07/17/08 10:06
Conductivity @ 25 C	1420	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B				07/17/08 10:06
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B				07/17/08 10:08
Conductivity @ 25 C	4940	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080717	Method Blank				Run: PH_COND2-R_080717B				07/17/08 10:42
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080714A-SLDS-TDS-W							
Sample ID: R08070211-006BMS	Sample Matrix Spike				Run: BAL-4-R_080710B				07/14/08 15:32
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	104	80	120			
Sample ID: R08070211-006BMDS	Sample Matrix Spike Duplicate				Run: BAL-4-R_080710B				07/14/08 15:33
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	102	80	120	0.4	10	
Method: A2580 B		Batch: 080716-ORP-ISE-W							
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080716A				07/16/08 00:00
Oxidation-Reduction Potential	470	mV		100	95	105			
Sample ID: R08070220-001F	Sample Duplicate				Run: PH_COND1-R_080716A				07/16/08 00:00
Oxidation-Reduction Potential	ND	mV					0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080805B		
Sample ID: MBLK	Method Blank					Run: SUB-C105358			08/05/08 14:47
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-114-6	Laboratory Control Sample					Run: SUB-C105358			08/05/08 14:49
Selenium-IV	0.050	mg/L	0.0010	99	90	110			
Sample ID: C08070631-001CMS	Sample Matrix Spike					Run: SUB-C105358			08/05/08 15:22
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
Sample ID: C08070631-001CMSD	Sample Matrix Spike Duplicate					Run: SUB-C105358			08/05/08 15:24
Selenium-IV	0.046	mg/L	0.0010	93	85	115	0.9	10	
Method: A3114 B							Batch: C_SE3114-080805C		
Sample ID: MBLK	Method Blank					Run: SUB-C105366			08/05/08 16:49
Selenium	ND	mg/L	6E-05						
Sample ID: 288-114-6	Laboratory Control Sample					Run: SUB-C105366			08/05/08 16:51
Selenium	0.050	mg/L	0.0010	99	90	110			
Sample ID: C08070547-001EMS	Sample Matrix Spike					Run: SUB-C105366			08/05/08 16:56
Selenium	0.053	mg/L	0.0010	102	85	115			
Sample ID: C08070547-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C105366			08/05/08 16:58
Selenium	0.054	mg/L	0.0010	104	85	115	1.1	10	
Method: A4500-H B							Batch: 080716_1_PH-W		
Sample ID: LCS_pH-1_080716	Laboratory Control Sample					Run: PH_COND2-R_080716A			07/16/08 15:41
pH	6.81	s.u.	0.010	99	98.55	101.45			
Method: A4500-NH3 G							Batch: A2008-07-17_2_NH3_02		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080717B			07/17/08 11:42
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080717B			07/17/08 11:54
Nitrogen, Ammonia as N	0.24	mg/L	0.10	94	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080717B			07/17/08 11:55
Nitrogen, Ammonia as N	0.26	mg/L	0.10	103	90	110			
Sample ID: R08070237-002BMS	Sample Matrix Spike					Run: TECHAA2-R_080717B			07/17/08 16:04
Nitrogen, Ammonia as N	0.21	mg/L	0.10	85	80	120			
Sample ID: R08070237-002BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080717B			07/17/08 16:05
Nitrogen, Ammonia as N	0.20	mg/L	0.10	80	80	120	6.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R104556		
Sample ID: R08070220-001G	Sample Duplicate				Run: SUB-C104556			07/16/08 18:45	
Radon 222	601	pCi/L	100				7.1	30	
Sample ID: MB-R104556	Method Blank				Run: SUB-C104556			07/16/08 18:45	
Radon 222	-30	pCi/L							
Sample ID: LCS-R104556	Laboratory Control Sample				Run: SUB-C104556			07/16/08 18:45	
Radon 222	302	pCi/L	100	109	70	130			
Method: E200.7							Batch: C_19148		
Sample ID: MB-19148	Method Blank				Run: SUB-C104499			07/18/08 10:27	
Boron	0.04	mg/L	0.006						
Iron	0.01	mg/L	0.005						
Sample ID: LCS3-19148	Laboratory Control Sample				Run: SUB-C104499			07/18/08 10:30	
Boron	0.565	mg/L	0.10	105	85	115			
Iron	2.55	mg/L	0.030	101	85	115			
Sample ID: C08070676-001HMS3	Sample Matrix Spike				Run: SUB-C104499			07/18/08 12:45	
Boron	0.525	mg/L	0.10	96	70	130			
Iron	2.35	mg/L	0.030	89	70	130			
Sample ID: C08070676-001HMSD3	Sample Matrix Spike Duplicate				Run: SUB-C104499			07/18/08 12:48	
Boron	0.552	mg/L	0.10	101	70	130	5	20	
Iron	2.47	mg/L	0.030	94	70	130	5.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104679		
Sample ID: MB-080722	Method Blank		Run: SUB-C104679				07/22/08 11:40		
Boron	0.06	mg/L	0.02						
Iron	0.2	mg/L	0.005						
Calcium	0.7	mg/L	0.04						
Magnesium	0.6	mg/L	0.06						
Potassium	0.6	mg/L	0.05						
Silica	ND	mg/L	0.1						
Sodium	ND	mg/L	0.07						
Silicon	ND	mg/L	0.05						
Sample ID: C08070893-002BDUP	Sample Duplicate		Run: SUB-C104679				07/23/08 01:34		
Boron	ND	mg/L	0.10				0	20	
Iron	ND	mg/L	0.030				0	20	
Calcium	0.149	mg/L	1.0				0	20	
Magnesium	ND	mg/L	1.0				0	20	
Potassium	0.551	mg/L	1.0				0	20	
Silica	ND	mg/L	0.10						
Sodium	0.164	mg/L	1.0				0	20	
Silicon	ND	mg/L	0.047				0	20	
Sample ID: C08070707-001BMS	Sample Matrix Spike		Run: SUB-C104679				07/22/08 16:56		
Boron	3.02	mg/L	0.27	96	70	130			
Iron	2.44	mg/L	0.77	98	70	130			
Silicon	2.31	mg/L	0.27	13	70	130			S
Sample ID: C08070707-001BMSD	Sample Matrix Spike Duplicate		Run: SUB-C104679				07/22/08 17:01		
Boron	2.75	mg/L	0.27	85	70	130	9.4	20	
Iron	2.34	mg/L	0.77	94	70	130	4	20	
Silicon	2.33	mg/L	0.27	14	70	130	0.9	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19148		
Sample ID: MB-19148	Method Blank		Run: SUB-C105162				08/01/08 00:20		
Antimony	0.0002	mg/L	6E-05						
Arsenic	0.02	mg/L	4E-05						
Barium	0.0001	mg/L	7E-05						
Beryllium	ND	mg/L	5E-05						
Cadmium	ND	mg/L	2E-05						
Chromium	0.006	mg/L	5E-05						
Copper	ND	mg/L	0.0004						
Lead	ND	mg/L	5E-05						
Manganese	0.0002	mg/L	3E-05						
Molybdenum	5E-05	mg/L	4E-05						
Nickel	ND	mg/L	0.0002						
Selenium	ND	mg/L	4E-05						
Silver	ND	mg/L	0.0002						
Strontium	ND	mg/L	4E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.003	mg/L	0.0007						
Sample ID: LCS3-19148	Laboratory Control Sample		Run: SUB-C105162				08/01/08 00:27		
Antimony	0.526	mg/L	0.050	105	85	115			
Arsenic	0.550	mg/L	0.0010	106	85	115			
Barium	0.530	mg/L	0.10	106	85	115			
Beryllium	0.272	mg/L	0.010	109	85	115			
Cadmium	0.269	mg/L	0.010	108	85	115			
Chromium	0.517	mg/L	0.050	102	85	115			
Copper	0.516	mg/L	0.010	103	85	115			
Lead	0.513	mg/L	0.050	103	85	115			
Manganese	2.79	mg/L	0.010	112	85	115			
Molybdenum	0.501	mg/L	0.10	100	85	115			
Nickel	0.513	mg/L	0.050	103	85	115			
Selenium	0.528	mg/L	0.0010	106	85	115			
Silver	0.0294	mg/L	0.010	59	85	115			S
Strontium	0.529	mg/L	0.10	106	85	115			
Thallium	0.512	mg/L	0.10	102	85	115			
Uranium	0.555	mg/L	0.00030	111	85	115			
Zinc	0.521	mg/L	0.010	104	85	115			
Sample ID: C08070676-001HMS3	Sample Matrix Spike		Run: SUB-C105162				08/01/08 01:14		
Antimony	0.574	mg/L	0.050	115	70	130			
Arsenic	0.599	mg/L	0.0010	116	70	130			
Barium	0.638	mg/L	0.10	114	70	130			
Beryllium	0.279	mg/L	0.010	111	70	130			
Cadmium	0.287	mg/L	0.010	115	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19148		
Sample ID: C08070676-001HMS3	Sample Matrix Spike			Run: SUB-C105162			08/01/08 01:14		
Chromium	0.572	mg/L	0.050	113	70	130			
Copper	0.569	mg/L	0.010	114	70	130			
Lead	0.525	mg/L	0.050	105	70	130			
Manganese	3.00	mg/L	0.010	120	70	130			
Molybdenum	0.541	mg/L	0.10	108	70	130			
Nickel	0.570	mg/L	0.050	114	70	130			
Selenium	0.579	mg/L	0.0010	113	70	130			
Silver	0.0338	mg/L	0.010	68	70	130			S
Strontium	1.52	mg/L	0.10	147	70	130			S
Thallium	0.508	mg/L	0.10	102	70	130			
Uranium	0.586	mg/L	0.00030	113	70	130			
Zinc	0.597	mg/L	0.010	110	70	130			
Sample ID: C08070676-001HMSD3	Sample Matrix Spike Duplicate			Run: SUB-C105162			08/01/08 01:21		
Antimony	0.567	mg/L	0.050	113	70	130	1.3	20	
Arsenic	0.605	mg/L	0.0010	117	70	130	1	20	
Barium	0.628	mg/L	0.10	113	70	130	1.5	20	
Beryllium	0.280	mg/L	0.010	112	70	130	0.5	20	
Cadmium	0.285	mg/L	0.010	114	70	130	0.7	20	
Chromium	0.575	mg/L	0.050	114	70	130	0.4	20	
Copper	0.569	mg/L	0.010	114	70	130	0.1	20	
Lead	0.549	mg/L	0.050	110	70	130	4.4	20	
Manganese	3.01	mg/L	0.010	120	70	130	0.3	20	
Molybdenum	0.547	mg/L	0.10	109	70	130	1.1	20	
Nickel	0.569	mg/L	0.050	114	70	130	0.1	20	
Selenium	0.579	mg/L	0.0010	113	70	130	0	20	
Silver	0.0394	mg/L	0.010	79	70	130	15	20	
Strontium	1.54	mg/L	0.10	153	70	130	1.7	20	S
Thallium	0.539	mg/L	0.10	108	70	130	6	20	
Uranium	0.600	mg/L	0.00030	116	70	130	2.4	20	
Zinc	0.589	mg/L	0.010	109	70	130	1.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_19224
Sample ID: MB-19224	Method Blank					Run: SUB-C104868			07/27/08 03:08
Uranium	2E-05	mg/L							
Sample ID: LCS1-19224	Laboratory Control Sample					Run: SUB-C104868			07/27/08 03:12
Uranium	0.0471	mg/L	0.00030	90	80	120			
Sample ID: R08070244-009I	Post Digestion Spike					Run: SUB-C104868			07/27/08 04:50
Uranium	0.0115	mg/L	0.00030	92	70	130			
Sample ID: R08070244-009I	Post Digestion Spike Duplicate					Run: SUB-C104868			07/27/08 04:54
Uranium	0.0115	mg/L	0.00030	91	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: LRB	Method Blank		Run: SUB-C104869				07/25/08 17:21		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	4E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Mercury	8E-05	mg/L	1E-05						
Molybdenum	ND	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Uranium	ND	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0002	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104869				07/25/08 17:28		
Aluminum	0.0620	mg/L	0.0010	124	85	115			S
Arsenic	0.0515	mg/L	0.0010	103	85	115			
Barium	0.0513	mg/L	0.0010	102	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0515	mg/L	0.0010	103	85	115			
Copper	0.0520	mg/L	0.0010	104	85	115			
Lead	0.0514	mg/L	0.0010	103	85	115			
Manganese	0.0516	mg/L	0.0010	103	85	115			
Mercury	0.00522	mg/L	0.0010	103	85	115			
Molybdenum	0.0492	mg/L	0.0010	98	85	115			
Nickel	0.0514	mg/L	0.0010	103	85	115			
Uranium	0.0473	mg/L	0.00030	95	85	115			
Vanadium	0.0513	mg/L	0.0010	102	85	115			
Zinc	0.0545	mg/L	0.0010	109	85	115			
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104869				07/25/08 17:28		
Thorium 232	0.0473	mg/L	0.0010	95	85	115			
Sample ID: R08070220-001C	Post Digestion Spike		Run: SUB-C104869				07/26/08 07:58		
Aluminum	0.0458	mg/L	0.10	92	70	130			
Arsenic	0.0671	mg/L	0.0010	101	70	130			
Barium	0.0654	mg/L	0.10	102	70	130			
Cadmium	0.0474	mg/L	0.010	95	70	130			
Chromium	0.0489	mg/L	0.050	98	70	130			
Copper	0.0513	mg/L	0.010	92	70	130			
Lead	0.0502	mg/L	0.050	100	70	130			
Manganese	1.51	mg/L	0.010	70	70	130			A
Mercury	0.00539	mg/L	0.0010	108	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.  
S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: R08070220-001C	Post Digestion Spike		Run: SUB-C104869				07/26/08 07:58		
Molybdenum	0.0692	mg/L	0.10	99	70	130			
Nickel	0.0601	mg/L	0.050	96	70	130			
Thorium 232	0.0532	mg/L	0.0010	106	70	130			
Uranium	0.0669	mg/L	0.00030	108	70	130			
Vanadium	0.0503	mg/L	0.10	101	70	130			
Zinc	0.0555	mg/L	0.010	90	70	130			
Sample ID: R08070220-001C	Post Digestion Spike Duplicate		Run: SUB-C104869				07/26/08 08:05		
Aluminum	0.0459	mg/L	0.10	92	70	130	0	20	
Arsenic	0.0627	mg/L	0.0010	92	70	130	6.9	20	
Barium	0.0658	mg/L	0.10	102	70	130	0	20	
Cadmium	0.0476	mg/L	0.010	95	70	130	0.4	20	
Chromium	0.0452	mg/L	0.050	90	70	130	0	20	
Copper	0.0478	mg/L	0.010	85	70	130	7	20	
Lead	0.0505	mg/L	0.050	101	70	130	0.6	20	
Manganese	1.52	mg/L	0.010		70	130	0.8	20	A
Mercury	0.00553	mg/L	0.0010	111	70	130	2.6	20	
Molybdenum	0.0686	mg/L	0.10	98	70	130	0	20	
Nickel	0.0586	mg/L	0.050	93	70	130	2.5	20	
Thorium 232	0.0534	mg/L	0.0010	107	70	130	0.5	20	
Uranium	0.0669	mg/L	0.00030	108	70	130	0	20	
Vanadium	0.0468	mg/L	0.10	94	70	130	0	20	
Zinc	0.0501	mg/L	0.010	79	70	130	10	20	
Method: E200.8							Batch: C_R105162		
Sample ID: LRB	Method Blank		Run: SUB-C105162				07/31/08 12:55		
Silver	0.0004	mg/L	7E-06						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C105162				07/31/08 13:02		
Silver	0.0196	mg/L	0.0010	96	85	115			
Sample ID: C08070680-001CMS4	Post Digestion Spike		Run: SUB-C105162				07/31/08 18:14		
Silver	0.0137	mg/L	0.010	69	70	130			S
Sample ID: C08070707-001BMS4	Post Digestion Spike		Run: SUB-C105162				07/31/08 19:07		
Silver	0.119	mg/L	0.010	60	70	130			S
Sample ID: C08070707-001BMSD4	Post Digestion Spike Duplicate		Run: SUB-C105162				07/31/08 19:14		
Silver	0.122	mg/L	0.010	61	70	130	1.9	20	S

### Qualifiers:

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A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: B_33661		
Sample ID: MB-33661	Method Blank					Run: SUB-B114551			07/23/08 08:31
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33661	Laboratory Fortified Blank					Run: SUB-B114551			07/23/08 08:33
Mercury	0.0021	mg/L	0.0010	105	85	115			
Sample ID: B08071691-003AMS	Sample Matrix Spike					Run: SUB-B114551			07/23/08 08:38
Mercury	0.0019	mg/L	0.0010	97	70	130			
Sample ID: B08071691-003AMSD	Sample Matrix Spike Duplicate					Run: SUB-B114551			07/23/08 08:40
Mercury	0.0022	mg/L	0.0010	108	70	130	11	30	
Method: E245.1							Batch: C_B_33630		
Sample ID: MB-33630	Method Blank					Run: SUB-C104808			07/22/08 09:40
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33630	Laboratory Fortified Blank					Run: SUB-C104808			07/22/08 09:43
Mercury	0.0019	mg/L	0.0010	97	85	115			
Sample ID: B08071482-002BMS	Sample Matrix Spike					Run: SUB-C104808			07/22/08 10:15
Mercury	0.0018	mg/L	0.0010	92	70	130			
Sample ID: B08071482-002B MSD	Sample Matrix Spike Duplicate					Run: SUB-C104808			07/22/08 10:17
Mercury	0.0019	mg/L	0.0010	94	70	130	2.7	30	
Method: E245.1							Analytical Run: SUB-C104808		
Sample ID: QCS	Initial Calibration Verification Standard								07/22/08 09:25
Mercury	0.0020	mg/L	0.0010	101	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R36127		
Sample ID: LFB0807153729-3	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 08:56		
Chloride	4.80	mg/L	0.50	96	90	110			
Fluoride	1.81	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.37	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.51	mg/L	0.10	100	90	110			
Sulfate	14.3	mg/L	1.0	96	90	110			
Sample ID: LFB0807153729-4	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 09:12		
Chloride	4.93	mg/L	0.50	99	90	110			
Fluoride	1.87	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.58	mg/L	0.10	103	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
Sample ID: LFB0807153729-5	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 09:29		
Chloride	4.94	mg/L	0.50	99	90	110			
Fluoride	1.87	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.58	mg/L	0.10	103	90	110			
Sulfate	14.8	mg/L	1.0	98	90	110			
Sample ID: R08070220-001AMS	Sample Matrix Spike			Run: DIONEX_080716A			07/16/08 10:01		
Chloride	262	mg/L	5.4	95	80	120			
Fluoride	94.7	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	98	80	120			
Nitrogen, Nitrite as N	130	mg/L	2.9	104	80	120			
Sulfate	2320	mg/L	3.4	84	80	120			
Sample ID: R08070220-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080716A			07/16/08 10:18		
Chloride	251	mg/L	5.4	90	80	120	4.3	10	
Fluoride	90.6	mg/L	0.56	81	80	120	4.5	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	94	80	120	4.1	10	
Nitrogen, Nitrite as N	124	mg/L	2.9	100	80	120	4.3	10	
Sulfate	2260	mg/L	3.4	75	80	120	2.8	10	S

### Qualifiers:

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ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0496		
Sample ID: MB-GrAB-0496	Method Blank					Run: SUB-C105636		08/09/08 00:01	
Gross Alpha	-0.04	pCi/L							U
Gross Beta	-2	pCi/L							U
Sample ID: UNAT-GrAB-0496	Laboratory Control Sample					Run: SUB-C105636		08/09/08 00:01	
Gross Alpha	140	pCi/L		104	70	130			
Sample ID: C08071218-007DMS	Sample Matrix Spike					Run: SUB-C105636		08/09/08 00:01	
Gross Beta	113	pCi/L		91	70	130			
Sample ID: C08071218-007DMSD	Sample Matrix Spike Duplicate					Run: SUB-C105636		08/09/08 00:01	
Gross Beta	117	pCi/L		95	70	130	2.9	15.8	
Sample ID: R08070220-001H	Sample Duplicate					Run: SUB-C105636		08/09/08 12:18	
Gross Alpha	97	pCi/L					20	37.6	
Gross Beta	39	pCi/L					18	50.2	

### Qualifiers:

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ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R104840		
Sample ID: LCS-R104840	Laboratory Control Sample			Run: SUB-C104840			07/17/08 13:12		
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
Sample ID: MB-R104840	Method Blank			Run: SUB-C104840			07/17/08 13:12		
Americium 241	ND	pCi/L							
Barium 133	ND	pCi/L							
Bismuth 212	ND	pCi/L							
Bismuth 214	ND	pCi/L							
Cesium 134	ND	pCi/L							
Cesium 137	ND	pCi/L							
Cobalt 60	ND	pCi/L							
Iodine 125	ND	pCi/L							
Iodine 131	ND	pCi/L							
Lead 212	ND	pCi/L							
Lead 214	ND	pCi/L							
Manganese 54	ND	pCi/L							
Potassium 40	ND	pCi/L							
Radium 223	ND	pCi/L							
Radium 224	ND	pCi/L							
Thallium 208	ND	pCi/L							
Thorium 228	ND	pCi/L							
Thorium 234	ND	pCi/L							
Zinc 65	ND	pCi/L							
Radium 228	ND	pCi/L							
Gross Gamma	ND	pCi/L							U
Sample ID: R08070220-001H	Sample Duplicate			Run: SUB-C104840			07/17/08 13:12		
Americium 241	ND	pCi/L	20				0		30
Barium 133	ND	pCi/L	20				0		30
Bismuth 212	ND	pCi/L	20				0		30
Bismuth 214	81	pCi/L	20				2.6		30
Cesium 134	ND	pCi/L	20				0		30
Cesium 137	ND	pCi/L	20				0		30
Cobalt 60	ND	pCi/L	20				0		30
Iodine 125	ND	pCi/L	20				0		30
Iodine 131	ND	pCi/L	20				0		30
Lead 212	ND	pCi/L	20				0		30
Lead 214	47	pCi/L	20				3.3		30
Manganese 54	ND	pCi/L	20				0		30
Potassium 40	880	pCi/L	20				3.7		30
Radium 223	ND	pCi/L	20				0		30
Radium 224	ND	pCi/L	20				0		30

### Qualifiers:

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ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R104840		
Sample ID: R08070220-001H	Sample Duplicate				Run: SUB-C104840			07/17/08 13:12	
Thallium 208	ND	pCi/L	20				0	30	
Thorium 228	ND	pCi/L	20				0	30	
Thorium 234	ND	pCi/L	20				0	30	
Zinc 65	ND	pCi/L	20				0	30	
Radium 228	ND	pCi/L	20				0	30	
Gross Gamma	1000	pCi/L	20				3.3	30	
Method: E903.0							Batch: C_19224		
Sample ID: C08070719-001EMS	Sample Matrix Spike				Run: SUB-C105486			08/06/08 15:36	
Radium 226	140	pCi/L		87	70	130			
Sample ID: C08070719-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C105486			08/06/08 15:36	
Radium 226	130	pCi/L		79	70	130	7.8	29.9	
Sample ID: MB-19224	Method Blank				Run: SUB-C105486			08/06/08 17:08	
Radium 226	-2	pCi/L							U
Sample ID: LCS-19224	Laboratory Control Sample				Run: SUB-C105486			08/06/08 17:08	
Radium 226	58	pCi/L		76	70	130			
Method: E903.0							Batch: C_RA226-2969		
Sample ID: MB-RA226-2969	Method Blank				Run: SUB-C105492			08/06/08 14:37	
Radium 226	-0.2	pCi/L							U
Sample ID: LCS-RA226-2969	Laboratory Control Sample				Run: SUB-C105492			08/06/08 14:37	
Radium 226	8.0	pCi/L		103	70	130			
Method: E907.0							Batch: C_19224		
Sample ID: C08070680-001IMS	Sample Matrix Spike				Run: SUB-C105794			08/04/08 22:05	
Thorium 230	19.8	pCi/L	0.20	88	70	130			
Sample ID: C08070680-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C105794			08/04/08 22:05	
Thorium 230	23.7	pCi/L	0.20	103	70	130	18	30	
Sample ID: LCS-19224	Laboratory Control Sample				Run: SUB-C105794			08/05/08 12:51	
Thorium 230	44.9	pCi/L	0.20	92	70	130			
Sample ID: MB-19224	Method Blank				Run: SUB-C105794			08/05/08 12:51	
Thorium 230	0.04	pCi/L							U

### Qualifiers:

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ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_RA-TH-ISO-0592		
Sample ID: LCS-RA-TH-ISO-0592	Laboratory Control Sample				Run: SUB-C105766			08/10/08 16:42	
Thorium 230	6.23	pCi/L	0.20	103	70	130			
Sample ID: C08070547-006HMS	Sample Matrix Spike				Run: SUB-C105766			08/10/08 16:46	
Thorium 230	17.2	pCi/L	0.20	105	70	130			
Sample ID: C08070547-006HMSD	Sample Matrix Spike Duplicate				Run: SUB-C105766			08/10/08 16:47	
Thorium 230	16.0	pCi/L	0.20	98	70	130	7.3	30	
Sample ID: MB-RA-TH-ISO-0592	Method Blank				Run: SUB-C105766			08/08/08 23:51	
Thorium 230	-0.05	pCi/L							U
Method: E909.0M							Batch: C_19224		
Sample ID: C08070547-007IMS	Sample Matrix Spike				Run: SUB-C106081			07/29/08 09:30	
Lead 210	930	pCi/L		79	70	130			
Sample ID: C08070547-007IMSD	Sample Matrix Spike Duplicate				Run: SUB-C106081			07/29/08 09:30	
Lead 210	1400	pCi/L		117	70	130	39	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R106081	Method Blank				Run: SUB-C106081			07/29/08 09:30	
Lead 210	5	pCi/L							U
Sample ID: LCS-R106081	Laboratory Control Sample				Run: SUB-C106081			07/29/08 09:30	
Lead 210	110	pCi/L		87	70	130			
Method: E909.0M							Batch: C_R105965		
Sample ID: R08070244-003H	Sample Matrix Spike				Run: SUB-C105965			07/25/08 11:45	
Lead 210	510	pCi/L		88	70	130			
Sample ID: R08070244-003H	Sample Matrix Spike Duplicate				Run: SUB-C105965			07/25/08 11:45	
Lead 210	560	pCi/L		95	70	130	8	30	
Sample ID: R08070244-006H	Sample Duplicate				Run: SUB-C105965			07/25/08 11:45	
Lead 210	-3.1	pCi/L					43	30	R
Lead 210 MDC	9.2	pCi/L							
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
Sample ID: MB-R105965	Method Blank				Run: SUB-C105965			07/25/08 11:45	
Lead 210	-1	pCi/L							U
Sample ID: LCS-R105965	Laboratory Control Sample				Run: SUB-C105965			07/25/08 11:45	
Lead 210	130	pCi/L		110	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/01/08

Work Order: R08070220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_19224		
Sample ID: R08070244-009I	Sample Matrix Spike					Run: SUB-C105583			07/31/08 14:15
Polonium 210	50	pCi/L	1.0	119	70	130			
Sample ID: R08070244-009I	Sample Matrix Spike Duplicate					Run: SUB-C105583			07/31/08 14:15
Polonium 210	44	pCi/L	1.0	104	70	130	14	30	
Sample ID: LCS-R105583	Laboratory Control Sample					Run: SUB-C105583			07/31/08 14:15
Polonium 210	80	pCi/L	1.0	93	70	130			
Sample ID: MB-R105583	Method Blank					Run: SUB-C105583			07/31/08 14:15
Polonium 210	0.2	pCi/L							U
Method: RMO-3008							Batch: C_R106670		
Sample ID: C08070547-004HMS	Sample Matrix Spike					Run: SUB-C106670			08/21/08 17:30
Polonium 210	80	pCi/L	1.0	72	70	130			
Sample ID: C08070547-004HMSD	Sample Matrix Spike Duplicate					Run: SUB-C106670			08/21/08 17:30
Polonium 210	95	pCi/L	1.0	84	70	130	17	30	
Sample ID: LCS-R106670	Laboratory Control Sample					Run: SUB-C106670			08/21/08 17:30
Polonium 210	42	pCi/L	1.0	76	70	130			
Sample ID: MB-R106670	Method Blank					Run: SUB-C106670			08/21/08 17:30
Polonium 210	0.1	pCi/L							U
Method: SW7470A							Analytical Run: SUB-B114551		
Sample ID: QCS	Initial Calibration Verification Standard								07/23/08 08:21
Mercury	0.0021	mg/L	0.0010	105	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



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## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name <b>RESVER</b>		Project Name, PWS, Permit, Etc. <b>Powerful DB</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Cory Freeman @ resver.com</b>		Phone/Fax:	Sampler: (Please Print) <b>Eric Leane</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/MWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Number of Containers Sample Type: AWS V B O Air Water Soils/Solids Vegetation Bioassay Other		ANALYSIS REQUESTED  <b>See Attached</b> Normal Turnaround (TAT) <b>RUSH</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) <b>DeBurd GW302b</b>		Collection Date <b>7/13/06</b>	Collection Time <b>15:28</b>	Comments: <b>GW</b> <b>27-01-06</b> <b>24-H</b>	
1				On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2				Cooler Temp: <b>4.6 °C</b>	
3				Custody Seal: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
4				Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
5				Signature: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
6					
7					
8					
9					
10					
Custody Record <b>Must be Signed</b>		Relinquished by (print): <b>Eric Leane</b>	Date/Time: <b>7/14/06 07:39</b>	Signature: <b>[Signature]</b>	Received by Laboratory: <b>[Signature]</b>
Sample Disposal: Return to Client:		Lab Disposal:		Date/Time: Signature:	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





## ANALYTICAL SUMMARY REPORT

October 03, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08070244

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 11 samples from RESPEC Inc on 7/15/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070244-001	DewBurd GW622	07/14/08 12:35	07/15/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08070244-002	DewBurd GW615	07/14/08 11:50	07/15/08	Aqueous	Same As Above
R08070244-003	DewBurd GW695	07/14/08 13:42	07/15/08	Aqueous	Same As Above
R08070244-004	DewBurd GW696	07/14/08 15:10	07/15/08	Aqueous	Same As Above
R08070244-005	DewBurd GW694	07/14/08 15:30	07/15/08	Aqueous	Same As Above
R08070244-006	DewBurd GW697	07/14/08 15:52	07/15/08	Aqueous	Same As Above
R08070244-007	DewBurd GW697	07/14/08 15:57	07/15/08	Aqueous	Same As Above
R08070244-008	DewBurd GW689	07/14/08 16:50	07/15/08	Aqueous	Same As Above
R08070244-009	DewBurd GW681	07/14/08 17:04	07/15/08	Aqueous	Same As Above
R08070244-010	DewBurd GW698	07/14/08 18:43	07/15/08	Aqueous	Same As Above



## ANALYTICAL SUMMARY REPORT

R08070244-011 DewBurd BLK01

07/14/08 18:00 07/15/08

Aqueous

Metals by ICP/ICPMS, Dissolved  
Metals by ICP/ICPMS, Suspended  
Metals by ICP/ICPMS, Total  
Alkalinity  
Conductivity  
Mercury, Total  
Selenium, Dissolved  
Selenium, Dissolved  
Selenium, Dissolved  
Anions by Ion Chromatography  
Nitrogen, Ammonia  
Oxidation Reduction Potential  
pH  
Digestion, Total Metals  
Digestion, Total Metals  
Dissolved Filtration  
Digestion, Mercury by CVAA  
Gross Alpha, Gross Beta  
Gross Gamma, Dissolved  
Lead 210, Dissolved  
Lead 210, Suspended  
Polonium 210, Dissolved  
Polonium 210, Suspended  
Radium 226, Dissolved  
Radium 226, Suspended  
Radon 222  
Thorium, Isotopic  
Thorium, Suspended Isotopic  
Sodium Adsorption Ratio  
Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08070244

Date: 03-Oct-08

## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by RESPEC Inc on 7/15/2008 8:00:00 AM. These samples were assigned ELI Workorder Number R08070244.

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08070737

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08070737



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-001  
Client Sample ID: DewBurd GW622

Report Date: 10/03/08  
Collection Date: 07/14/08 12:35  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	182	mg/L		5		1	A2320 B	07/15/08 18:22/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:22/mb
Bicarbonate as HCO3	222	mg/L		5		1	A2320 B	07/15/08 18:22/mb
Calcium	85.9	mg/L		0.5		1	E200.7	07/21/08 21:15/eli-c
Chloride	10	mg/L		1		1	E300.0	07/16/08 13:35/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/16/08 13:35/jmh
Magnesium	29.1	mg/L		0.5		1	E200.8	07/24/08 03:59/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:22/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 13:35/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 13:35/jmh
Potassium	14.1	mg/L		0.5		1	E200.7	07/21/08 21:15/eli-c
Silica	1.9	mg/L		0.5		1	E200.7	07/21/08 21:15/eli-c
Sodium	185	mg/L		0.5		1	E200.7	07/21/08 21:15/eli-c
Sulfate	478	mg/L	D	3		50	E300.0	07/16/08 12:46/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1290	umhos/cm		5.0		1	A2510 B	07/17/08 10:23/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.68	s.u.		0.01		1	A4500-H B	07/16/08 15:53/tb
Sodium Adsorption Ratio (SAR)	4.4	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	07/17/08 17:25/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 03:59/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/24/08 03:59/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/25/08 23:47/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/21/08 21:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 23:47/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/24/08 03:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/24/08 03:59/eli-c
Iron	ND	mg/L		0.03		1	E200.8	07/25/08 23:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 03:59/eli-c
Manganese	0.19	mg/L		0.01		1	E200.8	07/25/08 23:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 03:59/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/24/08 03:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/24/08 03:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 23:47/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 03:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-001  
Client Sample ID: DewBurd GW622

Report Date: 10/03/08  
Collection Date: 07/14/08 12:35  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0052	mg/L		0.0003		1	E200.8	07/24/08 03:59/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/24/08 03:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/24/08 03:59/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:01/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:42/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	31.2	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	10.0	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	2.6	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	08/06/08 15:42/eli-c
Polonium 210 precision (±)	0.56	pCi/L				1	RMO-3008	08/06/08 15:42/eli-c
Radium 226	2.9	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 00:45/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	08/13/08 00:45/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	2.8	pCi/L		1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-001  
**Client Sample ID:** DewBurd GW622

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 12:35  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	824	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	57.9	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 02:30/eli-c
Arsenic	0.027	mg/L		0.001		10	E200.8	07/31/08 14:30/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/24/08 20:42/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 02:30/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/24/08 20:42/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 02:30/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 20:42/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/24/08 20:42/eli-c
Iron	0.91	mg/L		0.03		2	E200.7	07/24/08 20:42/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 02:30/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	07/24/08 20:42/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:17/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/24/08 20:42/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 20:42/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/30/08 02:30/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 14:30/eli-c
Strontium	1.6	mg/L		0.1		2	E200.7	07/24/08 20:42/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 02:30/eli-c
Uranium	0.0054	mg/L		0.0003		10	E200.8	07/30/08 02:30/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/24/08 20:42/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.15	%				1	A1030 E	09/29/08 00:00/jmh
Anions	13.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	15.1	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	918	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-002  
Client Sample ID: DewBurd GW615

Report Date: 10/03/08  
Collection Date: 07/14/08 11:50  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	138	mg/L		5		1	A2320 B	07/15/08 18:26/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:26/mb
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	07/15/08 18:26/mb
Calcium	71.8	mg/L		0.5		1	E200.7	07/21/08 21:19/eli-c
Chloride	5	mg/L		1		1	E300.0	07/16/08 14:08/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/16/08 14:08/jmh
Magnesium	21.7	mg/L		0.5		1	E200.8	07/24/08 04:06/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:24/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 14:08/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 14:08/jmh
Potassium	11.7	mg/L		0.5		1	E200.7	07/21/08 21:19/eli-c
Silica	2.0	mg/L		0.5		1	E200.7	07/21/08 21:19/eli-c
Sodium	142	mg/L		0.5		1	E200.7	07/21/08 21:19/eli-c
Sulfate	430	mg/L	D	3		50	E300.0	07/16/08 13:51/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1090	umhos/cm		5.0		1	A2510 B	07/17/08 10:24/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.29	s.u.		0.01		1	A4500-H B	07/16/08 16:03/tb
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	710	mg/L		5		1	A2540 C	07/17/08 17:26/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 04:06/eli-c
Arsenic	0.018	mg/L		0.001		1	E200.8	07/25/08 23:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/25/08 23:53/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 15:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 23:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/25/08 23:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/30/08 18:55/eli-c
Iron	0.54	mg/L		0.03		1	E200.8	07/25/08 23:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/25/08 23:53/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	07/25/08 23:53/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 04:06/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/21/08 21:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/25/08 23:53/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 15:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 23:53/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/25/08 23:53/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-002  
Client Sample ID: DewBurd GW615

Report Date: 10/03/08  
Collection Date: 07/14/08 11:50  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0025	mg/L		0.0003		1	E200.8	07/30/08 18:55/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/25/08 23:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/30/08 18:55/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:05/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:44/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	7.0	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	1.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-0.8	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/06/08 15:43/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	RMO-3008	08/06/08 15:43/eli-c
Radium 226	1.2	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-002  
**Client Sample ID:** DewBurd GW615

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 11:50  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L		0.2		1	E907.0	08/04/08 22:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/04/08 22:05/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1420	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	65.0	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	0.003	mg/L		0.003		10	E200.8	07/30/08 04:05/eli-c
Arsenic	0.023	mg/L		0.001		10	E200.8	07/30/08 04:05/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/24/08 23:52/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 04:05/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/24/08 23:52/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:05/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 23:52/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/24/08 23:52/eli-c
Iron	1.52	mg/L		0.03		2	E200.7	07/24/08 23:52/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:05/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/24/08 23:52/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:19/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/24/08 23:52/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 23:52/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/30/08 04:05/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 14:37/eli-c
Strontium	1.4	mg/L		0.1		2	E200.7	07/24/08 23:52/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:05/eli-c
Uranium	0.0025	mg/L		0.0003		10	E200.8	07/31/08 14:37/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/24/08 23:52/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.0400	%				1	A1030 E	09/29/08 00:00/jmh
Anions	11.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	11.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	771	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 13:42  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	174	mg/L		5		1	A2320 B	07/15/08 18:28/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	07/15/08 18:28/mb
Bicarbonate as HCO <sub>3</sub>	212	mg/L		5		1	A2320 B	07/15/08 18:28/mb
Calcium	48.0	mg/L		0.5		1	E200.7	07/21/08 21:24/eli-c
Chloride	12	mg/L		1		1	E300.0	07/16/08 14:40/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/16/08 14:40/jmh
Magnesium	17.8	mg/L		0.5		1	E200.8	07/24/08 04:12/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	07/17/08 16:25/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 14:40/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 14:40/jmh
Potassium	12.4	mg/L		0.5		1	E200.7	07/21/08 21:24/eli-c
Silica	1.9	mg/L		0.5		1	E200.7	07/21/08 21:24/eli-c
Sodium	258	mg/L		0.5		1	E200.7	07/21/08 21:24/eli-c
Sulfate	534	mg/L	D	3		50	E300.0	07/16/08 14:24/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1450	umhos/cm		5.0		1	A2510 B	07/17/08 10:25/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.98	s.u.		0.01		1	A4500-H B	07/16/08 16:03/tb
Sodium Adsorption Ratio (SAR)	8.1	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	07/17/08 17:28/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 04:12/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/26/08 00:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 15:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 00:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 00:00/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/28/08 16:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 04:12/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	07/26/08 00:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 04:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 00:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 00:00/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:00/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 04:12/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 13:42  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0028	mg/L		0.0003		1	E200.8	07/24/08 04:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 00:00/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/26/08 00:00/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:22/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	28.2	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	7.7	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-2	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/06/08 15:43/eli-c
Polonium 210 precision (±)	0.49	pCi/L				1	RMO-3008	08/06/08 15:43/eli-c
Radium 226	4.7	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-5	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 13:42  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1490	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	65.0	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:12/eli-c
Arsenic	0.004	mg/L		0.002		10	E200.8	07/30/08 04:12/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/24/08 23:56/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 04:12/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/24/08 23:56/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:12/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 23:56/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/24/08 23:56/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	07/24/08 23:56/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:12/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	07/24/08 23:56/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:22/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/24/08 23:56/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 23:56/eli-c
Selenium	0.004	mg/L	D	0.002		10	E200.8	07/30/08 04:12/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 14:43/eli-c
Strontium	1.0	mg/L		0.1		2	E200.7	07/24/08 23:56/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:12/eli-c
Uranium	0.0031	mg/L		0.0003		10	E200.8	07/31/08 14:43/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/24/08 23:56/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.44	%				1	A1030 E	09/29/08 00:00/jmh
Anions	15.0	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	15.4	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	991	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-004  
**Client Sample ID:** DewBurd GW696

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 15:10  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	180	mg/L		5		1	A2320 B	07/15/08 18:51/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:51/mb
Bicarbonate as HCO3	219	mg/L		5		1	A2320 B	07/15/08 18:51/mb
Calcium	28.8	mg/L		0.5		1	E200.7	07/21/08 21:36/eli-c
Chloride	13	mg/L		1		1	E300.0	07/16/08 15:13/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/16/08 15:13/jmh
Magnesium	10.2	mg/L		0.5		1	E200.8	07/24/08 04:19/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 15:13/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 15:13/jmh
Potassium	13.4	mg/L		0.5		1	E200.7	07/21/08 21:36/eli-c
Silica	2.1	mg/L		0.5		1	E200.7	07/21/08 21:36/eli-c
Sodium	291	mg/L		0.5		1	E200.7	07/21/08 21:36/eli-c
Sulfate	526	mg/L	D	3		50	E300.0	07/16/08 14:57/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1350	umhos/cm		5.0		1	A2510 B	07/17/08 10:26/tb
Oxidation-Reduction Potential	100	mV				1	A2580 B	07/16/08 00:00/kh
pH	8.19	s.u.		0.01		1	A4500-H B	07/16/08 16:03/tb
Sodium Adsorption Ratio (SAR)	12	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	07/17/08 17:29/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 04:19/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/26/08 00:07/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:07/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 16:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:07/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 00:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 00:07/eli-c
Iron	0.08	mg/L		0.03		2	E200.7	09/11/08 16:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 04:19/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	07/24/08 04:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 04:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 00:07/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 00:07/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:07/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 04:19/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-004  
Client Sample ID: DewBurd GW696

Report Date: 10/03/08  
Collection Date: 07/14/08 15:10  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 04:19/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 00:07/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/28/08 17:06/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:26/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:49/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.0	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	3.7	pCi/L	U			1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-3	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	08/06/08 15:43/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	08/06/08 15:43/eli-c
Radium 226	0.4	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.1	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.17	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-004  
**Client Sample ID:** DewBurd GW696

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 15:10  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	228	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	49.3	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:18/eli-c
Arsenic	0.003	mg/L		0.002		10	E200.8	07/30/08 04:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:00/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/31/08 14:50/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:00/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:00/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:00/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	07/25/08 00:00/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:18/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	07/25/08 00:00/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:24/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:00/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:00/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/30/08 04:18/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 14:50/eli-c
Strontium	0.8	mg/L		0.1		2	E200.7	07/25/08 00:00/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:18/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/30/08 04:18/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.30	%				1	A1030 E	09/29/08 00:00/jmh
Anions	14.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	15.3	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	996	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-005  
Client Sample ID: DewBurd GW694

Report Date: 10/03/08  
Collection Date: 07/14/08 15:30  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	206	mg/L		5		1	A2320 B	07/15/08 18:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:53/mb
Bicarbonate as HCO3	251	mg/L		5		1	A2320 B	07/15/08 18:53/mb
Calcium	92.0	mg/L		0.5		1	E200.7	07/21/08 21:41/eli-c
Chloride	9	mg/L		1		1	E300.0	07/16/08 16:52/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/16/08 16:52/jmh
Magnesium	36.9	mg/L		0.5		1	E200.8	07/24/08 04:26/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:27/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 16:52/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 16:52/jmh
Potassium	17.6	mg/L		0.5		1	E200.7	07/21/08 21:41/eli-c
Silica	2.1	mg/L		0.5		1	E200.7	07/21/08 21:41/eli-c
Sodium	185	mg/L		0.5		1	E200.7	07/21/08 21:41/eli-c
Sulfate	528	mg/L	D	3		50	E300.0	07/16/08 16:03/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1320	umhos/cm		5.0		1	A2510 B	07/17/08 10:27/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.73	s.u.		0.01		1	A4500-H B	07/16/08 16:02/tb
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	980	mg/L		5		1	A2540 C	07/17/08 17:29/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 04:26/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/30/08 19:02/eli-c
Barium	ND	mg/L		0.1		1	E200.7	07/21/08 21:41/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/21/08 21:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:13/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/26/08 00:13/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/28/08 17:13/eli-c
Iron	ND	mg/L		0.03		1	E200.7	07/21/08 21:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 04:26/eli-c
Manganese	0.10	mg/L		0.01		1	E200.7	07/21/08 21:41/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 04:26/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/21/08 21:41/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/26/08 00:13/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:13/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 04:26/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-005  
**Client Sample ID:** DewBurd GW694

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 15:30  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0007	mg/L		0.0003		1	E200.8	07/24/08 04:26/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/26/08 00:13/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/28/08 17:13/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:30/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:55/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.7	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	11.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	1.1	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	08/06/08 15:43/eli-c
Polonium 210 precision (±)	0.61	pCi/L				1	RMO-3008	08/06/08 15:43/eli-c
Radium 226	2.3	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.2	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.51	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-005  
**Client Sample ID:** DewBurd GW694

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 15:30  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	245	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	49.4	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:25/eli-c
Arsenic	0.007	mg/L		0.002		10	E200.8	07/30/08 04:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:04/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/31/08 14:57/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:04/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:04/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:04/eli-c
Iron	0.17	mg/L		0.03		2	E200.7	07/25/08 00:04/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:25/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	07/25/08 00:04/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:26/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:04/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:04/eli-c
Selenium	0.005	mg/L	D	0.002		10	E200.8	07/30/08 04:25/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 14:57/eli-c
Strontium	2.7	mg/L		0.1		2	E200.7	07/25/08 00:04/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:25/eli-c
Uranium	0.0005	mg/L		0.0003		10	E200.8	07/30/08 04:25/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:04/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.38	%				1	A1030 E	09/29/08 00:00/jmh
Anions	15.4	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	16.2	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	999	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-006  
Client Sample ID: DewBurd GW697

Report Date: 10/03/08  
Collection Date: 07/14/08 15:52  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	07/15/08 18:57/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:57/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	07/15/08 18:57/mb
Calcium	48.7	mg/L		0.5		1	E200.7	07/21/08 21:45/eli-c
Chloride	8	mg/L		1		1	E300.0	07/16/08 17:25/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/16/08 17:25/jmh
Magnesium	17.5	mg/L		0.5		1	E200.8	07/24/08 04:33/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:31/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 17:25/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 17:25/jmh
Potassium	11.8	mg/L		0.5		1	E200.7	07/21/08 21:45/eli-c
Silica	2.0	mg/L		0.5		1	E200.7	07/21/08 21:45/eli-c
Sodium	221	mg/L		0.5		1	E200.7	07/21/08 21:45/eli-c
Sulfate	470	mg/L	D	3		50	E300.0	07/16/08 17:08/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1290	umhos/cm		5.0		1	A2510 B	07/17/08 10:28/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.93	s.u.		0.01		1	A4500-H B	07/16/08 16:02/tb
Sodium Adsorption Ratio (SAR)	6.9	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	830	mg/L		5		1	A2540 C	07/17/08 17:30/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 04:33/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/30/08 19:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:20/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 16:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	07/28/08 17:20/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/11/08 16:07/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	09/11/08 16:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/26/08 00:20/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	07/28/08 17:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/26/08 00:20/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 00:20/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/28/08 17:20/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:20/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/26/08 00:20/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-006  
Client Sample ID: DewBurd GW697

Report Date: 10/03/08  
Collection Date: 07/14/08 15:52  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/28/08 17:20/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/28/08 17:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/28/08 17:20/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:34/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:57/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	2.4	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	4.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	1.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-2	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	-0.4	pCi/L	U	1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	0.69	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	0.9	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.6	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	08/06/08 15:36/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/06/08 15:36/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 15:36/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-006  
Client Sample ID: DewBurd GW697

Report Date: 10/03/08  
Collection Date: 07/14/08 15:52  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	295	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	50.0	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:32/eli-c
Arsenic	0.004	mg/L		0.002		10	E200.8	07/30/08 04:32/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:08/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/31/08 15:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:08/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/31/08 15:04/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:08/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:08/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	07/25/08 00:08/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:32/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/25/08 00:08/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:33/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:08/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/30/08 04:32/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 15:04/eli-c
Strontium	1.1	mg/L		0.1		2	E200.7	07/25/08 00:08/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:32/eli-c
Uranium	0.0003	mg/L		0.0003		10	E200.8	07/30/08 04:32/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:08/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.61	%				1	A1030 E	09/29/08 00:00/jmh
Anions	13.4	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	13.8	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	884	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.940					1	A1030 E	09/29/08 00:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-007  
**Client Sample ID:** DewBurd GW697

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 15:57  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	07/15/08 18:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 18:59/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	07/15/08 18:59/mb
Calcium	49.5	mg/L		0.5		1	E200.7	07/21/08 22:02/eli-c
Chloride	8	mg/L		1		1	E300.0	07/16/08 17:58/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/16/08 17:58/jmh
Magnesium	17.2	mg/L		0.5		1	E200.8	07/24/08 05:07/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:34/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 17:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 17:58/jmh
Potassium	12.0	mg/L		0.5		1	E200.7	07/21/08 22:02/eli-c
Silica	2.0	mg/L		0.5		1	E200.7	07/21/08 22:02/eli-c
Sodium	205	mg/L	D	2		2	E200.7	07/24/08 17:59/eli-c
Sulfate	492	mg/L	D	3		50	E300.0	07/16/08 17:41/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm		5.0		1	A2510 B	07/17/08 10:30/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.99	s.u.		0.01		1	A4500-H B	07/16/08 16:02/tb
Sodium Adsorption Ratio (SAR)	6.4	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	820	mg/L		5		1	A2540 C	07/17/08 17:30/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 05:07/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/30/08 19:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 16:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 17:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 00:26/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	07/24/08 17:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 05:07/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	07/24/08 17:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 05:07/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 00:26/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 17:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:26/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 05:07/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-007  
Client Sample ID: DewBurd GW697

Report Date: 10/03/08  
Collection Date: 07/14/08 15:57  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 05:07/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 17:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/30/08 19:42/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:38/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 13:59/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.4	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	7.3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	0.3	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	0.69	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	0.9	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.7	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	08/06/08 17:08/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 17:08/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 17:08/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-007  
Client Sample ID: DewBurd GW697

Report Date: 10/03/08  
Collection Date: 07/14/08 15:57  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	261	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	49.5	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:39/eli-c
Arsenic	0.004	mg/L		0.002		10	E200.8	07/30/08 04:39/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:12/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 04:39/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:12/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:39/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:12/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:12/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	07/25/08 00:12/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:39/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/25/08 00:12/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:36/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:12/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:12/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/30/08 04:39/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 15:11/eli-c
Strontium	1.1	mg/L		0.1		2	E200.7	07/25/08 00:12/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:39/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/30/08 04:39/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:12/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.81	%				1	A1030 E	09/29/08 00:00/jmh
Anions	13.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	13.1	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	890	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	09/29/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-008  
**Client Sample ID:** DewBurd GW689

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 16:50  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	148	mg/L		5		1	A2320 B	07/15/08 19:07/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 19:07/mb
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	07/15/08 19:07/mb
Calcium	44.8	mg/L		0.5		1	E200.7	07/21/08 22:06/eli-c
Chloride	5	mg/L		1		1	E300.0	07/16/08 18:30/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/16/08 18:30/jmh
Magnesium	16.4	mg/L		0.5		1	E200.8	07/24/08 05:27/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:35/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 18:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 18:30/jmh
Potassium	10.7	mg/L		0.5		1	E200.7	07/21/08 22:06/eli-c
Silica	2.0	mg/L		0.5		1	E200.7	07/21/08 22:06/eli-c
Sodium	173	mg/L	D	2		2	E200.7	07/24/08 18:03/eli-c
Sulfate	420	mg/L	D	3		50	E300.0	07/16/08 18:14/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1040	umhos/cm		5.0		1	A2510 B	07/17/08 10:32/tb
Oxidation-Reduction Potential	190	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.83	s.u.		0.01		1	A4500-H B	07/16/08 16:02/tb
Sodium Adsorption Ratio (SAR)	5.6	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	730	mg/L		5		1	A2540 C	07/17/08 17:31/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 05:27/eli-c
Arsenic	ND	mg/L	D	0.02		1	E200.7	07/21/08 22:06/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:33/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/24/08 18:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:33/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 18:03/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/30/08 19:49/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/11/08 16:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 05:27/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	07/24/08 18:03/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 05:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/21/08 22:06/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/30/08 19:49/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 05:27/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-008  
**Client Sample ID:** DewBurd GW689

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 16:50  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0034	mg/L		0.0003		1	E200.8	07/24/08 05:27/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 18:03/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/30/08 19:49/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:42/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 14:06/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	36.0	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	3.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	9.5	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	1.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-0.4	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	6.1	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.1	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.28	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/06/08 17:08/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/06/08 17:08/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 17:08/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-008  
Client Sample ID: DewBurd GW689

Report Date: 10/03/08  
Collection Date: 07/14/08 16:50  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1670	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	65.8	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:46/eli-c
Arsenic	ND	mg/L	D	0.001		10	E200.8	07/30/08 04:46/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:16/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 04:46/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:16/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:46/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:16/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:16/eli-c
Iron	0.82	mg/L		0.03		2	E200.7	07/25/08 00:16/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:46/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	07/25/08 00:16/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:38/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:16/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:16/eli-c
Selenium	ND	mg/L	D	0.002		10	E200.8	07/30/08 04:46/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 15:17/eli-c
Strontium	1.0	mg/L		0.1		2	E200.7	07/25/08 00:16/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:46/eli-c
Uranium	0.0041	mg/L		0.0003		10	E200.8	07/30/08 04:46/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:16/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.08	%				1	A1030 E	09/29/08 00:00/jmh
Anions	11.9	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	11.4	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	766	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	09/29/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-009  
Client Sample ID: DewBurd GW681

Report Date: 10/03/08  
Collection Date: 07/14/08 17:04  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	172	mg/L		5		1	A2320 B	07/15/08 19:09/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 19:09/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	07/15/08 19:09/mb
Calcium	60.6	mg/L		0.5		1	E200.7	07/21/08 22:14/eli-c
Chloride	17	mg/L		1		1	E300.0	07/16/08 20:09/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	07/16/08 20:09/jmh
Magnesium	24.3	mg/L		0.5		1	E200.8	07/24/08 05:33/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:36/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:09/jmh
Potassium	13.7	mg/L		0.5		1	E200.7	07/21/08 22:14/eli-c
Silica	1.9	mg/L		0.5		1	E200.7	07/21/08 22:14/eli-c
Sodium	214	mg/L	D	2		2	E200.7	07/24/08 18:08/eli-c
Sulfate	619	mg/L		1		1	E300.0	07/16/08 20:09/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1380	umhos/cm		5.0		1	A2510 B	07/17/08 10:32/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.85	s.u.		0.01		1	A4500-H B	07/16/08 16:02/tb
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	07/17/08 17:31/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 05:33/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/26/08 00:40/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 00:40/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/11/08 16:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 00:40/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 18:08/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/24/08 18:08/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/11/08 16:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 05:33/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	07/24/08 18:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 05:33/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 00:40/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 18:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/26/08 00:40/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 05:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-009  
**Client Sample ID:** DewBurd GW681

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 17:04  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0097	mg/L		0.0003		1	E200.8	07/24/08 05:33/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 18:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/24/08 18:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 04:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 14:09/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2170	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	30.3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	3.7	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	583	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	7.4	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	3.8	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	26.3	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.9	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	3.1	pCi/L		1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	1.8	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	418	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Radium 226 precision (±)	4.3	pCi/L				1	E903.0	08/12/08 13:16/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	13000	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	260	pCi/L				1	E901.1	07/17/08 13:12/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.7	pCi/L	U			1	E909.0M	07/29/08 09:30/eli-c
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Lead 210 MDC	21.4	pCi/L				1	E909.0M	07/29/08 09:30/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	07/31/08 14:15/eli-c
Polonium 210 precision (±)	0.56	pCi/L				1	RMO-3008	07/31/08 14:15/eli-c
Radium 226	0.6	pCi/L	U			1	E903.0	08/06/08 17:08/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	08/06/08 17:08/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	08/06/08 17:08/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-009  
**Client Sample ID:** DewBurd GW681

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 17:04  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/05/08 12:51/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/05/08 12:51/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	244000	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	575	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:52/eli-c
Arsenic	0.024	mg/L		0.001		10	E200.8	07/31/08 15:52/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:20/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/31/08 15:52/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:20/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:52/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:20/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:20/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	07/25/08 00:20/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 04:52/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	07/25/08 00:20/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:40/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:20/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:20/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/30/08 04:52/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 15:52/eli-c
Strontium	1.3	mg/L		0.1		2	E200.7	07/25/08 00:20/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:52/eli-c
Uranium	0.0104	mg/L		0.0003		10	E200.8	07/30/08 04:52/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:20/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.0200	%				1	A1030 E	09/29/08 00:00/jmh
Anions	14.7	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	14.7	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	955	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-010  
**Client Sample ID:** DewBurd GW698

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 18:43  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	122	mg/L		5		1	A2320 B	07/15/08 19:12/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	07/15/08 19:12/mb
Bicarbonate as HCO <sub>3</sub>	149	mg/L		5		1	A2320 B	07/15/08 19:12/mb
Calcium	356	mg/L		0.5		1	E200.7	07/21/08 22:18/eli-c
Chloride	10	mg/L		1		1	E300.0	07/16/08 20:42/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/16/08 20:42/jmh
Magnesium	139	mg/L		0.5		1	E200.8	07/24/08 05:40/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	07/17/08 16:38/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:42/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:42/jmh
Potassium	22.2	mg/L		0.5		1	E200.7	07/21/08 22:18/eli-c
Silica	2.6	mg/L		0.5		1	E200.7	07/21/08 22:18/eli-c
Sodium	84	mg/L	D	2		2	E200.7	07/24/08 18:12/eli-c
Sulfate	1530	mg/L	D	3		50	E300.0	07/16/08 20:25/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2530	umhos/cm		5.0		1	A2510 B	07/17/08 10:34/tb
Oxidation-Reduction Potential	47	mV				1	A2580 B	07/16/08 00:00/kh
pH	7.72	s.u.		0.01		1	A4500-H B	07/16/08 16:16/tb
Sodium Adsorption Ratio (SAR)	0.95	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	07/17/08 17:32/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 05:40/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/30/08 19:56/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/11/08 16:35/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/24/08 18:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/31/08 16:19/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 18:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/30/08 19:56/eli-c
Iron	3.38	mg/L		0.03		2	E200.7	07/24/08 18:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 05:40/eli-c
Manganese	2.44	mg/L		0.01		2	E200.7	07/24/08 18:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 05:40/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/21/08 22:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	07/30/08 19:56/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/31/08 16:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 05:40/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-010  
**Client Sample ID:** DewBurd GW698

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 18:43  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.119	mg/L		0.0003		1	E200.8	07/24/08 05:40/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 18:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/30/08 19:56/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0055	mg/L		0.0003		1	E200.8	07/27/08 05:19/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 14:11/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1790	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha precision (±)	39.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Alpha MDC	7.6	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta	599	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	11.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	7.7	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-0.4	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	423	pCi/L				1	E903.0	08/12/08 14:54/eli-c
Radium 226 precision (±)	6.0	pCi/L				1	E903.0	08/12/08 14:54/eli-c
Thorium 230	0.1	pCi/L		0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	1500	pCi/L		20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	90	pCi/L				1	E901.1	07/17/08 13:12/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.7	pCi/L	U			1	E909.0M	08/11/08 09:30/eli-c
Lead 210 precision (±)	7.0	pCi/L				1	E909.0M	08/11/08 09:30/eli-c
Lead 210 MDC	11.8	pCi/L				1	E909.0M	08/11/08 09:30/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	08/08/08 14:06/eli-c
Polonium 210 precision (±)	0.77	pCi/L				1	RMO-3008	08/08/08 14:06/eli-c
Radium 226	6.3	pCi/L				1	E903.0	08/11/08 09:37/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	08/11/08 09:37/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	08/11/08 09:37/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070244-010  
**Client Sample ID:** DewBurd GW698

**Report Date:** 10/03/08  
**Collection Date:** 07/14/08 18:43  
**Date Received:** 07/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.9	pCi/L		0.2		1	E907.0	08/10/08 12:37/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	08/10/08 12:37/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	27900	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	198	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 04:59/eli-c
Arsenic	0.002	mg/L	D	0.001		10	E200.8	07/30/08 04:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/25/08 00:24/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 04:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/25/08 00:24/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 04:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/25/08 00:24/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:24/eli-c
Iron	5.66	mg/L		0.03		2	E200.7	07/25/08 00:24/eli-c
Lead	0.001	mg/L	B	0.001		10	E200.8	07/30/08 04:59/eli-c
Manganese	2.53	mg/L		0.01		2	E200.7	07/25/08 00:24/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:43/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 00:24/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:24/eli-c
Selenium	0.005	mg/L	D	0.002		10	E200.8	07/30/08 04:59/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 15:58/eli-c
Strontium	4.7	mg/L		0.1		2	E200.7	07/25/08 00:24/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 04:59/eli-c
Uranium	0.116	mg/L		0.0003		10	E200.8	07/31/08 15:58/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/25/08 00:24/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.21	%				1	A1030 E	09/29/08 00:00/jmh
Anions	34.6	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	33.7	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	2220	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	09/29/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
B - The analyte was detected in the method blank.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-011  
Client Sample ID: DewBurd BLK01

Report Date: 10/03/08  
Collection Date: 07/14/08 18:00  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	07/15/08 19:14/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/15/08 19:14/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	07/15/08 19:14/mb
Calcium	ND	mg/L		0.5		1	E200.7	07/21/08 22:22/eli-c
Chloride	ND	mg/L		1		1	E300.0	07/16/08 20:58/jmh
Fluoride	0.7	mg/L		0.1		1	E300.0	07/16/08 20:58/jmh
Magnesium	ND	mg/L		0.5		1	E200.8	07/24/08 05:47/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/17/08 16:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/16/08 20:58/jmh
Potassium	0.6	mg/L		0.5		1	E200.7	07/21/08 22:22/eli-c
Silica	ND	mg/L		0.5		1	E200.7	07/21/08 22:22/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	07/24/08 18:24/eli-c
Sulfate	2	mg/L		1		1	E300.0	07/16/08 20:58/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	19.5	umhos/cm		5.0		1	A2510 B	07/17/08 10:35/tb
Oxidation-Reduction Potential	400	mV				1	A2580 B	07/16/08 00:00/kh
pH	4.47	s.u.		0.01		1	A4500-H B	07/16/08 16:17/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	46	mg/L		5		1	A2540 C	07/17/08 17:33/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/24/08 05:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/26/08 01:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	07/26/08 01:32/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/24/08 18:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/26/08 01:32/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/24/08 18:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/26/08 01:32/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/24/08 18:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/24/08 05:47/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/24/08 18:24/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/24/08 05:47/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	07/26/08 01:32/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/24/08 18:24/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/28/08 16:25/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/28/08 17:34/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/24/08 05:47/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-011  
Client Sample ID: DewBurd BLK01

Report Date: 10/03/08  
Collection Date: 07/14/08 18:00  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/24/08 05:47/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/24/08 18:24/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/24/08 18:24/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/27/08 05:23/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/28/08 14:13/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/28/08 16:34/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	0.5	pCi/L				1	E900.0	08/18/08 10:05/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0	08/18/08 10:05/eli-c
Gross Alpha MDC	1.0	pCi/L				1	E900.0	08/18/08 10:05/eli-c
Gross Beta	-3	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta precision (±)	1.2	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Gross Beta MDC	2.1	pCi/L				1	E900.0	09/04/08 06:47/eli-c
Lead 210	-3	pCi/L	U			1	E909.0M	07/25/08 11:45/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	07/25/08 11:45/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	08/07/08 14:50/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	08/07/08 14:50/eli-c
Radium 226	-0.02	pCi/L	U			1	E903.0	08/12/08 14:54/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/12/08 14:54/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/13/08 12:43/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	08/13/08 12:43/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	07/17/08 13:12/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/17/08 13:12/eli-c
- For Ra226 the sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved on all samples due to lack of sufficient sample volume from the client. These results should be used for general information only and not for regulatory compliance or reporting purposes.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	08/11/08 09:30/eli-c
Lead 210 precision (±)	7.0	pCi/L				1	E909.0M	08/11/08 09:30/eli-c
Lead 210 MDC	11.8	pCi/L				1	E909.0M	08/11/08 09:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	08/08/08 14:06/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	08/08/08 14:06/eli-c
Radium 226	-0.5	pCi/L	U			1	E903.0	08/11/08 09:37/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070244-011  
Client Sample ID: DewBurd BLK01

Report Date: 10/03/08  
Collection Date: 07/14/08 18:00  
Date Received: 07/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/11/08 09:37/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	08/11/08 09:37/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/10/08 12:37/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	08/10/08 12:37/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	124	pCi/L		100		1	D5072-92	07/16/08 18:45/eli-c
Radon 222 precision (±)	46.9	pCi/L				1	D5072-92	07/16/08 18:45/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	07/30/08 05:06/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	07/30/08 05:06/eli-c
Barium	ND	mg/L		0.1		1	E200.7	07/17/08 11:35/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	07/30/08 05:06/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/17/08 11:35/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/30/08 05:06/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	07/17/08 11:35/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/25/08 00:28/eli-c
Iron	0.03	mg/L		0.03		1	E200.7	07/17/08 11:35/eli-c
Lead	ND	mg/L		0.001		10	E200.8	07/30/08 05:06/eli-c
Manganese	ND	mg/L		0.01		1	E200.7	07/17/08 11:35/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	07/23/08 15:45/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.7	07/17/08 11:35/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/25/08 00:28/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/30/08 05:06/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/31/08 16:05/eli-c
Strontium	ND	mg/L		0.1		2	E200.7	07/25/08 00:28/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	07/30/08 05:06/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	07/30/08 05:06/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	07/17/08 11:35/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080715A-ALK-SEL-W							
Sample ID: LCS1_080715A	Laboratory Control Sample				Run: PH_COND1-R_080715A			07/15/08 14:16	
Alkalinity, Total as CaCO <sub>3</sub>	952	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080715A	Method Blank				Run: PH_COND1-R_080715A			07/15/08 14:17	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08070238-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080715A			07/15/08 18:02	
Alkalinity, Total as CaCO <sub>3</sub>	274	mg/L	5.0	102	80	120			
Sample ID: R08070238-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080715A			07/15/08 18:03	
Alkalinity, Total as CaCO <sub>3</sub>	276	mg/L	5.0	104	80	120	0.7	10	
Sample ID: R08070244-007AMS	Sample Matrix Spike				Run: PH_COND1-R_080715A			07/15/08 19:01	
Alkalinity, Total as CaCO <sub>3</sub>	272	mg/L	5.0	98	80	120			
Sample ID: R08070244-007AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080715A			07/15/08 19:04	
Alkalinity, Total as CaCO <sub>3</sub>	274	mg/L	5.0	100	80	120	0.7	10	
Method: A2510 B		Batch: 080717_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B			07/17/08 10:06	
Conductivity @ 25 C	1420	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B			07/17/08 10:06	
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080717	Laboratory Control Sample				Run: PH_COND2-R_080717B			07/17/08 10:08	
Conductivity @ 25 C	4940	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080717	Method Blank				Run: PH_COND2-R_080717B			07/17/08 10:42	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08070244-006ADUP	Sample Duplicate				Run: PH_COND2-R_080717B			07/17/08 10:29	
Conductivity @ 25 C	1270	umhos/cm	5.0				1.6	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 080717A-SLDS-TDS-W		
Sample ID: LCS1_080717A	Laboratory Control Sample				Run: BAL-4-R_080718A			07/17/08 17:19	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080717A	Method Blank				Run: BAL-4-R_080718A			07/17/08 17:20	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08070244-002AMS	Sample Matrix Spike				Run: BAL-4-R_080718A			07/17/08 17:26	
Solids, Total Dissolved TDS @ 180 C	930	mg/L	5.0	106	80	120			
Sample ID: R08070244-002AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080718A			07/17/08 17:27	
Solids, Total Dissolved TDS @ 180 C	950	mg/L	5.0	116	80	120	2.1	10	
Sample ID: R08070267-001AMS	Sample Matrix Spike				Run: BAL-4-R_080718A			07/17/08 17:35	
Solids, Total Dissolved TDS @ 180 C	470	mg/L	5.0	114	80	120			
Sample ID: R08070267-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080718A			07/17/08 17:35	
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0	102	80	120	5.3	10	
Method: A2580 B							Batch: 080716-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080716A			07/16/08 00:00	
Oxidation-Reduction Potential	470	mV		100	95	105			
Sample ID: R08070220-001F	Sample Duplicate				Run: PH_COND1-R_080716A			07/16/08 00:00	
Oxidation-Reduction Potential	ND	mV					0	10	
Method: A3114 B							Batch: C_SE3114-080728B		
Sample ID: MBLK	Method Blank				Run: SUB-C104944			07/28/08 13:15	
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-106-2	Laboratory Control Sample				Run: SUB-C104944			07/28/08 13:17	
Selenium-IV	0.054	mg/L	0.0010	108	90	110			
Sample ID: R08070244-004E	Sample Matrix Spike				Run: SUB-C104944			07/28/08 13:51	
Selenium-IV	0.050	mg/L	0.0010	99	85	115			
Sample ID: R08070244-004E	Sample Matrix Spike Duplicate				Run: SUB-C104944			07/28/08 13:53	
Selenium-IV	0.051	mg/L	0.0010	101	85	115	2.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080728C		
Sample ID: MBLK	Method Blank					Run: SUB-C104959			07/28/08 15:28
Selenium	ND	mg/L	6E-05						
Sample ID: 288-106-2	Laboratory Control Sample					Run: SUB-C104959			07/28/08 15:30
Selenium	0.055	mg/L	0.0010	109	90	110			
Sample ID: R08070244-004E	Sample Matrix Spike					Run: SUB-C104959			07/28/08 16:04
Selenium	0.048	mg/L	0.0010	95	85	115			
Sample ID: R08070244-004E	Sample Matrix Spike Duplicate					Run: SUB-C104959			07/28/08 16:06
Selenium	0.048	mg/L	0.0010	97	85	115	1.8	10	
Method: A4500-H B							Batch: 080716_1_PH-W		
Sample ID: LCS_pH-1_080716	Laboratory Control Sample					Run: PH_COND2-R_080716A			07/16/08 15:41
pH	6.81	s.u.	0.010	99	98.55	101.45			
Sample ID: R08070244-001ADUP	Sample Duplicate					Run: PH_COND2-R_080716A			07/16/08 16:05
pH	7.68	s.u.	0.010				0	1.25	
Sample ID: R08070244-011ADUP	Sample Duplicate					Run: PH_COND2-R_080716A			07/16/08 16:18
pH	4.44	s.u.	0.010				0.7	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2008-07-17_2_NH3_02		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080717B		07/17/08 11:42	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080717B		07/17/08 11:54	
Nitrogen, Ammonia as N	0.24	mg/L	0.10	94	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080717B		07/17/08 11:55	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	103	90	110			
Sample ID: R08070238-006CMS	Sample Matrix Spike					Run: TECHAA2-R_080717B		07/17/08 16:18	
Nitrogen, Ammonia as N	0.24	mg/L	0.10	96	80	120			
Sample ID: R08070238-006CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080717B		07/17/08 16:19	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	93	80	120	3.8	10	
Sample ID: R08070244-006BMS	Sample Matrix Spike					Run: TECHAA2-R_080717B		07/17/08 16:32	
Nitrogen, Ammonia as N	0.46	mg/L	0.10	115	80	120			
Sample ID: R08070244-006BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080717B		07/17/08 16:33	
Nitrogen, Ammonia as N	0.45	mg/L	0.10	114	80	120	0.4	10	
Sample ID: R08070256-003BMS	Sample Matrix Spike					Run: TECHAA2-R_080717B		07/17/08 16:46	
Nitrogen, Ammonia as N	0.22	mg/L	0.10	88	80	120			
Sample ID: R08070256-003BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080717B		07/17/08 16:47	
Nitrogen, Ammonia as N	0.20	mg/L	0.10	80	80	120	9.5	10	
Method: D5072-92							Batch: C_R104556		
Sample ID: MB-R104556	Method Blank					Run: SUB-C104556		07/16/08 18:45	
Radon 222	-30	pCi/L							
Sample ID: LCS-R104556	Laboratory Control Sample					Run: SUB-C104556		07/16/08 18:45	
Radon 222	302	pCi/L	100	109	70	130			
Sample ID: C08070756-008CDUP	Sample Duplicate					Run: SUB-C104556		07/16/08 18:45	
Radon 222	197	pCi/L	100				20	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19156		
Sample ID: MB-19156	Method Blank		Run: SUB-C104440				07/17/08 11:21		
Barium	ND	mg/L	0.004						
Boron	0.05	mg/L	0.006						
Chromium	ND	mg/L	0.003						
Copper	ND	mg/L	0.005						
Iron	0.02	mg/L	0.005						
Manganese	0.002	mg/L	0.0008						
Molybdenum	0.02	mg/L	0.01						
Nickel	ND	mg/L	0.02						
Zinc	0.007	mg/L	0.006						
Sample ID: LCS3-19156	Laboratory Control Sample		Run: SUB-C104440				07/17/08 11:24		
Barium	0.496	mg/L	0.10	99	85	115			
Boron	0.557	mg/L	0.10	101	85	115			
Chromium	0.485	mg/L	0.050	97	85	115			
Copper	0.460	mg/L	0.010	92	85	115			
Iron	2.43	mg/L	0.030	96	85	115			
Manganese	2.39	mg/L	0.010	95	85	115			
Molybdenum	0.519	mg/L	0.10	99	85	115			
Nickel	0.510	mg/L	0.050	102	85	115			
Zinc	0.484	mg/L	0.010	95	85	115			
Sample ID: R08070244-011D	Sample Matrix Spike		Run: SUB-C104440				07/17/08 11:38		
Barium	0.493	mg/L	0.10	99	70	130			
Boron	0.532	mg/L	0.10	101	70	130			
Chromium	0.486	mg/L	0.050	97	70	130			
Copper	0.461	mg/L	0.010	92	70	130			
Iron	2.43	mg/L	0.030	96	70	130			
Manganese	2.37	mg/L	0.010	95	70	130			
Molybdenum	0.512	mg/L	0.10	102	70	130			
Nickel	0.426	mg/L	0.050	85	70	130			
Zinc	0.489	mg/L	0.010	98	70	130			
Sample ID: R08070244-011D	Sample Matrix Spike Duplicate		Run: SUB-C104440				07/17/08 11:41		
Barium	0.486	mg/L	0.10	97	70	130	1.3	20	
Boron	0.524	mg/L	0.10	99	70	130	1.5	20	
Chromium	0.480	mg/L	0.050	96	70	130	1.2	20	
Copper	0.447	mg/L	0.010	89	70	130	3	20	
Iron	2.42	mg/L	0.030	96	70	130	0.3	20	
Manganese	2.35	mg/L	0.010	94	70	130	0.9	20	
Molybdenum	0.508	mg/L	0.10	102	70	130	0.8	20	
Nickel	0.494	mg/L	0.050	99	70	130	15	20	
Zinc	0.484	mg/L	0.010	97	70	130	1.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19156		
Sample ID: MB-19156	Method Blank		Run: SUB-C104799				07/24/08 20:09		
Barium	ND	mg/L	0.006						
Boron	0.04	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	ND	mg/L	0.001						
Sample ID: LCS3-19156	Laboratory Control Sample		Run: SUB-C104799				07/24/08 20:13		
Barium	0.504	mg/L	0.10	101	85	115			
Boron	0.545	mg/L	0.10	101	85	115			
Chromium	0.510	mg/L	0.050	102	85	115			
Copper	0.512	mg/L	0.010	102	85	115			
Iron	2.63	mg/L	0.030	105	85	115			
Manganese	2.53	mg/L	0.010	101	85	115			
Molybdenum	0.508	mg/L	0.10	102	85	115			
Nickel	0.507	mg/L	0.050	101	85	115			
Strontium	0.507	mg/L	0.10	101	85	115			
Zinc	0.505	mg/L	0.010	101	85	115			
Sample ID: R08070244-011D	Sample Matrix Spike		Run: SUB-C104799				07/25/08 00:33		
Barium	0.529	mg/L	0.10	106	70	130			
Boron	0.545	mg/L	0.10	109	70	130			
Chromium	0.523	mg/L	0.050	105	70	130			
Copper	0.530	mg/L	0.010	106	70	130			
Iron	2.73	mg/L	0.030	108	70	130			
Manganese	2.66	mg/L	0.010	106	70	130			
Molybdenum	0.519	mg/L	0.10	104	70	130			
Nickel	0.521	mg/L	0.050	104	70	130			
Strontium	0.537	mg/L	0.10	107	70	130			
Zinc	0.529	mg/L	0.010	106	70	130			
Sample ID: R08070244-011D	Sample Matrix Spike Duplicate		Run: SUB-C104799				07/25/08 00:37		
Barium	0.528	mg/L	0.10	106	70	130	0.3	20	
Boron	0.549	mg/L	0.10	110	70	130	0.8	20	
Chromium	0.529	mg/L	0.050	106	70	130	1.3	20	
Copper	0.530	mg/L	0.010	106	70	130	0.1	20	
Iron	2.74	mg/L	0.030	109	70	130	0.4	20	
Manganese	2.68	mg/L	0.010	107	70	130	0.6	20	
Molybdenum	0.525	mg/L	0.10	105	70	130	1.1	20	
Nickel	0.526	mg/L	0.050	105	70	130	0.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_19156
Sample ID: R08070244-011D	Sample Matrix Spike Duplicate				Run: SUB-C104799				07/25/08 00:37
Strontium	0.531	mg/L	0.10	106	70	130	1	20	
Zinc	0.530	mg/L	0.010	106	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104799		
Sample ID: MB-080724A	Method Blank		Run: SUB-C104799				07/24/08 13:13		
Chromium	ND	mg/L	0.002						
Iron	ND	mg/L	0.005						
Manganese	ND	mg/L	0.0003						
Nickel	ND	mg/L	0.004						
Sodium	ND	mg/L	0.8						
Vanadium	ND	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080724A	Laboratory Fortified Blank		Run: SUB-C104799				07/24/08 13:17		
Chromium	1.0	mg/L	0.050	105	85	125			
Iron	1.1	mg/L	0.030	109	85	125			
Manganese	1.1	mg/L	0.010	105	85	125			
Nickel	1.0	mg/L	0.050	104	85	125			
Sodium	50	mg/L	0.77	99	85	125			
Vanadium	1.1	mg/L	0.10	106	85	125			
Zinc	1.0	mg/L	0.010	103	85	125			
Sample ID: C08070339-001JMS2	Sample Matrix Spike		Run: SUB-C104799				07/24/08 17:19		
Boron	2.25	mg/L	0.10	103	70	130			
Chromium	2.05	mg/L	0.050	102	70	130			
Copper	2.05	mg/L	0.010	102	70	130			
Iron	2.13	mg/L	0.030	106	70	130			
Manganese	2.26	mg/L	0.010	103	70	130			
Nickel	2.02	mg/L	0.050	101	70	130			
Vanadium	2.17	mg/L	0.10	108	70	130			
Zinc	2.10	mg/L	0.010	105	70	130			
Sodium	144	mg/L	1.5	99	70	130			
Sample ID: C08070339-001JMSD2	Sample Matrix Spike Duplicate		Run: SUB-C104799				07/24/08 17:23		
Boron	2.23	mg/L	0.10	102	70	130	0.9	20	
Chromium	2.02	mg/L	0.050	101	70	130	1.5	20	
Copper	2.01	mg/L	0.010	101	70	130	1.6	20	
Iron	2.10	mg/L	0.030	105	70	130	1.3	20	
Manganese	2.23	mg/L	0.010	101	70	130	1.7	20	
Nickel	1.98	mg/L	0.050	99	70	130	1.7	20	
Vanadium	2.07	mg/L	0.10	103	70	130	4.5	20	
Zinc	2.04	mg/L	0.010	102	70	130	2.9	20	
Sodium	141	mg/L	1.5	97	70	130	1.6	20	
Sample ID: R08070244-010C	Sample Matrix Spike		Run: SUB-C104799				07/24/08 18:16		
Chromium	2.00	mg/L	0.050	100	70	130			
Iron	5.41	mg/L	0.030	102	70	130			
Manganese	4.37	mg/L	0.010	96	70	130			
Nickel	1.95	mg/L	0.050	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R104799		
Sample ID: R08070244-010C	Sample Matrix Spike		Run: SUB-C104799				07/24/08 18:16		
Vanadium	2.07	mg/L	0.10	103	70	130			
Zinc	2.04	mg/L	0.010	102	70	130			
Sodium	185	mg/L	1.5	101	70	130			
Sample ID: R08070244-010C	Sample Matrix Spike Duplicate		Run: SUB-C104799				07/24/08 18:20		
Chromium	1.98	mg/L	0.050	99	70	130	1.1	20	
Iron	5.42	mg/L	0.030	102	70	130	0.2	20	
Manganese	4.38	mg/L	0.010	97	70	130	0.3	20	
Nickel	1.93	mg/L	0.050	97	70	130	1.2	20	
Vanadium	2.03	mg/L	0.10	101	70	130	1.8	20	
Zinc	2.00	mg/L	0.010	100	70	130	1.9	20	
Sodium	183	mg/L	1.5	100	70	130	0.8	20	
Method: E200.7							Batch: C_R104966		
Sample ID: MB-080728A	Method Blank		Run: SUB-C104966				07/28/08 16:33		
Iron	ND	mg/L	0.005						
Sample ID: LFB-080728A	Laboratory Fortified Blank		Run: SUB-C104966				07/28/08 16:37		
Iron	1.0	mg/L	0.030	102	85	125			
Sample ID: R08070244-003C	Sample Matrix Spike		Run: SUB-C104966				07/28/08 16:45		
Iron	2.16	mg/L	0.030	108	70	130			
Sample ID: R08070244-003C	Sample Matrix Spike Duplicate		Run: SUB-C104966				07/28/08 16:49		
Iron	2.13	mg/L	0.030	106	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R107424		
Sample ID: MB-080911A	Method Blank		Run: SUB-C107424				09/11/08 13:08		
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.008						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.005						
Sample ID: LFB-080911A	Laboratory Fortified Blank		Run: SUB-C107424				09/11/08 13:12		
Barium	0.97	mg/L	0.10	97	85	125			
Boron	0.99	mg/L	0.10	96	85	125			
Copper	0.97	mg/L	0.010	97	85	125			
Iron	1.0	mg/L	0.030	104	85	125			
Sample ID: R08070244-002C	Sample Matrix Spike		Run: SUB-C107424				09/11/08 15:47		
Barium	1.98	mg/L	0.10	99	70	130			
Boron	2.08	mg/L	0.10	100	70	130			
Copper	2.04	mg/L	0.010	102	70	130			
Iron	2.64	mg/L	0.030	104	70	130			
Sample ID: R08070244-002C	Sample Matrix Spike Duplicate		Run: SUB-C107424				09/11/08 15:51		
Barium	2.01	mg/L	0.10	100	70	130	1.2	20	
Boron	2.15	mg/L	0.10	104	70	130	3.4	20	
Copper	2.07	mg/L	0.010	104	70	130	1.5	20	
Iron	2.61	mg/L	0.030	102	70	130	1.1	20	
Sample ID: C08081207-001CMS2	Sample Matrix Spike		Run: SUB-C107424				09/11/08 16:56		
Barium	4.92	mg/L	0.10	98	70	130			
Boron	6.10	mg/L	0.10	99	70	130			
Copper	4.99	mg/L	0.026	100	70	130			
Iron	5.37	mg/L	0.030	101	70	130			
Sample ID: C08081207-001CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C107424				09/11/08 17:00		
Barium	4.93	mg/L	0.10	99	70	130	0.3	20	
Boron	6.24	mg/L	0.10	102	70	130	2.2	20	
Copper	5.09	mg/L	0.026	102	70	130	2	20	
Iron	5.52	mg/L	0.030	104	70	130	2.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19156		
Sample ID: MB-19156	Method Blank		Run: SUB-C105057				07/30/08 01:16		
Antimony	ND	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Lead	0.005	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	4E-05						
Thallium	8E-05	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Sample ID: LCS3-19156	Laboratory Control Sample		Run: SUB-C105057				07/30/08 01:22		
Antimony	0.542	mg/L	0.050	108	85	115			
Arsenic	0.518	mg/L	0.0010	103	85	115			
Beryllium	0.247	mg/L	0.010	99	85	115			
Cadmium	0.251	mg/L	0.010	101	85	115			
Lead	0.511	mg/L	0.050	101	85	115			
Selenium	0.496	mg/L	0.0020	99	85	115			
Silver	0.0474	mg/L	0.010	95	85	115			
Thallium	0.508	mg/L	0.10	101	85	115			
Uranium	0.527	mg/L	0.00032	105	85	115			
Sample ID: R08070244-011D	Sample Matrix Spike		Run: SUB-C105057				07/30/08 05:40		
Antimony	0.542	mg/L	0.050	108	70	130			
Arsenic	0.507	mg/L	0.0010	101	70	130			
Beryllium	0.247	mg/L	0.010	99	70	130			
Cadmium	0.249	mg/L	0.010	100	70	130			
Lead	0.501	mg/L	0.050	100	70	130			
Selenium	0.499	mg/L	0.0020	99	70	130			
Silver	0.0462	mg/L	0.010	92	70	130			
Thallium	0.494	mg/L	0.10	99	70	130			
Uranium	0.528	mg/L	0.00032	106	70	130			
Sample ID: R08070244-011D	Sample Matrix Spike Duplicate		Run: SUB-C105057				07/30/08 05:46		
Antimony	0.544	mg/L	0.050	109	70	130	0.4	20	
Arsenic	0.504	mg/L	0.0010	101	70	130	0.5	20	
Beryllium	0.242	mg/L	0.010	97	70	130	2.1	20	
Cadmium	0.248	mg/L	0.010	99	70	130	0.5	20	
Lead	0.499	mg/L	0.050	100	70	130	0.4	20	
Selenium	0.492	mg/L	0.0020	98	70	130	1.4	20	
Silver	0.0460	mg/L	0.010	92	70	130	0.4	20	
Thallium	0.497	mg/L	0.10	99	70	130	0.6	20	
Uranium	0.520	mg/L	0.00032	104	70	130	1.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19224		
Sample ID: MB-19224	Method Blank					Run: SUB-C104868			07/27/08 03:08
Uranium	2E-05	mg/L							
Sample ID: LCS1-19224	Laboratory Control Sample					Run: SUB-C104868			07/27/08 03:12
Uranium	0.0471	mg/L	0.00030	90	80	120			
Sample ID: R08070244-009I	Post Digestion Spike					Run: SUB-C104868			07/27/08 04:50
Uranium	0.0115	mg/L	0.00030	92	70	130			
Sample ID: R08070244-009I	Post Digestion Spike Duplicate					Run: SUB-C104868			07/27/08 04:54
Uranium	0.0115	mg/L	0.00030	91	70	130	0.6	20	
Method: E200.8							Batch: C_19232		
Sample ID: MB-19232	Method Blank					Run: SUB-C104868			07/27/08 04:58
Uranium	6E-05	mg/L							
Sample ID: LCS1-19232	Laboratory Control Sample					Run: SUB-C104868			07/27/08 05:15
Uranium	0.0467	mg/L	0.00030	89	80	120			
Sample ID: C08071003-002KMS4	Post Digestion Spike					Run: SUB-C104868			07/27/08 05:35
Uranium	0.0128	mg/L	0.00030	95	70	130			
Sample ID: C08071003-002KMSD4	Post Digestion Spike Duplicate					Run: SUB-C104868			07/27/08 05:39
Uranium	0.0128	mg/L	0.00030	95	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 10/03/08

Project: Edgemont

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: LRB	Method Blank		Run: SUB-C104758				07/23/08 12:27		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	4E-05						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Magnesium	ND	mg/L	0.003						
Manganese	ND	mg/L	6E-06						
Mercury	ND	mg/L	1E-05						
Molybdenum	ND	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Uranium	4E-06	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0001	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104758				07/23/08 12:34		
Aluminum	0.0509	mg/L	0.0010	102	85	115			
Arsenic	0.0497	mg/L	0.0010	99	85	115			
Chromium	0.0503	mg/L	0.0010	101	85	115			
Copper	0.0512	mg/L	0.0010	102	85	115			
Lead	0.0492	mg/L	0.0010	98	85	115			
Magnesium	1.37	mg/L	0.0030	109	85	115			
Manganese	0.0495	mg/L	0.0010	99	85	115			
Mercury	0.00498	mg/L	0.0010	100	85	115			
Molybdenum	0.0497	mg/L	0.0010	99	85	115			
Nickel	0.0499	mg/L	0.0010	100	85	115			
Uranium	0.0488	mg/L	0.00030	98	85	115			
Vanadium	0.0492	mg/L	0.0010	98	85	115			
Zinc	0.0533	mg/L	0.0010	106	85	115			
Sample ID: R08070115-005C	Post Digestion Spike		Run: SUB-C104758				07/24/08 08:23		
Aluminum	0.0537	mg/L	0.10	105	70	130			
Arsenic	0.0485	mg/L	0.0010	97	70	130			
Chromium	0.0460	mg/L	0.050	92	70	130			
Copper	0.0480	mg/L	0.010	95	70	130			
Lead	0.0490	mg/L	0.050	98	70	130			
Manganese	0.0553	mg/L	0.010	95	70	130			
Mercury	0.00565	mg/L	0.0010	113	70	130			
Molybdenum	0.0565	mg/L	0.10	96	70	130			
Nickel	0.0473	mg/L	0.050	95	70	130			
Thorium 232	0.0490	mg/L	0.0010	98	70	130			
Uranium	0.0489	mg/L	0.00030	98	70	130			
Vanadium	0.0475	mg/L	0.10	95	70	130			
Zinc	0.0476	mg/L	0.010	93	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: R08070115-005C	Post Digestion Spike		Run: SUB-C104758			07/24/08 08:23			
Magnesium	27.6	mg/L	1.0		70	130			A
Sample ID: R08070115-005C	Post Digestion Spike Duplicate		Run: SUB-C104758			07/24/08 08:30			
Aluminum	0.0549	mg/L	0.10	107	70	130	0	20	
Arsenic	0.0484	mg/L	0.0010	97	70	130	0.3	20	
Chromium	0.0463	mg/L	0.050	93	70	130	0	20	
Copper	0.0484	mg/L	0.010	96	70	130	0.9	20	
Lead	0.0491	mg/L	0.050	98	70	130	0	20	
Manganese	0.0556	mg/L	0.010	95	70	130	0.6	20	
Mercury	0.00533	mg/L	0.0010	106	70	130	5.9	20	
Molybdenum	0.0569	mg/L	0.10	96	70	130	0	20	
Nickel	0.0479	mg/L	0.050	96	70	130	0	20	
Thorium 232	0.0494	mg/L	0.0010	99	70	130	1	20	
Uranium	0.0493	mg/L	0.00030	98	70	130	0.8	20	
Vanadium	0.0481	mg/L	0.10	96	70	130	0	20	
Zinc	0.0493	mg/L	0.010	96	70	130	3.5	20	
Magnesium	27.4	mg/L	1.0		70	130	0.8	20	A
Sample ID: LRB	Method Blank		Run: SUB-C104758			07/23/08 12:27			
Thorium 232	3E-05	mg/L							
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104758			07/23/08 12:34			
Thorium 232	0.0485	mg/L	0.0010	97	85	115			
Sample ID: R08070244-007C	Post Digestion Spike		Run: SUB-C104758			07/24/08 05:13			
Aluminum	0.0485	mg/L	0.10	97	70	130			
Arsenic	0.0501	mg/L	0.0010	98	70	130			
Chromium	0.0465	mg/L	0.050	93	70	130			
Copper	0.0489	mg/L	0.010	98	70	130			
Lead	0.0492	mg/L	0.050	98	70	130			
Manganese	0.101	mg/L	0.010	96	70	130			
Mercury	0.00479	mg/L	0.0010	98	70	130			
Molybdenum	0.0506	mg/L	0.10	97	70	130			
Nickel	0.0483	mg/L	0.050	97	70	130			
Thorium 232	0.0494	mg/L	0.0010	98	70	130			
Uranium	0.0497	mg/L	0.00030	99	70	130			
Vanadium	0.0487	mg/L	0.10	97	70	130			
Zinc	0.0502	mg/L	0.010	100	70	130			
Magnesium	17.9	mg/L	1.0		70	130			A
Sample ID: R08070244-007C	Post Digestion Spike Duplicate		Run: SUB-C104758			07/24/08 05:20			
Aluminum	0.0507	mg/L	0.10	101	70	130	0	20	
Arsenic	0.0515	mg/L	0.0010	101	70	130	2.7	20	
Chromium	0.0477	mg/L	0.050	95	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104758		
Sample ID: R08070244-007C	Post Digestion Spike Duplicate				Run: SUB-C104758			07/24/08 05:20	
Copper	0.0501	mg/L	0.010	100	70	130	2.4	20	
Lead	0.0505	mg/L	0.050	101	70	130	2.6	20	
Manganese	0.102	mg/L	0.010	99	70	130	1.6	20	
Mercury	0.00495	mg/L	0.0010	101	70	130	3.2	20	
Molybdenum	0.0535	mg/L	0.10	102	70	130	0	20	
Nickel	0.0495	mg/L	0.050	99	70	130	0	20	
Thorium 232	0.0510	mg/L	0.0010	102	70	130	3.2	20	
Uranium	0.0510	mg/L	0.00030	102	70	130	2.6	20	
Vanadium	0.0499	mg/L	0.10	100	70	130	0	20	
Zinc	0.0487	mg/L	0.010	97	70	130	3.2	20	
Magnesium	19.2	mg/L	1.0		70	130	7.1	20	A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: LRB	Method Blank		Run: SUB-C104869				07/25/08 17:21		
Arsenic	ND	mg/L	4E-05						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Lead	ND	mg/L	3E-06						
Mercury	8E-05	mg/L	1E-05						
Nickel	ND	mg/L	3E-05						
Silver	0.0006	mg/L	7E-06						
Vanadium	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104869				07/25/08 17:28		
Arsenic	0.0515	mg/L	0.0010	103	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0515	mg/L	0.0010	103	85	115			
Lead	0.0514	mg/L	0.0010	103	85	115			
Mercury	0.00522	mg/L	0.0010	103	85	115			
Nickel	0.0514	mg/L	0.0010	103	85	115			
Silver	0.0185	mg/L	0.0010	89	85	115			
Vanadium	0.0513	mg/L	0.0010	102	85	115			
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104869				07/25/08 17:28		
Thorium 232	0.0473	mg/L	0.0010	95	85	115			
Sample ID: R08070220-001C	Post Digestion Spike		Run: SUB-C104869				07/26/08 07:58		
Arsenic	0.0671	mg/L	0.0010	101	70	130			
Barium	0.0654	mg/L	0.10	102	70	130			
Cadmium	0.0474	mg/L	0.010	95	70	130			
Chromium	0.0489	mg/L	0.050	98	70	130			
Copper	0.0513	mg/L	0.010	92	70	130			
Iron	22.4	mg/L	0.030		70	130			A
Lead	0.0502	mg/L	0.050	100	70	130			
Manganese	1.51	mg/L	0.010		70	130			A
Mercury	0.00539	mg/L	0.0010	108	70	130			
Molybdenum	0.0692	mg/L	0.10	99	70	130			
Nickel	0.0601	mg/L	0.050	96	70	130			
Silver	0.0153	mg/L	0.010	77	70	130			
Thorium 232	0.0532	mg/L	0.0010	106	70	130			
Vanadium	0.0503	mg/L	0.10	101	70	130			
Zinc	0.0555	mg/L	0.010	90	70	130			
Sample ID: R08070220-001C	Post Digestion Spike Duplicate		Run: SUB-C104869				07/26/08 08:05		
Arsenic	0.0627	mg/L	0.0010	92	70	130	6.9	20	
Barium	0.0658	mg/L	0.10	102	70	130	0	20	
Cadmium	0.0476	mg/L	0.010	95	70	130	0.4	20	
Chromium	0.0452	mg/L	0.050	90	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104869		
Sample ID: R08070220-001C	Post Digestion Spike Duplicate			Run: SUB-C104869			07/26/08 08:05		
Copper	0.0478	mg/L	0.010	85	70	130	7	20	
Iron	21.9	mg/L	0.030		70	130	2.5	20	A
Lead	0.0505	mg/L	0.050	101	70	130	0.6	20	
Manganese	1.52	mg/L	0.010		70	130	0.8	20	A
Mercury	0.00553	mg/L	0.0010	111	70	130	2.6	20	
Molybdenum	0.0686	mg/L	0.10	98	70	130	0	20	
Nickel	0.0586	mg/L	0.050	93	70	130	2.5	20	
Silver	0.0148	mg/L	0.010	74	70	130	3.3	20	
Thorium 232	0.0534	mg/L	0.0010	107	70	130	0.5	20	
Vanadium	0.0468	mg/L	0.10	94	70	130	0	20	
Zinc	0.0501	mg/L	0.010	79	70	130	10	20	
Sample ID: R08070244-010C	Post Digestion Spike			Run: SUB-C104869			07/26/08 01:19		
Arsenic	0.0516	mg/L	0.0010	102	70	130			
Cadmium	0.0488	mg/L	0.010	98	70	130			
Chromium	0.0496	mg/L	0.050	99	70	130			
Lead	0.0509	mg/L	0.050	102	70	130			
Mercury	0.00507	mg/L	0.0010	101	70	130			
Nickel	0.0547	mg/L	0.050	97	70	130			
Silver	0.0184	mg/L	0.010	92	70	130			
Thorium 232	0.0538	mg/L	0.0010	107	70	130			
Vanadium	0.0513	mg/L	0.10	103	70	130			
Sample ID: R08070244-010C	Post Digestion Spike Duplicate			Run: SUB-C104869			07/26/08 01:26		
Arsenic	0.0513	mg/L	0.0010	102	70	130	0.5	20	
Cadmium	0.0491	mg/L	0.010	98	70	130	0.7	20	
Chromium	0.0495	mg/L	0.050	99	70	130	0	20	
Lead	0.0510	mg/L	0.050	102	70	130	0.2	20	
Mercury	0.00520	mg/L	0.0010	104	70	130	2.4	20	
Nickel	0.0543	mg/L	0.050	96	70	130	0.8	20	
Silver	0.0191	mg/L	0.010	95	70	130	3.3	20	
Thorium 232	0.0497	mg/L	0.0010	99	70	130	8	20	
Vanadium	0.0513	mg/L	0.10	102	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R104980		
Sample ID: LRB	Method Blank		Run: SUB-C104980				07/28/08 12:17		
Chromium	ND	mg/L	4E-05						
Manganese	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Uranium	3E-05	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C104980				07/28/08 12:24		
Chromium	0.0529	mg/L	0.0010	106	85	115			
Manganese	0.0525	mg/L	0.0010	105	85	115			
Nickel	0.0517	mg/L	0.0010	103	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Uranium	0.0520	mg/L	0.00030	104	85	115			
Vanadium	0.0522	mg/L	0.0010	104	85	115			
Sample ID: R08070244-011C	Post Digestion Spike		Run: SUB-C104980				07/28/08 17:41		
Chromium	0.0519	mg/L	0.050	103	70	130			
Manganese	0.0535	mg/L	0.010	104	70	130			
Nickel	0.0495	mg/L	0.050	99	70	130			
Silver	0.0140	mg/L	0.010	70	70	130			
Uranium	0.0506	mg/L	0.00030	101	70	130			
Vanadium	0.0513	mg/L	0.10	102	70	130			
Sample ID: R08070244-011C	Post Digestion Spike Duplicate		Run: SUB-C104980				07/28/08 18:15		
Chromium	0.0506	mg/L	0.050	100	70	130	2.6	20	
Manganese	0.0524	mg/L	0.010	102	70	130	2.2	20	
Nickel	0.0490	mg/L	0.050	98	70	130	0	20	
Silver	0.0156	mg/L	0.010	78	70	130	10	20	
Uranium	0.0502	mg/L	0.00030	100	70	130	0.8	20	
Vanadium	0.0502	mg/L	0.10	100	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R105126		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C105126				07/30/08 16:46		
Arsenic	8E-05	mg/L	6E-05						
Nickel	ND	mg/L	0.0007						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C105126				07/30/08 16:53		
Arsenic	0.0513	mg/L	0.0010	102	85	115			
Nickel	0.0512	mg/L	0.0010	102	85	115			
Uranium	0.0518	mg/L	0.00030	104	85	115			
<b>Sample ID: C08070851-010BMS4</b>	Post Digestion Spike		Run: SUB-C105126				07/30/08 18:41		
Arsenic	0.0513	mg/L	0.0010	102	70	130			
Nickel	0.0513	mg/L	0.050	103	70	130			
Uranium	0.0502	mg/L	0.00030	100	70	130			
<b>Sample ID: C08070851-010BMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C105126				07/30/08 18:48		
Arsenic	0.0510	mg/L	0.0010	102	70	130	0.6	20	
Nickel	0.0500	mg/L	0.050	100	70	130	2.6	20	
Uranium	0.0510	mg/L	0.00030	102	70	130	1.6	20	
<b>Sample ID: C08070821-004BMS4</b>	Post Digestion Spike		Run: SUB-C105126				07/30/08 20:29		
Arsenic	0.0692	mg/L	0.0010	103	70	130			
Nickel	0.0484	mg/L	0.050	94	70	130			
Uranium	10.8	mg/L	0.00030		70	130			A
<b>Sample ID: C08070821-004BMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C105126				07/30/08 20:36		
Arsenic	0.0684	mg/L	0.0010	101	70	130	1.1	20	
Nickel	0.0480	mg/L	0.050	93	70	130	0	20	
Uranium	11.4	mg/L	0.00030		70	130	5.8	20	A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R105162		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C105162		07/31/08 12:55		
Cadmium	ND	mg/L	3E-06						
Silver	0.0004	mg/L	7E-06						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C105162		07/31/08 13:02		
Cadmium	0.0499	mg/L	0.0010	100	85	115			
Silver	0.0196	mg/L	0.0010	96	85	115			
<b>Sample ID: C08070680-001CMS4</b>	Post Digestion Spike				Run: SUB-C105162		07/31/08 18:14		
Cadmium	0.0473	mg/L	0.010	95	70	130			
Silver	0.0137	mg/L	0.010	69	70	130			S
<b>Sample ID: C08070707-001BMS4</b>	Post Digestion Spike				Run: SUB-C105162		07/31/08 19:07		
Cadmium	0.505	mg/L	0.010	101	70	130			
Silver	0.119	mg/L	0.010	60	70	130			S
<b>Sample ID: C08070707-001BMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C105162		07/31/08 19:14		
Cadmium	0.492	mg/L	0.010	98	70	130	2.6	20	
Silver	0.122	mg/L	0.010	61	70	130	1.9	20	S
<b>Sample ID: C08070680-001CMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C105162		07/31/08 18:47		
Cadmium	0.0474	mg/L	0.010	95	70	130	0.2	20	
Silver	0.0119	mg/L	0.010	59	70	130	14	20	S
<b>Method: E245.1</b>							Batch: B_33680		
<b>Sample ID: MB-33680</b>	Method Blank				Run: SUB-B114551		07/23/08 14:30		
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-33680</b>	Laboratory Fortified Blank				Run: SUB-B114551		07/23/08 14:33		
Mercury	0.0022	mg/L	0.0010	109	85	115			
<b>Sample ID: R08070238-006F</b>	Sample Matrix Spike				Run: SUB-B114551		07/23/08 15:08		
Mercury	0.0022	mg/L	0.0010	108	70	130			
<b>Sample ID: R08070238-006F</b>	Sample Matrix Spike Duplicate				Run: SUB-B114551		07/23/08 15:10		
Mercury	0.0021	mg/L	0.0010	105	70	130	2.8	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R36127		
<b>Sample ID: LFB0807153729-3</b>	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 08:56		
Chloride	4.80	mg/L	0.50	96	90	110			
Fluoride	1.81	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N	2.37	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.51	mg/L	0.10	100	90	110			
Sulfate	14.3	mg/L	1.0	96	90	110			
<b>Sample ID: LFB0807153729-4</b>	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 09:12		
Chloride	4.93	mg/L	0.50	99	90	110			
Fluoride	1.87	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.58	mg/L	0.10	103	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
<b>Sample ID: LFB0807153729-5</b>	Laboratory Fortified Blank			Run: DIONEX_080716A			07/16/08 09:29		
Chloride	4.94	mg/L	0.50	99	90	110			
Fluoride	1.87	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.58	mg/L	0.10	103	90	110			
Sulfate	14.8	mg/L	1.0	98	90	110			
<b>Sample ID: R08070244-001AMS</b>	Sample Matrix Spike			Run: DIONEX_080716A			07/16/08 13:02		
Chloride	257	mg/L	5.4	94	80	120			
Fluoride	94.0	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	97	80	120			
Nitrogen, Nitrite as N	129	mg/L	2.9	103	80	120			
Sulfate	1150	mg/L	3.4	90	80	120			
<b>Sample ID: R08070244-001AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080716A			07/16/08 13:18		
Chloride	250	mg/L	5.4	92	80	120	2.5	10	
Fluoride	91.4	mg/L	0.56	82	80	120	2.8	10	
Nitrogen, Nitrate as N	118	mg/L	1.3	94	80	120	3.3	10	
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120	2.9	10	
Sulfate	1160	mg/L	3.4	91	80	120	0.6	10	
<b>Sample ID: R08070244-005AMS</b>	Sample Matrix Spike			Run: DIONEX_080716A			07/16/08 16:19		
Chloride	256	mg/L	5.4	94	80	120			
Fluoride	93.9	mg/L	0.56	85	80	120			
Nitrogen, Nitrate as N	121	mg/L	1.3	97	80	120			
Nitrogen, Nitrite as N	129	mg/L	2.9	103	80	120			
Sulfate	1180	mg/L	3.4	87	80	120			
<b>Sample ID: R08070244-005AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080716A			07/16/08 16:35		
Chloride	254	mg/L	5.4	93	80	120	0.5	10	
Fluoride	93.4	mg/L	0.56	84	80	120	0.6	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>									Batch: R36127
<b>Sample ID: R08070244-005AMSD</b> Sample Matrix Spike Duplicate      Run: DIONEX_080716A      07/16/08 16:35									
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120	1.3	10	
Nitrogen, Nitrite as N	127	mg/L	2.9	102	80	120	1.4	10	
Sulfate	1190	mg/L	3.4	88	80	120	0.7	10	
<b>Sample ID: R08070244-009AMS</b> Sample Matrix Spike      Run: DIONEX_080716A      07/16/08 19:36									
Chloride	262	mg/L	5.4	94	80	120			
Fluoride	104	mg/L	0.56	95	80	120			
Nitrogen, Nitrate as N	121	mg/L	1.3	96	80	120			
Nitrogen, Nitrite as N	127	mg/L	2.9	102	80	120			
Sulfate	1170	mg/L	3.4	87	80	120			
<b>Sample ID: R08070244-009AMSD</b> Sample Matrix Spike Duplicate      Run: DIONEX_080716A      07/16/08 19:52									
Chloride	254	mg/L	5.4	91	80	120	3.2	10	
Fluoride	92.0	mg/L	0.56	83	80	120	12	10	R
Nitrogen, Nitrate as N	117	mg/L	1.3	93	80	120	3.2	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	99	80	120	2.9	10	
Sulfate	1130	mg/L	3.4	82	80	120	3.4	10	
<b>Method: E900.0</b>									Batch: C_GrAB-0510
<b>Sample ID: MB-GrAB-0510</b> Method Blank      Run: SUB-C107110      09/04/08 06:47									
Gross Alpha	-0.1	pCi/L							U
Gross Beta	-2	pCi/L							
<b>Sample ID: UNAT-GrAB-0510</b> Laboratory Control Sample      Run: SUB-C107110      09/04/08 06:47									
Gross Alpha	120	pCi/L		87	70	130			
<b>Sample ID: Cs137-GrAB-0510</b> Laboratory Control Sample      Run: SUB-C107110      09/04/08 06:47									
Gross Beta	77	pCi/L		84	70	130			
<b>Sample ID: C08070835-001AMS</b> Sample Matrix Spike      Run: SUB-C107110      09/04/08 18:47									
Gross Alpha	128	pCi/L		92	70	130			
<b>Sample ID: C08070835-001AMSD</b> Sample Matrix Spike Duplicate      Run: SUB-C107110      09/04/08 18:47									
Gross Alpha	121	pCi/L		88	70	130	5.2	16.7	
<b>Sample ID: C08070835-001AMS</b> Sample Matrix Spike      Run: SUB-C107110      09/04/08 18:47									
Gross Beta	76.3	pCi/L		86	70	130			
<b>Sample ID: C08070835-001AMSD</b> Sample Matrix Spike Duplicate      Run: SUB-C107110      09/04/08 18:47									
Gross Beta	74.2	pCi/L		84	70	130	2.8	16.1	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_R106566		
Sample ID: R08070244-011H	Sample Matrix Spike				Run: SUB-C106566			08/18/08 10:05	
Gross Alpha	130	pCi/L		97	70	130			
Sample ID: R08070244-011H	Sample Matrix Spike Duplicate				Run: SUB-C106566			08/18/08 10:05	
Gross Alpha	120	pCi/L		90	70	130	7.6	30	
Sample ID: MB-R106566	Method Blank				Run: SUB-C106566			08/18/08 10:05	
Gross Alpha	0.2	pCi/L							
Sample ID: LCS-R106566	Laboratory Control Sample				Run: SUB-C106566			08/18/08 10:05	
Gross Alpha	140	pCi/L		98	70	130			
Method: E901.1							Batch: C_R104840		
Sample ID: LCS-R104840	Laboratory Control Sample				Run: SUB-C104840			07/17/08 13:12	
Americium 241	230000	pCi/L	20	75	70	130			
Cesium 137	460000	pCi/L	20	106	70	130			
Cobalt 60	320000	pCi/L	20	101	70	130			
Sample ID: MB-R104840	Method Blank				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	ND	pCi/L						U	
Sample ID: R08070244-011H	Sample Duplicate				Run: SUB-C104840			07/17/08 13:12	
Gross Gamma	ND	pCi/L	20				0	30	
Method: E903.0							Batch: C_19224		
Sample ID: C08070719-001EMS	Sample Matrix Spike				Run: SUB-C105486			08/06/08 15:36	
Radium 226	140	pCi/L		87	70	130			
Sample ID: C08070719-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C105486			08/06/08 15:36	
Radium 226	130	pCi/L		79	70	130	7.8	29.9	
Sample ID: MB-19224	Method Blank				Run: SUB-C105486			08/06/08 17:08	
Radium 226	-2	pCi/L						U	
Sample ID: LCS-19224	Laboratory Control Sample				Run: SUB-C105486			08/06/08 17:08	
Radium 226	58	pCi/L		76	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b> Batch: C_19232									
Sample ID: R08070244-010I	Sample Matrix Spike					Run: SUB-C105907			08/11/08 09:37
Radium 226	44	pCi/L		100	70	130			
Sample ID: R08070244-010I	Sample Matrix Spike Duplicate					Run: SUB-C105907			08/11/08 09:37
Radium 226	43	pCi/L		97	70	130	2.1	24.1	
Sample ID: MB-19232	Method Blank					Run: SUB-C105907			08/11/08 11:25
Radium 226	-1	pCi/L							U
Sample ID: LCS-19232	Laboratory Control Sample					Run: SUB-C105907			08/11/08 14:02
Radium 226	86	pCi/L		104	70	130			
<b>Method: E903.0</b> Batch: C_RA226-2985									
Sample ID: MB-RA226-2985	Method Blank					Run: SUB-C105914			08/12/08 16:42
Radium 226	-0.2	pCi/L							U
Sample ID: LCS-RA226-2985	Laboratory Control Sample					Run: SUB-C105914			08/12/08 16:42
Radium 226	8.2	pCi/L		106	70	130			
<b>Method: E907.0</b> Batch: C_19224									
Sample ID: C08070680-001IMS	Sample Matrix Spike					Run: SUB-C105794			08/04/08 22:05
Thorium 230	19.8	pCi/L	0.20	88	70	130			
Sample ID: C08070680-001IMSD	Sample Matrix Spike Duplicate					Run: SUB-C105794			08/04/08 22:05
Thorium 230	23.7	pCi/L	0.20	103	70	130	18	30	
Sample ID: LCS-19224	Laboratory Control Sample					Run: SUB-C105794			08/05/08 12:51
Thorium 230	44.9	pCi/L	0.20	92	70	130			
Sample ID: MB-19224	Method Blank					Run: SUB-C105794			08/05/08 12:51
Thorium 230	0.04	pCi/L							U
<b>Method: E907.0</b> Batch: C_19232									
Sample ID: C08071003-001KMS	Sample Matrix Spike					Run: SUB-C105778			08/10/08 17:23
Thorium 230	22.3	pCi/L	0.20	96	70	130			
Sample ID: C08071003-001KMSD	Sample Matrix Spike Duplicate					Run: SUB-C105778			08/10/08 17:23
Thorium 230	21.3	pCi/L	0.20	90	70	130	4.3	30	
Sample ID: LCS-19232	Laboratory Control Sample					Run: SUB-C105778			08/10/08 17:23
Thorium 230	45.0	pCi/L	0.20	88	70	130			
Sample ID: MB-19232	Method Blank					Run: SUB-C105778			08/10/08 21:35
Thorium 230	0.1	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_RA-TH-ISO-0598		
Sample ID: LCS-RA-TH-ISO-0598	Laboratory Control Sample				Run: SUB-C106251				08/13/08 00:45
Thorium 230	6.45	pCi/L	0.20	105	70	130			
Sample ID: R08070244-001H	Sample Matrix Spike				Run: SUB-C106251				08/13/08 12:43
Thorium 230	16.1	pCi/L	0.20	99	70	130			
Sample ID: R08070244-001H	Sample Matrix Spike Duplicate				Run: SUB-C106251				08/13/08 12:43
Thorium 230	16.8	pCi/L	0.20	103	70	130	4.4	30	
Sample ID: MB-RA-TH-ISO-0598	Method Blank				Run: SUB-C106251				08/13/08 17:32
Thorium 230	0.02	pCi/L							U
Method: E909.0M							Batch: C_19224		
Sample ID: C08070547-007IMS	Sample Matrix Spike				Run: SUB-C106081				07/29/08 09:30
Lead 210	930	pCi/L		79	70	130			
Sample ID: C08070547-007IMSD	Sample Matrix Spike Duplicate				Run: SUB-C106081				07/29/08 09:30
Lead 210	1400	pCi/L		117	70	130	39	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-R106081	Method Blank				Run: SUB-C106081				07/29/08 09:30
Lead 210	5	pCi/L							U
Sample ID: LCS-R106081	Laboratory Control Sample				Run: SUB-C106081				07/29/08 09:30
Lead 210	110	pCi/L		87	70	130			
Method: E909.0M							Batch: C_19232		
Sample ID: C08070935-001FMS	Sample Matrix Spike				Run: SUB-C106570				08/11/08 09:30
Lead 210	1200	pCi/L		100	70	130			
Sample ID: C08070935-001FMDS	Sample Matrix Spike Duplicate				Run: SUB-C106570				08/11/08 09:30
Lead 210	1300	pCi/L		107	70	130	7.4	30	
Sample ID: MB-R106570	Method Blank				Run: SUB-C106570				08/11/08 09:30
Lead 210	1	pCi/L							U
Sample ID: LCS-R106570	Laboratory Control Sample				Run: SUB-C106570				08/11/08 09:30
Lead 210	140	pCi/L		117	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R105965		
Sample ID: R08070244-003H	Sample Matrix Spike				Run: SUB-C105965			07/25/08 11:45	
Lead 210	510	pCi/L		88	70	130			
Sample ID: R08070244-003H	Sample Matrix Spike Duplicate				Run: SUB-C105965			07/25/08 11:45	
Lead 210	560	pCi/L		95	70	130	8	30	
Sample ID: R08070244-006H	Sample Duplicate				Run: SUB-C105965			07/25/08 11:45	
Lead 210	-3.1	pCi/L					43	30	R
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
Sample ID: MB-R105965	Method Blank				Run: SUB-C105965			07/25/08 11:45	
Lead 210	-1	pCi/L							U
Sample ID: LCS-R105965	Laboratory Control Sample				Run: SUB-C105965			07/25/08 11:45	
Lead 210	130	pCi/L		110	70	130			
Method: RMO-3008							Batch: C_19224		
Sample ID: R08070244-009I	Sample Matrix Spike				Run: SUB-C105583			07/31/08 14:15	
Polonium 210	50	pCi/L	1.0	119	70	130			
Sample ID: R08070244-009I	Sample Matrix Spike Duplicate				Run: SUB-C105583			07/31/08 14:15	
Polonium 210	44	pCi/L	1.0	104	70	130	14	30	
Sample ID: LCS-R105583	Laboratory Control Sample				Run: SUB-C105583			07/31/08 14:15	
Polonium 210	80	pCi/L	1.0	93	70	130			
Sample ID: MB-R105583	Method Blank				Run: SUB-C105583			07/31/08 14:15	
Polonium 210	0.2	pCi/L							U
Method: RMO-3008							Batch: C_19232		
Sample ID: C08071003-002KMS	Sample Matrix Spike				Run: SUB-C105985			08/08/08 16:32	
Polonium 210	39	pCi/L	1.0	95	70	130			
Sample ID: C08071003-002KMSD	Sample Matrix Spike Duplicate				Run: SUB-C105985			08/08/08 16:32	
Polonium 210	44	pCi/L	1.0	109	70	130	13	30	
Sample ID: LCS-19232	Laboratory Control Sample				Run: SUB-C105985			08/08/08 16:32	
Polonium 210	86	pCi/L	1.0	105	70	130			
Sample ID: MB-19232	Method Blank				Run: SUB-C105985			08/08/08 16:32	
Polonium 210	0.6	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070244

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_PO210-0122		
Sample ID: C08070897-005DMS	Sample Matrix Spike				Run: SUB-C105573			08/07/08 14:50	
Polonium 210	80	pCi/L	1.0	90	70	130			
Sample ID: C08070897-005DMSD	Sample Matrix Spike Duplicate				Run: SUB-C105573			08/07/08 14:50	
Polonium 210	87	pCi/L	1.0	98	70	130	8.1	30	
Sample ID: MB-PO210-0122	Method Blank				Run: SUB-C105573			08/07/08 17:07	
Polonium 210	0.4	pCi/L							U
Sample ID: LCS-R105573	Laboratory Control Sample				Run: SUB-C105573			08/04/08 03:45	
Polonium 210	42	pCi/L	1.0	97	70	130			
Method: SW7470A							Analytical Run: SUB-B114551		
Sample ID: QCS	Initial Calibration Verification Standard							07/23/08 08:21	
Mercury	0.0021	mg/L	0.0010	105	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>Reslec</b>		Project Name, PWS, Permit, Etc. <b>Reslec DB</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Cory Foreman</b>		Phone/Fax: <b>reslec.com</b>	Sampler: (Please Print) <b>Eric Kuntz</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:					
<div><input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POT/WWWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: <input type="checkbox"/> NEIAC</div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1. Dew Burd GW 622		7/14/08	12:35	W	<div>SEE ATTACHED Normal Turnaround (TAT)</div> <div><b>RUSH</b></div> <div>Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page</div> <div>Comments: <b>All GW</b></div> <div>Receipt Temp: <b>5.1 °C</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cooler ID#: Shipped by:</div>
2. Dew Burd GW 615		7/14/08	11:50	W	
3. Dew Burd GW 695		7/14/08	13:42	W	
4. Dew Burd GW 696		7/14/08	15:10	W	
5. Dew Burd GW 694		7/14/08	15:30	W	
6. Dew Burd GW 697		7/14/08	15:52	W	
7. Dew Burd GW 697		7/14/08	15:57	W	
8. Dew Burd GW 689		7/14/08	16:50	W	
9. Dew Burd GW 681		7/14/08	17:04	W	
10. Dew Burd GW 698		7/14/08	18:43	W	
Custody Record Relinquished by (Print): <b>Eric Kuntz</b>		Date/Time: <b>7/14/08 8:15</b>	Signature: <b>Eric Kuntz</b>		Received by (Print): <b>Eric Kuntz</b>
Signed		Sample Disposal:	Return to Client:	Lab Disposal:	Date/Time: <b>7-15-08 8:00</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





# Chain of Custody and Analytical Request Record

Page 2 of 2

PLEASE PRINT - Provide as much information as possible.

Company Name <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>Powerbel DB</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Cory Foreman</b> Phone/Fax: <b>respec.com</b>		Email:	Sampler: (Please Print) <b>Eric Knute</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following:  <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> Format: _____ <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC			Number of Containers Sample Type: <b>AWSVB</b> Air Water Soils/Solids Vegetation Bioassay Other		
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	
1 <b>Dewey Burdock</b>		7/14/08	18:00	W	
2 <b>Dewey Burdock</b>		7/14/08	18:00	W	
3					
4					
5					
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Redeemed by (print): <b>Eric Knute</b>		Date/Time: 7/14/08 21:30	
Sample Disposal: <b>Return to Client</b>		Lab Disposal:		Signature: <b>Eric Knute</b>	
In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at <a href="http://www.energylab.com">www.energylab.com</a> for additional information, downloadable fee schedule, forms, and links.		Received by (print): <b>Dustin Knute</b>		Date/Time: 7-14-08/9:45	
Received by Laboratory:		Signature: <b>Steve Tholand</b>		Date/Time: 7-15-08 8:00	
Signature:		Signature:		Signature:	

LABORATORY USE ONLY

SEE ATTACHED  
Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page

Comments:  
**GW**

On Ice: ☒ Yes ☐ No

Recept Temp  
**5.1** °C

Custody Seal  
Intact ☒ Yes ☐ No

Signature  
**Y N**

Match  
**Y N**



## ANALYTICAL SUMMARY REPORT

October 03, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08070471

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 7/29/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08070471-001	DewBurd GW688	07/28/08 15:45	07/29/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson

Rapid City - Project Manager



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08070471

Date: 03-Oct-08

## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by RESPEC Inc on 7/29/2008 8:45:00 AM. These samples were assigned ELI Workorder Number R08070471.

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08071390

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08071390



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070471-001  
Client Sample ID: DewBurd GW688

Report Date: 10/03/08  
Collection Date: 07/28/08 15:45  
Date Received: 07/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	08/01/08 14:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/01/08 14:53/mb
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	08/01/08 14:53/mb
Calcium	50.0	mg/L		0.5		2	E200.7	08/06/08 16:19/eli-c
Chloride	11	mg/L		1		1	E300.0	07/30/08 20:37/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/30/08 20:37/jmh
Magnesium	21.1	mg/L		0.5		2	E200.7	08/06/08 16:19/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	07/30/08 13:55/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/30/08 20:37/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/30/08 20:37/jmh
Potassium	12.0	mg/L		0.5		2	E200.7	08/06/08 16:19/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	08/06/08 16:19/eli-c
Sodium	183	mg/L	D	2		2	E200.7	08/06/08 16:19/eli-c
Sulfate	445	mg/L	D	3		50	E300.0	07/30/08 20:21/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1280	umhos/cm		5.0		1	A2510 B	08/01/08 08:53/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	08/04/08 00:00/jmh
pH	8.21	s.u.		0.01		1	A4500-H B	08/04/08 15:37/tb
Sodium Adsorption Ratio (SAR)	5.5	unitless		0.10		1	Calculation	09/29/08 11:40/ADM
Solids, Total Dissolved TDS @ 180 C	790	mg/L		5		1	A2540 C	07/31/08 12:00/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	08/06/08 16:19/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	08/11/08 16:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	08/05/08 20:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/06/08 16:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/05/08 20:29/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	08/05/08 20:29/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/05/08 20:29/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	08/06/08 16:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/05/08 20:29/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	08/05/08 20:29/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/05/08 20:29/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	08/05/08 20:29/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	08/05/08 20:29/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/15/08 15:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/11/08 16:15/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 20:29/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 1 of 3



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070471-001  
**Client Sample ID:** DewBurd GW688

**Report Date:** 10/03/08  
**Collection Date:** 07/28/08 15:45  
**Date Received:** 07/29/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	08/05/08 20:29/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	08/05/08 20:29/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/05/08 20:29/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	08/09/08 01:05/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/15/08 11:57/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/15/08 15:52/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.9	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Gross Alpha precision (±)	2.0	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Gross Beta	14.3	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Gross Beta MDC	3.5	pCi/L				1	E900.0	09/06/08 01:18/eli-c
Lead 210	-6	pCi/L	U			1	E909.0M	08/28/08 09:57/eli-c
Lead 210 precision (±)	7.3	pCi/L				1	E909.0M	08/28/08 09:57/eli-c
Lead 210 MDC	12.5	pCi/L				1	E909.0M	08/28/08 09:57/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	0.6	pCi/L				1	E903.0	08/27/08 15:35/eli-ca
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/27/08 15:35/eli-ca
Radium 226 MDC	0.3	pCi/L				1	E903.0	08/27/08 15:35/eli-ca
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	08/20/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/20/08 16:00/eli-c
Gross Gamma	950	pCi/L		20		1	E901.1	08/08/08 07:23/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	08/08/08 07:23/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.6	pCi/L	U			1	E909.0M	08/21/08 10:15/eli-c
Lead 210 precision (±)	7.1	pCi/L				1	E909.0M	08/21/08 10:15/eli-c
Lead 210 MDC	11.9	pCi/L				1	E909.0M	08/21/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/03/08 17:30/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	RMO-3008	09/03/08 17:30/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	08/18/08 17:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/18/08 17:41/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

Page 2 of 3



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070471-001  
Client Sample ID: DewBurd GW688

Report Date: 10/03/08  
Collection Date: 07/28/08 15:45  
Date Received: 07/29/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.6	pCi/L	U	0.2		1	E903.0	08/18/08 17:41/eli-c
Thorium 230	0.2	pCi/L				1	E907.0	08/22/08 10:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	08/22/08 10:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1160	pCi/L		100		1	D5072-92	08/01/08 13:44/eli-c
Radon 222 precision (±)	127	pCi/L				1	D5072-92	08/01/08 13:44/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	08/06/08 15:43/eli-c
Arsenic	0.015	mg/L		0.001		10	E200.8	08/11/08 19:20/eli-c
Barium	ND	mg/L		0.1		10	E200.8	08/06/08 15:43/eli-c
Beryllium	ND	mg/L		0.001		10	E200.8	08/11/08 19:20/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/05/08 20:02/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	08/06/08 15:43/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	08/05/08 20:02/eli-c
Copper	ND	mg/L		0.01		2	E200.7	08/05/08 20:02/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	08/05/08 20:02/eli-c
Lead	ND	mg/L		0.001		10	E200.8	08/06/08 15:43/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	08/05/08 20:02/eli-c
Mercury	ND	mg/L		0.0002		1	E245.1	08/05/08 13:50/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	08/05/08 20:02/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	08/05/08 20:02/eli-c
Selenium	ND	mg/L		0.001		10	E200.8	08/11/08 19:20/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/06/08 15:43/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	08/05/08 20:02/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	08/06/08 15:43/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	08/11/08 19:20/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	08/05/08 20:02/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.16	%				1	A1030 E	09/29/08 00:00/jmh
Anions	12.8	meq/L				1	A1030 E	09/29/08 00:00/jmh
Cations	12.5	meq/L				1	A1030 E	09/29/08 00:00/jmh
Solids, Total Dissolved Calculated	830	mg/L				1	A1030 E	09/29/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	09/29/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B			Batch: 080801A-ALK-SEL-W						
Sample ID: LCS1_080801A	Laboratory Control Sample				Run: PH_COND1-R_080801A				08/01/08 14:01
Alkalinity, Total as CaCO <sub>3</sub>	940	mg/L	5.0	94	90	110			
Sample ID: MBLK1_080801A	Method Blank				Run: PH_COND1-R_080801A				08/01/08 14:02
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Method: A2510 B			Batch: 080801_1_COND-PROBE-W						
Sample ID: LCS_COND-1_080801	Laboratory Control Sample				Run: PH_COND2-R_080801A				08/01/08 08:42
Conductivity @ 25 C	1420	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080801	Laboratory Control Sample				Run: PH_COND2-R_080801A				08/01/08 08:44
Conductivity @ 25 C	152	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_080801	Laboratory Control Sample				Run: PH_COND2-R_080801A				08/01/08 08:45
Conductivity @ 25 C	4920	umhos/cm	5.0	98	90	110			
Sample ID: MBLK-1_080801	Method Blank				Run: PH_COND2-R_080801A				08/01/08 08:46
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08070503-001ADUP	Sample Duplicate				Run: PH_COND2-R_080801A				08/01/08 08:56
Conductivity @ 25 C	4010	umhos/cm	5.0				1	10	
Method: A2540 C			Batch: 080731A-SLDS-TDS-W						
Sample ID: LCS1_080731A	Laboratory Control Sample				Run: BAL-4-R_080731A				07/31/08 11:39
Solids, Total Dissolved TDS @ 180 C	230	mg/L	5.0	116	90	110			S
Sample ID: MBLK1_080731A	Method Blank				Run: BAL-4-R_080731A				07/31/08 11:40
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08070444-006AMS	Sample Matrix Spike				Run: BAL-4-R_080731A				07/31/08 11:55
Solids, Total Dissolved TDS @ 180 C	1500	mg/L	5.0	83	80	120			
Sample ID: R08070444-006AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080731A				07/31/08 11:56
Solids, Total Dissolved TDS @ 180 C	1500	mg/L	5.0	99	80	120	2.1	10	
Method: A2580 B			Batch: 080804-ORP-ISE-W						
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080804A				08/04/08 00:00
Oxidation-Reduction Potential	470	mV		99	95	105			
Sample ID: R08070471-001F	Sample Duplicate				Run: PH_COND1-R_080804A				08/04/08 00:00
Oxidation-Reduction Potential	290	mV					0.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-0808015A		
Sample ID: MBLK	Method Blank					Run: SUB-C105972			08/15/08 11:38
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-121-5	Laboratory Control Sample					Run: SUB-C105972			08/15/08 11:40
Selenium-IV	0.049	mg/L	0.0010	98	90	110			
Sample ID: C08071121-001AMS	Sample Matrix Spike					Run: SUB-C105972			08/15/08 11:46
Selenium-IV	0.055	mg/L	0.0010	109	85	115			
Sample ID: C08071121-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C105972			08/15/08 11:48
Selenium-IV	0.057	mg/L	0.0010	113	85	115	4	10	
Method: A3114 B							Batch: C_SE3114-0808015B		
Sample ID: MBLK	Method Blank					Run: SUB-C105991			08/15/08 15:10
Selenium	ND	mg/L	6E-05						
Sample ID: 288-121-5	Laboratory Control Sample					Run: SUB-C105991			08/15/08 15:20
Selenium	0.047	mg/L	0.0010	95	90	110			
Sample ID: C08071121-001AMS	Sample Matrix Spike					Run: SUB-C105991			08/15/08 15:24
Selenium	0.047	mg/L	0.0010	91	85	115			
Sample ID: C08071121-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C105991			08/15/08 15:26
Selenium	0.048	mg/L	0.0010	93	85	115	2.1	15	
Method: A4500-H B							Batch: 080804_1_PH-W		
Sample ID: LCS_pH-1_080804	Laboratory Control Sample					Run: PH_COND2-R_080804A			08/04/08 15:34
pH	6.88	s.u.	0.010	100	98.55	101.45			
Sample ID: R08080016-004BDUP	Sample Duplicate					Run: PH_COND2-R_080804A			08/04/08 15:43
pH	8.02	s.u.	0.010				0.1	1.25	
Method: A4500-NH3 G							Batch: A2008-07-30_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080730A			07/30/08 11:56
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080730A			07/30/08 11:58
Nitrogen, Ammonia as N	0.25	mg/L	0.10	102	90	110			
Sample ID: R08070444-004BMS	Sample Matrix Spike					Run: TECHAA2-R_080730A			07/30/08 13:47
Nitrogen, Ammonia as N	0.13	mg/L	0.10	52	80	120			S
Sample ID: R08070444-004BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080730A			07/30/08 13:48
Nitrogen, Ammonia as N	0.12	mg/L	0.10	48	80	120	9.6	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92									Batch: C_R105444
Sample ID: R08070471-001G	Sample Duplicate					Run: SUB-C105444			08/01/08 13:44
Radon 222	1230	pCi/L	100				5.3	30	
Sample ID: MB-R105444	Method Blank					Run: SUB-C105444			08/01/08 13:44
Radon 222	40	pCi/L							
Sample ID: LCS-R105444	Laboratory Control Sample					Run: SUB-C105444			08/01/08 13:44
Radon 222	324	pCi/L	100	94	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19343		
Sample ID: MB-19343	Method Blank		Run: SUB-C105373				08/05/08 19:34		
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	0.003	mg/L	0.001						
Sample ID: LCS3-19343	Laboratory Control Sample		Run: SUB-C105373				08/05/08 19:38		
Boron	0.501	mg/L	0.10	100	85	115			
Chromium	0.501	mg/L	0.050	100	85	115			
Copper	0.505	mg/L	0.010	101	85	115			
Iron	2.72	mg/L	0.030	109	85	115			
Manganese	2.51	mg/L	0.010	101	85	115			
Molybdenum	0.498	mg/L	0.10	100	85	115			
Nickel	0.496	mg/L	0.050	99	85	115			
Strontium	0.493	mg/L	0.10	99	85	115			
Zinc	0.501	mg/L	0.010	100	85	115			
Sample ID: C08071410-001BMS3	Sample Matrix Spike		Run: SUB-C105373				08/05/08 20:10		
Boron	0.514	mg/L	0.10	103	70	130			
Chromium	0.504	mg/L	0.050	101	70	130			
Copper	0.514	mg/L	0.010	103	70	130			
Iron	2.80	mg/L	0.030	109	70	130			
Manganese	2.71	mg/L	0.010	100	70	130			
Molybdenum	0.500	mg/L	0.10	100	70	130			
Nickel	0.492	mg/L	0.050	98	70	130			
Strontium	2.00	mg/L	0.10	82	70	130			
Zinc	0.531	mg/L	0.010	99	70	130			
Sample ID: C08071410-001BMSD3	Sample Matrix Spike Duplicate		Run: SUB-C105373				08/05/08 20:14		
Boron	0.510	mg/L	0.10	102	70	130	0.9	20	
Chromium	0.515	mg/L	0.050	103	70	130	2.2	20	
Copper	0.527	mg/L	0.010	105	70	130	2.5	20	
Iron	2.84	mg/L	0.030	111	70	130	1.4	20	
Manganese	2.75	mg/L	0.010	102	70	130	1.8	20	
Molybdenum	0.509	mg/L	0.10	102	70	130	1.9	20	
Nickel	0.490	mg/L	0.050	98	70	130	0.3	20	
Strontium	2.15	mg/L	0.10	113	70	130	7.5	20	
Zinc	0.545	mg/L	0.010	102	70	130	2.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R105457		
Sample ID: MB-080806A	Method Blank		Run: SUB-C105457				08/06/08 13:48		
Silica	0.04	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Boron	0.02	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Sample ID: LFB-080806A	Laboratory Fortified Blank		Run: SUB-C105457				08/06/08 15:10		
Silica	0.41	mg/L	0.10	103	85	125			
Aluminum	0.97	mg/L	0.10	97	85	125			
Boron	1.00	mg/L	0.10	100	85	125			
Calcium	54	mg/L	0.50	107	85	125			
Iron	1.0	mg/L	0.030	104	85	125			
Magnesium	53	mg/L	0.50	106	85	125			
Potassium	46	mg/L	0.50	92	85	125			
Sodium	49	mg/L	0.77	98	85	125			
Sample ID: C08061359-007EMS2	Sample Matrix Spike		Run: SUB-C105457				08/06/08 15:18		
Aluminum	1.97	mg/L	0.10	99	70	130			
Boron	2.17	mg/L	0.10	98	70	130			
Iron	2.14	mg/L	0.030	105	70	130			
Calcium	134	mg/L	1.0	106	70	130			
Magnesium	110	mg/L	1.0	105	70	130			
Potassium	100	mg/L	1.0	92	70	130			
Silica	6.57	mg/L	0.10		70	130			A
Sodium	246	mg/L	1.5	97	70	130			
Sample ID: C08061359-007EMSD2	Sample Matrix Spike Duplicate		Run: SUB-C105457				08/06/08 15:22		
Aluminum	2.04	mg/L	0.10	102	70	130	3.3	20	
Boron	2.27	mg/L	0.10	103	70	130	4.3	20	
Iron	2.23	mg/L	0.030	110	70	130	4.2	20	
Calcium	138	mg/L	1.0	110	70	130	3	20	
Magnesium	113	mg/L	1.0	109	70	130	3.1	20	
Potassium	99.5	mg/L	1.0	91	70	130	0.7	20	
Silica	6.83	mg/L	0.10		70	130	4	20	A
Sodium	250	mg/L	1.5	100	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19343		
Sample ID: MB-19343	Method Blank		Run: SUB-C105472				08/06/08 15:03		
Antimony	ND	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	4E-05	mg/L	3E-05						
Lead	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	4E-05						
Thallium	ND	mg/L	3E-05						
Uranium	0.0002	mg/L	3E-05						
Sample ID: LCS3-19343	Laboratory Control Sample		Run: SUB-C105472				08/06/08 15:37		
Antimony	0.545	mg/L	0.050	109	85	115			
Arsenic	0.521	mg/L	0.0010	104	85	115			
Barium	0.525	mg/L	0.10	105	85	115			
Beryllium	0.230	mg/L	0.010	92	85	115			
Cadmium	0.260	mg/L	0.010	104	85	115			
Lead	0.516	mg/L	0.050	103	85	115			
Selenium	0.523	mg/L	0.0020	105	85	115			
Silver	0.0479	mg/L	0.010	96	85	115			
Thallium	0.511	mg/L	0.10	102	85	115			
Uranium	0.547	mg/L	0.00032	109	85	115			
Sample ID: C08071410-001BMS3	Sample Matrix Spike		Run: SUB-C105472				08/06/08 15:57		
Antimony	0.559	mg/L	0.050	112	70	130			
Arsenic	0.546	mg/L	0.0010	109	70	130			
Barium	0.553	mg/L	0.10	107	70	130			
Cadmium	0.255	mg/L	0.010	102	70	130			
Lead	0.534	mg/L	0.050	107	70	130			
Selenium	0.535	mg/L	0.0010	107	70	130			
Silver	0.0473	mg/L	0.010	95	70	130			
Thallium	0.550	mg/L	0.10	110	70	130			
Uranium	0.627	mg/L	0.00030	125	70	130			
Sample ID: C08071410-001BMSD3	Sample Matrix Spike Duplicate		Run: SUB-C105472				08/06/08 16:04		
Antimony	0.564	mg/L	0.050	113	70	130	0.9	20	
Arsenic	0.542	mg/L	0.0010	108	70	130	0.8	20	
Barium	0.555	mg/L	0.10	107	70	130	0.2	20	
Cadmium	0.254	mg/L	0.010	101	70	130	0.4	20	
Lead	0.526	mg/L	0.050	105	70	130	1.5	20	
Selenium	0.527	mg/L	0.0010	105	70	130	1.7	20	
Silver	0.0475	mg/L	0.010	95	70	130	0.4	20	
Thallium	0.545	mg/L	0.10	109	70	130	0.8	20	
Uranium	0.628	mg/L	0.00030	125	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_19343
Sample ID: C08071410-001BMSD3	Sample Matrix Spike Duplicate					Run: SUB-C105472			08/06/08 16:04

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R105384		
Sample ID: LRB	Method Blank		Run: SUB-C105384				08/05/08 13:12		
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	ND	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C105384				08/05/08 13:18		
Arsenic	0.0564	mg/L	0.0010	113	85	115			
Barium	0.0559	mg/L	0.0010	112	85	115			
Cadmium	0.0557	mg/L	0.0010	111	85	115			
Chromium	0.0537	mg/L	0.0010	107	85	115			
Copper	0.0576	mg/L	0.0010	115	85	115			
Lead	0.0563	mg/L	0.0010	113	85	115			
Manganese	0.0536	mg/L	0.0010	107	85	115			
Mercury	0.00558	mg/L	0.0010	112	85	115			
Molybdenum	0.0564	mg/L	0.0010	113	85	115			
Nickel	0.0574	mg/L	0.0010	115	85	115			
Thorium 232	0.0538	mg/L	0.0010	108	85	115			
Uranium	0.0543	mg/L	0.00030	109	85	115			
Vanadium	0.0531	mg/L	0.0010	106	85	115			
Zinc	0.0579	mg/L	0.0010	116	85	115			
Sample ID: R08070471-001C	Post Digestion Spike		Run: SUB-C105384				08/05/08 20:35		
Arsenic	0.0551	mg/L	0.0010	107	70	130			
Barium	0.0670	mg/L	0.10	107	70	130			
Cadmium	0.0493	mg/L	0.010	99	70	130			
Chromium	0.0480	mg/L	0.050	96	70	130			
Copper	0.0492	mg/L	0.010	97	70	130			
Lead	0.0545	mg/L	0.050	109	70	130			
Manganese	0.0869	mg/L	0.010	103	70	130			
Mercury	0.00539	mg/L	0.0010	108	70	130			
Molybdenum	0.0529	mg/L	0.10	104	70	130			
Nickel	0.0491	mg/L	0.050	98	70	130			
Thorium 232	0.0553	mg/L	0.0010	111	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R105384		
Sample ID: R08070471-001C	Post Digestion Spike		Run: SUB-C105384				08/05/08 20:35		
Uranium	0.0557	mg/L	0.00030	111	70	130			
Vanadium	0.0495	mg/L	0.10	98	70	130			
Zinc	0.0506	mg/L	0.010	99	70	130			
Sample ID: R08070471-001C	Post Digestion Spike Duplicate		Run: SUB-C105384				08/05/08 20:42		
Arsenic	0.0557	mg/L	0.0010	108	70	130	0.9	20	
Barium	0.0677	mg/L	0.10	108	70	130	0	20	
Cadmium	0.0505	mg/L	0.010	101	70	130	2.6	20	
Chromium	0.0499	mg/L	0.050	100	70	130	0	20	
Copper	0.0504	mg/L	0.010	99	70	130	2.4	20	
Lead	0.0540	mg/L	0.050	108	70	130	0.9	20	
Manganese	0.0881	mg/L	0.010	106	70	130	1.4	20	
Mercury	0.00536	mg/L	0.0010	107	70	130	0.5	20	
Molybdenum	0.0547	mg/L	0.10	108	70	130	0	20	
Nickel	0.0504	mg/L	0.050	101	70	130	2.7	20	
Thorium 232	0.0557	mg/L	0.0010	111	70	130	0.6	20	
Uranium	0.0556	mg/L	0.00030	111	70	130	0.1	20	
Vanadium	0.0510	mg/L	0.10	102	70	130	0	20	
Zinc	0.0507	mg/L	0.010	99	70	130	0.1	20	
Method: E200.8							Batch: C_R105674		
Sample ID: LRB	Method Blank		Run: SUB-C105674				08/11/08 12:08		
Silver	5E-05	mg/L	7E-06						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C105674				08/11/08 12:15		
Silver	0.0197	mg/L	0.0010	98	85	115			
Sample ID: C08080052-001FMS4	Post Digestion Spike		Run: SUB-C105674				08/11/08 19:51		
Silver	0.00469	mg/L	0.010	23	70	130			S
Sample ID: C08080052-001FMSD4	Post Digestion Spike Duplicate		Run: SUB-C105674				08/11/08 20:24		
Silver	0.00310	mg/L	0.010	16	70	130	0	20	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: B_33886		
Sample ID: MB-33886	Method Blank				Run: SUB-B115272		08/05/08 12:37		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-33886	Laboratory Fortified Blank				Run: SUB-B115272		08/05/08 12:39		
Mercury	0.0021	mg/L	0.0010	107	85	115			
Sample ID: B08072977-006CMS	Sample Matrix Spike				Run: SUB-B115272		08/05/08 13:11		
Mercury	0.00230	mg/L	0.0010	115	70	130			
Sample ID: B08072977-006CMSD	Sample Matrix Spike Duplicate				Run: SUB-B115272		08/05/08 13:13		
Mercury	0.00223	mg/L	0.0010	112	70	130	3.1	30	
Method: E245.1							Analytical Run: SUB-B115272		
Sample ID: QCS	Initial Calibration Verification Standard						08/05/08 12:29		
Mercury	0.0018	mg/L	0.0010	92	90	110			
Method: E300.0							Batch: R36547		
Sample ID: LFB0807304819-1	Laboratory Fortified Blank				Run: DIONEX_080730A		07/30/08 11:36		
Chloride	6.29	mg/L	0.50	126	90	110			S
Fluoride	2.02	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.42	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	2.52	mg/L	0.10	101	90	110			
Sulfate	16.9	mg/L	1.0	113	90	110			S
Sample ID: LFB0807304819-4	Laboratory Fortified Blank				Run: DIONEX_080730A		07/30/08 12:25		
Chloride	4.91	mg/L	0.50	98	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.42	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	2.54	mg/L	0.10	102	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: R08070444-009AMS	Sample Matrix Spike				Run: DIONEX_080730A		07/30/08 19:32		
Chloride	83.7	mg/L	1.1	92	80	120			
Fluoride	20.5	mg/L	0.11	98	80	120			
Nitrogen, Nitrate as N	25.2	mg/L	0.25	93	80	120			
Nitrogen, Nitrite as N	25.5	mg/L	0.58	102	80	120			
Sulfate	382	mg/L	1.0	84	80	120			
Sample ID: R08070444-009AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_080730A		07/30/08 19:48		
Chloride	85.0	mg/L	1.1	94	80	120	1.5	10	
Fluoride	20.4	mg/L	0.11	98	80	120	0.3	10	
Nitrogen, Nitrate as N	25.1	mg/L	0.25	92	80	120	0.5	10	
Nitrogen, Nitrite as N	25.4	mg/L	0.58	102	80	120	0.5	10	
Sulfate	392	mg/L	1.0	90	80	120	2.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0511		
Sample ID: MB-GrAB-0511	Method Blank					Run: SUB-C107112		09/05/08 11:49	
Gross Alpha	-0.2	pCi/L							U
Gross Beta	-2	pCi/L							
Sample ID: UNAT-GrAB-0511	Laboratory Control Sample					Run: SUB-C107112		09/05/08 11:50	
Gross Alpha	130	pCi/L		92	70	130			
Sample ID: C08080307-002FMS	Sample Matrix Spike					Run: SUB-C107112		09/05/08 11:49	
Gross Alpha	165	pCi/L		117	70	130			
Sample ID: C08080307-002FMSD	Sample Matrix Spike Duplicate					Run: SUB-C107112		09/05/08 11:50	
Gross Alpha	147	pCi/L		104	70	130	11	16.5	
Sample ID: Cs137-GrAB-0511	Laboratory Control Sample					Run: SUB-C107112		09/05/08 11:49	
Gross Beta	82	pCi/L		90	70	130			
Sample ID: C08080307-002FMS	Sample Matrix Spike					Run: SUB-C107112		09/05/08 11:50	
Gross Beta	87.6	pCi/L		92	70	130			
Sample ID: C08080307-002FMSD	Sample Matrix Spike Duplicate					Run: SUB-C107112		09/05/08 11:50	
Gross Beta	86.6	pCi/L		91	70	130	1.2	16	
Method: E901.1							Batch: C_R105938		
Sample ID: LCS-R105938	Laboratory Control Sample					Run: SUB-C105938		08/08/08 07:23	
Cesium 137	39300	pCi/L	20	102	70	130			
Cobalt 60	38200	pCi/L	20	95	70	130			
Sample ID: MB-R105938	Method Blank					Run: SUB-C105938		08/08/08 07:23	
Gross Gamma	ND	pCi/L							
Sample ID: R08070471-001H	Sample Duplicate					Run: SUB-C105938		08/08/08 07:23	
Gross Gamma	1100	pCi/L	20				11	30	
Method: E903.0							Batch: C_19385		
Sample ID: C08071321-001FMS	Sample Matrix Spike					Run: SUB-C106299		08/18/08 16:03	
Radium 226	47	pCi/L		120	70	130			
Sample ID: C08071321-001FMSD	Sample Matrix Spike Duplicate					Run: SUB-C106299		08/18/08 17:41	
Radium 226	40	pCi/L		103	70	130	16	25.8	
Sample ID: MB-19385	Method Blank					Run: SUB-C106299		08/18/08 17:41	
Radium 226	-2	pCi/L							U
Sample ID: LCS-19385	Laboratory Control Sample					Run: SUB-C106299		08/18/08 17:41	
Radium 226	96	pCi/L		124	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-3016		
<b>Sample ID: MB-RA226-3016</b>	Method Blank					Run: SUB-C106616			08/27/08 17:58
Radium 226	-0.2	pCi/L							U
<b>Sample ID: LCS-RA226-3016</b>	Laboratory Control Sample					Run: SUB-C106616			08/27/08 17:58
Radium 226	8.5	pCi/L		110	70	130			
<b>Sample ID: C08071259-001DMS</b>	Sample Matrix Spike					Run: SUB-C106616			08/15/08 14:15
Radium 226	19	pCi/L		114	70	130			
<b>Sample ID: C08071259-001DMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C106616			08/15/08 14:15
Radium 226	18	pCi/L		109	70	130	4.8	30	
<b>Method: E907.0</b>							Batch: C_19385		
<b>Sample ID: C08071095-003FMS</b>	Sample Matrix Spike					Run: SUB-C106951			08/22/08 10:00
Thorium 230	24.9	pCi/L	0.20	100	70	130			
<b>Sample ID: C08071095-003FMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C106951			08/22/08 10:00
Thorium 230	23.1	pCi/L	0.20	94	70	130	7.5	30	
<b>Sample ID: LCS-19385</b>	Laboratory Control Sample					Run: SUB-C106951			08/22/08 10:00
Thorium 230	50.0	pCi/Filter	0.20	102	70	130			
<b>Sample ID: MB-19385</b>	Method Blank					Run: SUB-C106951			08/22/08 10:00
Thorium 230	0.4	pCi/L							U
<b>Method: E907.0</b>							Batch: C_R106719		
<b>Sample ID: LCS-R106719</b>	Laboratory Control Sample					Run: SUB-C106719			08/20/08 16:00
Thorium 230	6.10	pCi/L	0.20	102	70	130			
<b>Sample ID: C08071230-006CMS</b>	Sample Matrix Spike					Run: SUB-C106719			08/20/08 16:00
Thorium 230	17.4	pCi/L	0.20	107	70	130			
<b>Sample ID: C08071230-006CMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C106719			08/20/08 16:00
Thorium 230	12.7	pCi/L	0.20	79	70	130	31	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
<b>Sample ID: MB-R106719</b>	Method Blank					Run: SUB-C106719			08/20/08 16:00
Thorium 230	ND	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 10/03/08  
Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_19385		
Sample ID: C08071095-005FMS	Sample Matrix Spike				Run: SUB-C106789			08/21/08 10:15	
Lead 210	950	pCi/L		81	70	130			
Sample ID: C08071095-005FMSD	Sample Matrix Spike Duplicate				Run: SUB-C106789			08/21/08 10:15	
Lead 210	1200	pCi/L		103	70	130	23	30	
Sample ID: MB-R106789	Method Blank				Run: SUB-C106789			08/21/08 10:15	
Lead 210	-4	pCi/L							U
Sample ID: LCS-R106789	Laboratory Control Sample				Run: SUB-C106789			08/21/08 10:15	
Lead 210	110	pCi/L		101	70	130			
Method: E909.0M							Batch: C_R107244		
Sample ID: C08080052-002AMS	Sample Matrix Spike				Run: SUB-C107244			08/28/08 09:57	
Lead 210	580	pCi/L		100	70	130			
Sample ID: C08080052-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C107244			08/28/08 09:57	
Lead 210	780	pCi/L		134	70	130	29	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: C08080052-003ADUP	Sample Duplicate				Run: SUB-C107244			08/28/08 09:57	
Lead 210	-6.0	pCi/L					180	30	UR
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
Sample ID: MB-R107244	Method Blank				Run: SUB-C107244			08/28/08 09:57	
Lead 210	-8	pCi/L							U
Sample ID: LCS-R107244	Laboratory Control Sample				Run: SUB-C107244			08/28/08 09:57	
Lead 210	110	pCi/L		104	70	130			
Method: RMO-3008							Batch: C_R106673		
Sample ID: C08071095-001EMS	Sample Matrix Spike				Run: SUB-C106673			08/21/08 17:30	
Polonium 210	53	pCi/L	1.0	93	70	130			
Sample ID: C08071095-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C106673			08/21/08 17:30	
Polonium 210	47	pCi/L	1.0	83	70	130	12	30	
Sample ID: LCS-R106673	Laboratory Control Sample				Run: SUB-C106673			08/21/08 17:30	
Polonium 210	43	pCi/L	1.0	77	70	130			
Sample ID: MB-R106673	Method Blank				Run: SUB-C106673			08/21/08 17:30	
Polonium 210	0.4	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 10/03/08

Work Order: R08070471

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R107327		
Sample ID: C08080030-003FMS	Sample Matrix Spike				Run: SUB-C107327		09/03/08 17:30		
Polonium 210	21	pCi/L	1.0	92	70	130			
Sample ID: C08080030-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C107327		09/03/08 17:30		
Polonium 210	24	pCi/L	1.0	108	70	130	14	30	
Sample ID: LCS-19385	Laboratory Control Sample				Run: SUB-C107327		09/03/08 17:30		
Polonium 210	100	pCi/L	1.0	126	70	130			
Sample ID: MB-19385	Method Blank				Run: SUB-C107327		09/03/08 17:30		
Polonium 210	-0.4	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESER</b>		Project Name, PWS, Permit, Etc. <b>Bureau of D8</b>		Sample Origin State: <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/>	EPA/State Compliance: <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Corey Foreman</b> Phone/Fax: <b>605-672-1225</b>		Email: <b>corey@energylab.com</b>	Sampler: (Please Print) <b>Eric Krantz</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/>			Number of Containers: <b>1</b> Sample Type: <b>A W S V B O</b> Air Water Soils/Solids Vegetation Bioassay Other		
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	
1 <b>Dew Burd SW1688</b>		7/29/08	15:45	W	
2					
3					
4					
5					
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Relinquished by (print): <b>Eric Krantz</b> Date/Time: <b>7/29/08 08:45</b> Signature: <b>[Signature]</b>	Relinquished by (print): <b>Steve Hainland</b> Date/Time: <b>7-29-08 8:45</b> Signature: <b>[Signature]</b>	Received by Laboratory: <b>[Signature]</b> Date/Time: <b>[Signature]</b>	Signature: <b>[Signature]</b>
Sample Disposal: <b>Return to Client:</b>		Lab Disposal:		Received by Laboratory: <b>[Signature]</b> Date/Time: <b>[Signature]</b>	

ANALYSIS REQUESTED

SEE ATTACHED  
Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for changes and scheduling - See Instruction Page

Comments:

Shipped by: **2.2°C**

Cooler Dry:

On Ice: **Yes** ☒ **No** ☐

Custody Seal: **Y** ☐ **N** ☐

Intact: **Y** ☐ **N** ☐

Signature: **Y** ☐ **N** ☐

Match: **Y** ☐ **N** ☐

LABORATORY USE ONLY

605070471-001

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

November 14, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08080301 Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 5 samples for RESPEC Inc on 8/20/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08080301-001	DewBurd GW3026	08/19/08 16:25	08/20/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08080301-002	DewBurd GW3026	08/19/08 16:35	08/20/08	Aqueous	Same As Above
R08080301-003	DewBurd GW698	08/19/08 17:35	08/20/08	Aqueous	Same As Above
R08080301-004	DewBurd GW681	08/19/08 19:08	08/20/08	Aqueous	Same As Above
R08080301-005	DewBurd GW689	08/19/08 19:18	08/20/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: \_\_\_\_\_

Linda Larson  
Rapid City - Project Manager



**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08080301

**Date:** 14-Nov-08

## **CASE NARRATIVE**

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### **BRANCH LABORATORY IDENTIFIERS**

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08081029

### **ANALYTICAL COMMENTS**

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08081029



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-001  
Client Sample ID: DewBurd GW3026

Report Date: 11/14/08  
Collection Date: 08/19/08 16:25  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	208	mg/L		5		1	A2320 B	08/21/08 11:43/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 11:43/mb
Bicarbonate as HCO <sub>3</sub>	254	mg/L		5		1	A2320 B	08/21/08 11:43/mb
Calcium	499	mg/L		0.5		2	E200.7	09/02/08 17:29/eli-c
Chloride	15	mg/L		1		1	E300.0	08/21/08 23:06/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/21/08 23:06/jmh
Magnesium	152	mg/L		0.5		2	E200.7	09/02/08 17:29/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 17:48/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/21/08 23:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/21/08 23:06/jmh
Potassium	21.9	mg/L		0.5		2	E200.7	09/02/08 17:29/eli-c
Silica	2.2	mg/L		0.5		2	E200.7	09/02/08 17:29/eli-c
Sodium	172	mg/L	D	2		2	E200.7	09/02/08 17:29/eli-c
Sulfate	1870	mg/L	D	3		50	E300.0	08/21/08 22:49/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3480	umhos/cm		5.0		1	A2510 B	08/22/08 11:48/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.07	s.u.		0.01		1	A4500-H B	08/22/08 13:53/tb
Sodium Adsorption Ratio (SAR)	1.7	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	2800	mg/L		5		1	A2540 C	08/25/08 15:53/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:29/eli-c
Arsenic	0.017	mg/L		0.001		1	E200.8	09/03/08 03:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:29/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	09/02/08 17:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 03:19/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:29/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/03/08 03:19/eli-c
Iron	25.4	mg/L		0.03		2	E200.7	09/02/08 17:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 03:19/eli-c
Manganese	1.60	mg/L		0.01		1	E200.8	09/03/08 03:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/03/08 03:19/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:29/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:29/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 03:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/03/08 03:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-001  
Client Sample ID: DewBurd GW3026

Report Date: 11/14/08  
Collection Date: 08/19/08 16:25  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0106	mg/L		0.0003		1	E200.8	09/03/08 03:19/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/03/08 03:19/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	09/02/08 17:29/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 01:11/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:02/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	77.5	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha precision (±)	11.6	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha MDC	10.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta	30.2	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta precision (±)	7.3	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta MDC	11.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Lead 210	2.1	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	9.5	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/20/08 12:26/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	09/20/08 12:26/eli-c
Gross Gamma	840	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-5	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.19	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080301-001  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 11/14/08  
**Collection Date:** 08/19/08 16:25  
**Date Received:** 08/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	836	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	109	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/03/08 03:25/eli-c
Arsenic	0.022	mg/L		0.001		1	E200.8	09/03/08 03:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/03/08 21:47/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/02/08 19:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 03:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:55/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:55/eli-c
Iron	25.8	mg/L		0.03		2	E200.7	09/02/08 19:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 03:25/eli-c
Manganese	1.64	mg/L		0.01		1	E200.8	09/03/08 03:25/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:08/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:55/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:55/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	09/03/08 03:25/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 03:25/eli-c
Strontium	7.2	mg/L		0.1		2	E200.7	09/02/08 19:55/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/03/08 03:25/eli-c
Uranium	0.0105	mg/L		0.0003		1	E200.8	09/03/08 03:25/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	09/02/08 19:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.22	%				1	A1030 E	11/04/08 00:00/jmh
Anions	43.6	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	46.5	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	2860	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	11/04/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-002  
Client Sample ID: DewBurd GW3026

Report Date: 11/14/08  
Collection Date: 08/19/08 16:35  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	206	mg/L		5		1	A2320 B	08/21/08 11:46/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 11:46/mb
Bicarbonate as HCO <sub>3</sub>	251	mg/L		5		1	A2320 B	08/21/08 11:46/mb
Calcium	481	mg/L		0.5		2	E200.7	09/02/08 17:45/eli-c
Chloride	15	mg/L		1		1	E300.0	08/22/08 00:12/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/22/08 00:12/jmh
Magnesium	147	mg/L		0.5		2	E200.7	09/02/08 17:45/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 17:50/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 00:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 00:12/jmh
Potassium	21.9	mg/L		0.5		2	E200.7	09/02/08 17:45/eli-c
Silica	2.2	mg/L		0.5		2	E200.7	09/02/08 17:45/eli-c
Sodium	172	mg/L	D	2		2	E200.7	09/02/08 17:45/eli-c
Sulfate	1670	mg/L	D	3		50	E300.0	08/21/08 23:22/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3310	umhos/cm		5.0		1	A2510 B	08/22/08 11:49/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.08	s.u.		0.01		1	A4500-H B	08/22/08 13:56/tb
Sodium Adsorption Ratio (SAR)	1.8	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	2800	mg/L		5		1	A2540 C	08/25/08 15:53/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:45/eli-c
Arsenic	0.014	mg/L		0.001		1	E200.8	09/03/08 03:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:45/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	09/02/08 17:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 03:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:45/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/03/08 03:59/eli-c
Iron	22.7	mg/L		0.03		2	E200.7	09/02/08 17:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 03:59/eli-c
Manganese	1.59	mg/L		0.01		1	E200.8	09/03/08 03:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/03/08 03:59/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:45/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:45/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 03:59/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/03/08 03:59/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-002  
Client Sample ID: DewBurd GW3026

Report Date: 11/14/08  
Collection Date: 08/19/08 16:35  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0111	mg/L		0.0003		1	E200.8	09/03/08 03:59/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/03/08 03:59/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	09/02/08 17:45/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 01:15/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:04/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	79.0	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha precision (±)	11.6	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha MDC	10.2	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta	30.1	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta precision (±)	7.3	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta MDC	11.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Lead 210	1.9	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	8.7	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/20/08 12:26/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/20/08 12:26/eli-c
Gross Gamma	900	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-9	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.19	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-002  
Client Sample ID: DewBurd GW3026

Report Date: 11/14/08  
Collection Date: 08/19/08 16:35  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	800	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	108	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/03/08 04:06/eli-c
Arsenic	0.021	mg/L		0.001		1	E200.8	09/03/08 04:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:59/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/03/08 21:54/eli-c
Boron	0.2	mg/L		0.1		1	E200.8	09/03/08 21:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 04:06/eli-c
Chromium	0.42	mg/L		0.05		2	E200.7	09/02/08 19:59/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:59/eli-c
Iron	29.1	mg/L		0.03		2	E200.7	09/02/08 19:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 04:06/eli-c
Manganese	1.58	mg/L		0.01		2	E200.7	09/02/08 19:59/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:18/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:59/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:59/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	09/03/08 04:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 04:06/eli-c
Strontium	7.1	mg/L		0.1		2	E200.7	09/02/08 19:59/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/03/08 04:06/eli-c
Uranium	0.0112	mg/L		0.0003		1	E200.8	09/03/08 04:06/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	09/02/08 19:59/eli-c
DATA QUALITY								
A/C Balance (± 5)	6.76	%				1	A1030 E	11/04/08 00:00/jmh
Anions	39.4	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	45.1	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	2640	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080301-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 11/14/08  
**Collection Date:** 08/19/08 17:35  
**Date Received:** 08/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	122	mg/L		5		1	A2320 B	08/21/08 11:48/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 11:48/mb
Bicarbonate as HCO <sub>3</sub>	149	mg/L		5		1	A2320 B	08/21/08 11:48/mb
Calcium	385	mg/L		0.5		2	E200.7	09/02/08 17:57/eli-c
Chloride	10	mg/L		1		1	E300.0	08/22/08 01:17/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/22/08 01:17/jmh
Magnesium	139	mg/L		0.5		2	E200.7	09/02/08 17:57/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 17:51/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 01:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 01:17/jmh
Potassium	16.0	mg/L		0.5		2	E200.7	09/02/08 17:57/eli-c
Silica	5.0	mg/L		0.5		2	E200.7	09/02/08 17:57/eli-c
Sodium	89	mg/L	D	2		2	E200.7	09/02/08 17:57/eli-c
Sulfate	1290	mg/L	D	3		50	E300.0	08/22/08 00:28/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2840	umhos/cm		5.0		1	A2510 B	08/22/08 11:50/tb
Oxidation-Reduction Potential	44	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.27	s.u.		0.01		1	A4500-H B	08/22/08 13:58/tb
Sodium Adsorption Ratio (SAR)	0.99	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	08/25/08 15:54/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:57/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/03/08 04:13/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:57/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 04:13/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/03/08 04:13/eli-c
Iron	4.36	mg/L		0.03		2	E200.7	09/02/08 17:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 04:13/eli-c
Manganese	2.55	mg/L		0.01		2	E200.7	09/02/08 17:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/03/08 04:13/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:57/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:57/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 04:13/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/03/08 04:13/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-003  
Client Sample ID: DewBurd GW698

Report Date: 11/14/08  
Collection Date: 08/19/08 17:35  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.113	mg/L		0.0003		1	E200.8	09/03/08 04:13/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/03/08 04:13/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 17:57/eli-c
METALS - SUSPENDED								
Uranium	0.0023	mg/L		0.0003		1	E200.8	09/11/08 01:20/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:06/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1560	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha precision (±)	39.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha MDC	8.0	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta	488	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta precision (±)	11.6	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Lead 210	3.1	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	372	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Radium 226 precision (±)	4.1	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/20/08 12:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/20/08 12:26/eli-c
Gross Gamma	1300	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.1	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.48	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	1.7	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-003  
Client Sample ID: DewBurd GW698

Report Date: 11/14/08  
Collection Date: 08/19/08 17:35  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.5	pCi/L		0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	38200	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	342	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	09/04/08 00:10/eli-c
Arsenic	ND	mg/L	D	0.004		1	E200.8	10/18/08 14:53/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/03/08 03:30/eli-c
Beryllium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/03/08 03:30/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	09/04/08 00:10/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/03/08 03:30/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/03/08 03:30/eli-c
Iron	4.78	mg/L		0.03		2	E200.7	09/03/08 03:30/eli-c
Lead	ND	mg/L		0.001		10	E200.8	09/04/08 00:10/eli-c
Manganese	2.54	mg/L		0.01		2	E200.7	09/03/08 03:30/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:20/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/03/08 03:30/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/03/08 03:30/eli-c
Selenium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:10/eli-c
Silver	ND	mg/L	D	0.02		10	E200.8	09/04/08 00:10/eli-c
Strontium	4.6	mg/L		0.1		2	E200.7	09/03/08 03:30/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	09/04/08 00:10/eli-c
Uranium	0.101	mg/L	D	0.0005		10	E200.8	09/04/08 00:10/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/03/08 03:30/eli-c
DATA QUALITY								
A/C Balance (± 5)	8.93	%				1	A1030 E	11/04/08 00:00/jmh
Anions	29.5	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	35.3	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	2010	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.13					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
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MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-004  
Client Sample ID: DewBurd GW681

Report Date: 11/14/08  
Collection Date: 08/19/08 19:08  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	172	mg/L		5		1	A2320 B	08/21/08 11:51/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 11:51/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	08/21/08 11:51/mb
Calcium	66.5	mg/L		0.5		2	E200.7	09/02/08 18:06/eli-c
Chloride	16	mg/L		1		1	E300.0	08/22/08 01:50/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	08/22/08 01:50/jmh
Magnesium	24.7	mg/L		0.5		2	E200.7	09/02/08 18:06/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/21/08 17:54/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 01:50/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 01:50/jmh
Potassium	9.8	mg/L		0.5		2	E200.7	09/02/08 18:06/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	09/02/08 18:06/eli-c
Sodium	222	mg/L	D	2		2	E200.7	09/02/08 18:06/eli-c
Sulfate	489	mg/L	D	3		50	E300.0	08/22/08 01:34/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1450	umhos/cm		5.0		1	A2510 B	08/22/08 11:52/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.01	s.u.		0.01		1	A4500-H B	08/22/08 14:00/tb
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	08/25/08 15:54/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 18:06/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	09/03/08 04:20/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 18:06/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 18:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 04:20/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 18:06/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/03/08 04:20/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 18:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 04:20/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	09/02/08 18:06/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/03/08 04:20/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 18:06/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 18:06/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 04:20/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/03/08 04:20/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080301-004  
**Client Sample ID:** DewBurd GW681

**Report Date:** 11/14/08  
**Collection Date:** 08/19/08 19:08  
**Date Received:** 08/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0100	mg/L		0.0003		1	E200.8	09/03/08 04:20/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/03/08 04:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/26/08 06:43/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 01:24/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:08/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1430	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha precision (±)	25.9	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta	423	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta precision (±)	7.2	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta MDC	4.7	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Lead 210	32.2	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.8	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	3.7	pCi/L		1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	1.9	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	362	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Radium 226 precision (±)	4.2	pCi/L				1	E903.0	09/15/08 16:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/20/08 12:26/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	09/20/08 12:26/eli-c
Gross Gamma	2800	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	310	pCi/L				1	E901.1	08/29/08 12:32/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-1	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	0.8	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	09/17/08 17:18/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-004  
Client Sample ID: DewBurd GW681

Report Date: 11/14/08  
Collection Date: 08/19/08 19:08  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	318000	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	944	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/03/08 04:26/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	09/03/08 04:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 20:03/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/03/08 22:01/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 20:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/03/08 04:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 20:03/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 20:03/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	09/02/08 20:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 04:26/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	09/02/08 20:03/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:23/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 20:03/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 20:03/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/03/08 04:26/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 04:26/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	09/02/08 20:03/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/03/08 04:26/eli-c
Uranium	0.0037	mg/L		0.0003		1	E200.8	09/03/08 04:26/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 20:03/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.01	%				1	A1030 E	11/04/08 00:00/jmh
Anions	14.1	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	15.3	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	942	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080301-005  
**Client Sample ID:** DewBurd GW689

**Report Date:** 11/14/08  
**Collection Date:** 08/19/08 19:18  
**Date Received:** 08/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	148	mg/L		5		1	A2320 B	08/21/08 11:54/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 11:54/mb
Bicarbonate as HCO <sub>3</sub>	180	mg/L		5		1	A2320 B	08/21/08 11:54/mb
Calcium	48.8	mg/L		0.5		2	E200.7	09/02/08 18:10/eli-c
Chloride	5	mg/L		1		1	E300.0	08/22/08 02:23/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/22/08 02:23/jmh
Magnesium	16.2	mg/L		0.5		2	E200.7	09/02/08 18:10/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 17:58/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 02:23/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 02:23/jmh
Potassium	7.9	mg/L		0.5		2	E200.7	09/02/08 18:10/eli-c
Silica	4.3	mg/L		0.5		2	E200.7	09/02/08 18:10/eli-c
Sodium	185	mg/L	D	2		2	E200.7	09/02/08 18:10/eli-c
Sulfate	399	mg/L	D	3		50	E300.0	08/22/08 02:06/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1270	umhos/cm		5.0		1	A2510 B	08/22/08 11:53/tb
Oxidation-Reduction Potential	170	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.96	s.u.		0.01		1	A4500-H B	08/22/08 14:00/tb
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	710	mg/L		5		1	A2540 C	08/25/08 15:55/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 18:10/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/03/08 04:33/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 18:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 18:10/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/02/08 18:10/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 18:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/03/08 04:33/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 18:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/03/08 04:33/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	09/02/08 18:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/03/08 04:33/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 18:10/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 18:10/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/03/08 04:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/03/08 04:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080301-005  
Client Sample ID: DewBurd GW689

Report Date: 11/14/08  
Collection Date: 08/19/08 19:18  
Date Received: 08/20/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0034	mg/L		0.0003		1	E200.8	09/03/08 04:33/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/03/08 04:33/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 18:10/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 01:28/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:10/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	36.4	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta	13.3	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Gross Beta MDC	3.2	pCi/L				1	E900.0	09/25/08 14:09/eli-c
Lead 210	2.1	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	4.4	pCi/L				1	E903.0	09/15/08 18:05/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	09/15/08 18:05/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	09/20/08 12:26/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	09/20/08 12:26/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-9	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.4	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.19	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080301-005  
**Client Sample ID:** DewBurd GW689

**Report Date:** 11/14/08  
**Collection Date:** 08/19/08 19:18  
**Date Received:** 08/20/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	2520	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	127	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	09/04/08 00:17/eli-c
Arsenic	ND	mg/L	D	0.004		1	E200.8	10/18/08 15:20/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/03/08 03:34/eli-c
Beryllium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/03/08 03:34/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	09/04/08 00:17/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/03/08 03:34/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/03/08 03:34/eli-c
Iron	0.73	mg/L		0.03		2	E200.7	09/03/08 03:34/eli-c
Lead	0.002	mg/L		0.001		10	E200.8	09/04/08 00:17/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	09/03/08 03:34/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:25/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/03/08 03:34/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/03/08 03:34/eli-c
Selenium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:17/eli-c
Silver	ND	mg/L	D	0.02		10	E200.8	09/04/08 00:17/eli-c
Strontium	0.9	mg/L		0.1		2	E200.7	09/03/08 03:34/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	09/04/08 00:17/eli-c
Uranium	0.0034	mg/L	D	0.0005		10	E200.8	09/04/08 00:17/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/03/08 03:34/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.54	%				1	A1030 E	11/04/08 00:00/jmh
Anions	11.4	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	12.0	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	764	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	11/04/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080820A-ALK-SEL-W		
Sample ID: LCS1_080820A	Laboratory Control Sample				Run: PH_COND1-R_080821A			08/20/08 11:41	
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_080820A	Method Blank				Run: PH_COND1-R_080821A			08/20/08 11:52	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08080296-001AMS	Sample Matrix Spike				Run: PH_COND1-R_080821A			08/21/08 11:27	
Alkalinity, Total as CaCO <sub>3</sub>	274	mg/L	5.0	108	80	120			
Sample ID: R08080296-001AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080821A			08/21/08 11:31	
Alkalinity, Total as CaCO <sub>3</sub>	264	mg/L	5.0	98	80	120	3.7	10	
Method: A2510 B							Batch: 080822_1_COND-PROBE-W		
Sample ID: LCS_COND-1_080822	Laboratory Control Sample				Run: BAL-7-R_080822A			08/22/08 11:38	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080822	Laboratory Control Sample				Run: BAL-7-R_080822A			08/22/08 11:40	
Conductivity @ 25 C	162	umhos/cm	5.0	108	90	110			
Sample ID: LCS2-1_080822	Laboratory Control Sample				Run: BAL-7-R_080822A			08/22/08 11:41	
Conductivity @ 25 C	5010	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080822	Method Blank				Run: BAL-7-R_080822A			08/22/08 11:42	
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C							Batch: 080825A-SLDS-TDS-W		
Sample ID: LCS1_080825A	Laboratory Control Sample				Run: BAL-4-R_080825B			08/25/08 15:44	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080825A	Method Blank				Run: BAL-4-R_080825B			08/25/08 15:46	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08080295-010AMS	Sample Matrix Spike				Run: BAL-4-R_080825B			08/25/08 15:52	
Solids, Total Dissolved TDS @ 180 C	420	mg/L	5.0	106	80	120			
Sample ID: R08080295-010AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080825B			08/25/08 15:52	
Solids, Total Dissolved TDS @ 180 C	410	mg/L	5.0	104	80	120	1	10	
Sample ID: R08080322-004AMS	Sample Matrix Spike				Run: BAL-4-R_080825B			08/25/08 15:57	
Solids, Total Dissolved TDS @ 180 C	590	mg/L	5.0	83	80	120			
Sample ID: R08080322-004AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080825B			08/25/08 15:58	
Solids, Total Dissolved TDS @ 180 C	590	mg/L	5.0	82	80	120	0.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080825-ORP-ISE-VV		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080825A		08/25/08 00:00		
Oxidation-Reduction Potential	470	mV		98	95	105			
Sample ID: R08080301-005F	Sample Duplicate				Run: PH_COND1-R_080825A		08/25/08 00:00		
Oxidation-Reduction Potential	170	mV					3.4	10	
Method: A3114 B							Batch: C_SE3114-080901A		
Sample ID: MBLK	Method Blank				Run: SUB-C106784		09/01/08 11:25		
Selenium	0.0008	mg/L	6E-05						
Sample ID: C08081048-003AMS	Sample Matrix Spike				Run: SUB-C106784		09/01/08 11:46		
Selenium	0.071	mg/L	0.0010	81	85	115			S
Sample ID: C08081048-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C106784		09/01/08 11:48		
Selenium	0.073	mg/L	0.0010	86	85	115	3.5	15	
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C106784		09/01/08 11:50		
Selenium	0.050	mg/L	0.0010	99	90	110			
Sample ID: R08080332-009E	Sample Matrix Spike				Run: SUB-C106784		09/01/08 12:17		
Selenium	0.042	mg/L	0.0010	84	85	115			S
Sample ID: R08080332-009E	Sample Matrix Spike Duplicate				Run: SUB-C106784		09/01/08 12:19		
Selenium	0.044	mg/L	0.0010	88	85	115	4.5	15	
Method: A3114 B							Batch: C_SEIV3114-080831A		
Sample ID: MBLK	Method Blank				Run: SUB-C106776		08/31/08 15:53		
Selenium-IV	0.0005	mg/L	6E-05						
Sample ID: C08081048-003AMS	Sample Matrix Spike				Run: SUB-C106776		08/31/08 16:12		
Selenium-IV	0.052	mg/L	0.0010	87	85	115			
Sample ID: C08081048-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C106776		08/31/08 16:20		
Selenium-IV	0.056	mg/L	0.0010	96	85	115	7.7	10	
Sample ID: 288-92-2	Laboratory Control Sample				Run: SUB-C106776		08/31/08 16:22		
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Sample ID: R08080332-009E	Sample Matrix Spike				Run: SUB-C106776		08/31/08 16:49		
Selenium-IV	0.045	mg/L	0.0010	89	85	115			
Sample ID: R08080332-009E	Sample Matrix Spike Duplicate				Run: SUB-C106776		08/31/08 16:52		
Selenium-IV	0.046	mg/L	0.0010	92	85	115	2.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080822_1_PH-W		
Sample ID: LCS_pH-1_080822	Laboratory Control Sample				Run: BAL-7-R_080822B			08/22/08 13:46	
pH	6.87	s.u.	0.010	100	98.55	101.45			
Method: A4500-NH3 G							Batch: A2008-08-21_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080821A			08/21/08 14:35	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080821A			08/21/08 14:36	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080821A			08/21/08 14:37	
Nitrogen, Ammonia as N	0.25	mg/L	0.10	101	90	110			
Sample ID: R08080295-008CMS	Sample Matrix Spike				Run: TECHAA2-R_080821A			08/21/08 17:41	
Nitrogen, Ammonia as N	0.22	mg/L	0.10	87	80	120			
Sample ID: R08080295-008CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080821A			08/21/08 17:43	
Nitrogen, Ammonia as N	0.20	mg/L	0.10	81	80	120	7.2	10	
Sample ID: R08080301-004BMS	Sample Matrix Spike				Run: TECHAA2-R_080821A			08/21/08 17:55	
Nitrogen, Ammonia as N	0.29	mg/L	0.10	83	80	120			
Sample ID: R08080301-004BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080821A			08/21/08 17:57	
Nitrogen, Ammonia as N	0.31	mg/L	0.10	90	80	120	5.7	10	
Method: D5072-92							Batch: C_R106600		
Sample ID: R08080301-005G	Sample Duplicate				Run: SUB-C106600			08/25/08 17:46	
Radon 222	2410	pCi/L	100				4.2	30	
Sample ID: MB-R106600	Method Blank				Run: SUB-C106600			08/25/08 17:46	
Radon 222	40	pCi/L							U
Sample ID: LCS-R106600	Laboratory Control Sample				Run: SUB-C106600			08/25/08 17:46	
Radon 222	300	pCi/L	100	85	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 11/14/08

Project: Edgemont

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_19595		
<b>Sample ID: MB-19595</b>	Method Blank		Run: SUB-C106856				09/03/08 02:17		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	ND	mg/L	0.001						
<b>Sample ID: LCS3-19595</b>	Laboratory Control Sample		Run: SUB-C106856				09/03/08 02:21		
Barium	0.509	mg/L	0.10	102	85	115			
Boron	0.520	mg/L	0.10	104	85	115			
Chromium	0.520	mg/L	0.050	104	85	115			
Copper	0.518	mg/L	0.010	104	85	115			
Iron	2.75	mg/L	0.030	110	85	115			
Manganese	2.58	mg/L	0.010	103	85	115			
Molybdenum	0.508	mg/L	0.10	102	85	115			
Nickel	0.523	mg/L	0.050	105	85	115			
Strontium	0.487	mg/L	0.10	97	85	115			
Zinc	0.522	mg/L	0.010	104	85	115			
<b>Sample ID: C08080990-003CMS3</b>	Sample Matrix Spike		Run: SUB-C106856				09/03/08 02:41		
Barium	0.678	mg/L	0.10	100	70	130			
Boron	0.608	mg/L	0.10	105	70	130			
Chromium	0.524	mg/L	0.050	105	70	130			
Copper	0.522	mg/L	0.010	104	70	130			
Iron	4.25	mg/L	0.030	83	70	130			
Manganese	2.61	mg/L	0.010	102	70	130			
Molybdenum	0.520	mg/L	0.10	104	70	130			
Nickel	0.520	mg/L	0.050	104	70	130			
Strontium	0.968	mg/L	0.10	100	70	130			
Zinc	0.531	mg/L	0.010	102	70	130			
<b>Sample ID: C08080990-003CMSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C106856				09/03/08 02:45		
Barium	0.702	mg/L	0.10	105	70	130	3.5	20	
Boron	0.625	mg/L	0.10	108	70	130	2.8	20	
Chromium	0.531	mg/L	0.050	106	70	130	1.3	20	
Copper	0.530	mg/L	0.010	106	70	130	1.5	20	
Iron	4.47	mg/L	0.030	92	70	130	5.2	20	
Manganese	2.65	mg/L	0.010	104	70	130	1.6	20	
Molybdenum	0.532	mg/L	0.10	106	70	130	2.3	20	
Nickel	0.523	mg/L	0.050	105	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19595		
Sample ID: C08080990-003CMSD3		Sample Matrix Spike Duplicate			Run: SUB-C106856			09/03/08 02:45	
Strontium	0.962	mg/L	0.10	98	70	130	0.6	20	
Zinc	0.546	mg/L	0.010	105	70	130	2.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R106856		
Sample ID: MB-080902A	Method Blank			Run: SUB-C106856			09/02/08 14:38		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.008						
Cadmium	ND	mg/L	0.0008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Copper	ND	mg/L	0.005						
Iron	0.005	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080902A	Laboratory Fortified Blank			Run: SUB-C106856			09/02/08 14:42		
Silica	0.38	mg/L	0.10	96	85	125			
Aluminum	1.00	mg/L	0.10	100	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	0.96	mg/L	0.10	96	85	125			
Cadmium	1.0	mg/L	0.010	101	85	125			
Calcium	54	mg/L	0.50	107	85	125			
Chromium	1.0	mg/L	0.050	103	85	125			
Copper	1.0	mg/L	0.010	103	85	125			
Iron	1.1	mg/L	0.030	106	85	125			
Magnesium	53	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.00	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	102	85	125			
Potassium	45	mg/L	0.50	91	85	125			
Sodium	50	mg/L	0.77	100	85	125			
Strontium	1.0	mg/L	0.10	102	85	125			
Zinc	1.0	mg/L	0.010	103	85	125			
Sample ID: C08081029-002CMS2	Sample Matrix Spike			Run: SUB-C106856			09/02/08 17:49		
Aluminum	2.06	mg/L	0.10	102	70	130			
Barium	2.10	mg/L	0.10	104	70	130			
Boron	2.27	mg/L	0.10	105	70	130			
Cadmium	2.09	mg/L	0.010	104	70	130			
Chromium	2.11	mg/L	0.050	106	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R106856		
Sample ID: C08081029-002CMS2	Sample Matrix Spike		Run: SUB-C106856				09/02/08 17:49		
Copper	2.10	mg/L	0.010	105	70	130			
Iron	24.2	mg/L	0.030		70	130			A
Manganese	3.64	mg/L	0.010	101	70	130			
Molybdenum	2.05	mg/L	0.10	102	70	130			
Nickel	2.07	mg/L	0.050	104	70	130			
Strontium	9.22	mg/L	0.10	98	70	130			
Zinc	2.11	mg/L	0.010	105	70	130			
Calcium	580	mg/L	1.0		70	130			A
Magnesium	252	mg/L	1.0	105	70	130			
Potassium	114	mg/L	1.0	93	70	130			
Silica	2.77	mg/L	0.10	67	70	130			S
Sodium	278	mg/L	1.5	106	70	130			
Sample ID: C08081029-002CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C106856				09/02/08 17:53		
Aluminum	2.05	mg/L	0.10	101	70	130	0.7	20	
Barium	2.09	mg/L	0.10	104	70	130	0.4	20	
Boron	2.27	mg/L	0.10	105	70	130	0	20	
Cadmium	2.02	mg/L	0.010	101	70	130	3.1	20	
Chromium	2.10	mg/L	0.050	105	70	130	0.7	20	
Copper	2.08	mg/L	0.010	104	70	130	0.9	20	
Iron	23.6	mg/L	0.030		70	130	2.3	20	A
Manganese	3.57	mg/L	0.010	98	70	130	1.8	20	
Molybdenum	2.07	mg/L	0.10	103	70	130	0.8	20	
Nickel	2.05	mg/L	0.050	102	70	130	1.2	20	
Strontium	9.00	mg/L	0.10	87	70	130	2.4	20	
Zinc	2.11	mg/L	0.010	105	70	130	0	20	
Calcium	569	mg/L	1.0		70	130	2	20	A
Magnesium	247	mg/L	1.0	101	70	130	1.7	20	
Potassium	113	mg/L	1.0	91	70	130	1.1	20	
Silica	2.80	mg/L	0.10	71	70	130	1	20	
Sodium	278	mg/L	1.5	106	70	130	0	20	
Method: E200.7_8							Batch: C_19720		
Sample ID: MB-19720	Method Blank		Run: SUB-C107379				09/10/08 23:44		
Uranium	2E-07	mg/L							
Sample ID: LCS1-19720	Laboratory Control Sample		Run: SUB-C107379				09/10/08 23:48		
Uranium	5.46E-05	mg/L	0.00030	103	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 11/14/08

Project: Edgemont

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19595		
Sample ID: MB-19595	Method Blank		Run: SUB-C106973				09/03/08 22:42		
Antimony	ND	mg/L	0.0003						
Arsenic	0.007	mg/L							
Beryllium	ND	mg/L	0.0003						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0003						
Silver	ND	mg/L	0.002						
Thallium	ND	mg/L	0.0001						
Uranium	ND	mg/L	5E-05						
Sample ID: LCS3-19595	Laboratory Control Sample		Run: SUB-C106973				09/03/08 22:48		
Antimony	0.543	mg/L	0.050	109	85	115			
Arsenic	0.535	mg/L	0.0010	106	85	115			
Beryllium	0.261	mg/L	0.010	104	85	115			
Cadmium	0.273	mg/L	0.010	109	85	115			
Lead	0.509	mg/L	0.050	102	85	115			
Selenium	0.528	mg/L	0.0032	106	85	115			
Silver	0.0495	mg/L	0.016	99	85	115			
Thallium	0.502	mg/L	0.10	100	85	115			
Uranium	0.498	mg/L	0.00048	100	85	115			
Sample ID: C08080990-003CMS3	Sample Matrix Spike		Run: SUB-C106973				09/04/08 00:44		
Antimony	0.521	mg/L	0.050	104	70	130			
Arsenic	0.519	mg/L	0.0010	101	70	130			
Beryllium	0.251	mg/L	0.010	100	70	130			
Cadmium	0.262	mg/L	0.010	105	70	130			
Lead	0.493	mg/L	0.050	98	70	130			
Selenium	0.506	mg/L	0.0032	101	70	130			
Silver	0.0475	mg/L	0.016	95	70	130			
Thallium	0.483	mg/L	0.10	97	70	130			
Uranium	0.486	mg/L	0.00048	96	70	130			
Sample ID: C08080990-003CMSD3	Sample Matrix Spike Duplicate		Run: SUB-C106973				09/04/08 00:51		
Antimony	0.516	mg/L	0.050	103	70	130	0.8	20	
Arsenic	0.552	mg/L	0.0010	108	70	130	6.1	20	
Beryllium	0.251	mg/L	0.010	101	70	130	0.3	20	
Cadmium	0.260	mg/L	0.010	104	70	130	0.9	20	
Lead	0.485	mg/L	0.050	96	70	130	1.7	20	
Selenium	0.553	mg/L	0.0032	111	70	130	8.9	20	
Silver	0.0490	mg/L	0.016	98	70	130	3.1	20	
Thallium	0.485	mg/L	0.10	97	70	130	0.2	20	
Uranium	0.479	mg/L	0.00048	95	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19595		
Sample ID: MB-19595	Method Blank		Run: SUB-C109482			10/18/08 14:16			
Arsenic	0.003	mg/L	5E-05						
Lead	ND	mg/L	5E-05						
Selenium	0.0007	mg/L	0.0002						
Uranium	ND	mg/L	3E-05						
Method: E200.8							Batch: C_19720		
Sample ID: C08081244-005CMS4	Post Digestion Spike		Run: SUB-C107379			09/11/08 02:12			
Uranium	0.0135	mg/L	0.00030	101	70	130			
Sample ID: C08081244-005CMSD4	Post Digestion Spike Duplicate		Run: SUB-C107379			09/11/08 02:16			
Uranium	0.0135	mg/L	0.00030	101	70	130	0.2	20	
Method: E200.8							Batch: C_R106481		
Sample ID: LRB	Method Blank		Run: SUB-C106481			08/25/08 13:26			
Arsenic	ND	mg/L	4E-05						
Zinc	0.0001	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C106481			08/25/08 17:18			
Arsenic	0.0504	mg/L	0.0010	101	85	115			
Zinc	0.0513	mg/L	0.0010	102	85	115			
Sample ID: C08080873-001BMS4	Post Digestion Spike		Run: SUB-C106481			08/26/08 07:31			
Arsenic	0.0421	mg/L	0.0010	84	70	130			
Zinc	0.0581	mg/L	0.010	81	70	130			
Sample ID: C08080873-001BMSD4	Post Digestion Spike Duplicate		Run: SUB-C106481			08/26/08 07:38			
Arsenic	0.0458	mg/L	0.0010	92	70	130	8.4	20	
Zinc	0.0595	mg/L	0.010	84	70	130	2.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R106879		
Sample ID: LRB	Method Blank		Run: SUB-C106879				09/02/08 13:32		
Antimony	ND	mg/L	7E-05						
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	3E-05						
Thallium	ND	mg/L	1E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	3E-05	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C106879				09/02/08 13:39		
Antimony	0.0519	mg/L	0.0010	104	85	115			
Arsenic	0.0504	mg/L	0.0010	101	85	115			
Cadmium	0.0514	mg/L	0.0010	103	85	115			
Copper	0.0526	mg/L	0.0010	105	85	115			
Lead	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00508	mg/L	0.0010	102	85	115			
Selenium	0.0507	mg/L	0.0010	101	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Thallium	0.0510	mg/L	0.0010	102	85	115			
Thorium 232	0.0497	mg/L	0.0010	99	85	115			
Uranium	0.0498	mg/L	0.00030	100	85	115			
Vanadium	0.0504	mg/L	0.0010	101	85	115			
Sample ID: C08080819-001BMS4	Post Digestion Spike		Run: SUB-C106879				09/03/08 01:57		
Antimony	0.0495	mg/L	0.050	99	70	130			
Arsenic	0.0477	mg/L	0.0010	94	70	130			
Cadmium	0.0482	mg/L	0.010	96	70	130			
Copper	0.0487	mg/L	0.010	94	70	130			
Lead	0.0478	mg/L	0.050	95	70	130			
Mercury	0.00482	mg/L	0.0010	96	70	130			
Selenium	0.0480	mg/L	0.0010	96	70	130			
Silver	0.0147	mg/L	0.010	73	70	130			
Thallium	0.0474	mg/L	0.10	95	70	130			
Thorium 232	0.0486	mg/L	0.0010	97	70	130			
Uranium	0.0492	mg/L	0.00030	98	70	130			
Vanadium	0.0469	mg/L	0.10	94	70	130			
Sample ID: C08080819-001BMSD4	Post Digestion Spike Duplicate		Run: SUB-C106879				09/03/08 02:31		
Antimony	0.0534	mg/L	0.050	107	70	130	7.6	20	
Arsenic	0.0514	mg/L	0.0010	102	70	130	7.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R106879		
Sample ID: C08080819-001BMSD4	Post Digestion Spike Duplicate			Run: SUB-C106879				09/03/08 02:31	
Cadmium	0.0513	mg/L	0.010	103	70	130	6.2	20	
Copper	0.0529	mg/L	0.010	102	70	130	8.4	20	
Lead	0.0527	mg/L	0.050	105	70	130	9.7	20	
Mercury	0.00533	mg/L	0.0010	107	70	130	10	20	
Selenium	0.0506	mg/L	0.0010	101	70	130	5.3	20	
Silver	0.0149	mg/L	0.010	74	70	130	1.5	20	
Thallium	0.0521	mg/L	0.10	104	70	130	0	20	
Thorium 232	0.0530	mg/L	0.0010	106	70	130	8.5	20	
Uranium	0.0536	mg/L	0.00030	107	70	130	8.5	20	
Vanadium	0.0507	mg/L	0.10	101	70	130	0	20	
Sample ID: C08080873-001BMS4	Post Digestion Spike			Run: SUB-C106879				09/03/08 02:45	
Antimony	0.0525	mg/L	0.050	105	70	130			
Arsenic	0.0492	mg/L	0.0010	98	70	130			
Cadmium	0.0488	mg/L	0.010	98	70	130			
Copper	0.0594	mg/L	0.010	98	70	130			
Lead	0.0502	mg/L	0.050	100	70	130			
Mercury	0.00504	mg/L	0.0010	101	70	130			
Selenium	0.402	mg/L	0.0010		70	130			A
Silver	0.0114	mg/L	0.010	57	70	130			S
Thallium	0.0495	mg/L	0.10	99	70	130			
Thorium 232	0.0525	mg/L	0.0010	105	70	130			
Uranium	0.260	mg/L	0.00030		70	130			A
Vanadium	0.0480	mg/L	0.10	95	70	130			
Sample ID: C08080873-001BMSD4	Post Digestion Spike Duplicate			Run: SUB-C106879				09/03/08 02:52	
Antimony	0.0509	mg/L	0.050	102	70	130	3.2	20	
Arsenic	0.0476	mg/L	0.0010	95	70	130	3.5	20	
Cadmium	0.0473	mg/L	0.010	94	70	130	3.3	20	
Copper	0.0576	mg/L	0.010	95	70	130	3	20	
Lead	0.0494	mg/L	0.050	99	70	130	0	20	
Mercury	0.00502	mg/L	0.0010	100	70	130	0.4	20	
Selenium	0.401	mg/L	0.0010		70	130	0.3	20	A
Silver	0.0117	mg/L	0.010	59	70	130	3.3	20	S
Thallium	0.0486	mg/L	0.10	97	70	130	0	20	
Thorium 232	0.0521	mg/L	0.0010	104	70	130	0.9	20	
Uranium	0.257	mg/L	0.00030		70	130	1.1	20	A
Vanadium	0.0474	mg/L	0.10	94	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R106973		
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C106973			09/03/08 13:38
Beryllium	ND	mg/L	4E-06						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C106973			09/03/08 13:45
Beryllium	0.0539	mg/L	0.0010	108	85	115			
<b>Sample ID: R08080332-009D</b>	Post Digestion Spike					Run: SUB-C106973			09/04/08 05:22
Beryllium	0.0565	mg/L	0.010	113	70	130			
<b>Sample ID: R08080332-009D</b>	Post Digestion Spike Duplicate					Run: SUB-C106973			09/04/08 05:57
Beryllium	0.0582	mg/L	0.010	116	70	130	2.9	20	
<b>Method: E245.1</b>							Batch: B_34292		
<b>Sample ID: MB-34292</b>	Method Blank					Run: SUB-B116583			08/28/08 07:30
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-34292</b>	Laboratory Fortified Blank					Run: SUB-B116583			08/28/08 07:35
Mercury	0.0019	mg/L	0.0010	94	85	115			
<b>Sample ID: B08082231-001DMS</b>	Sample Matrix Spike					Run: SUB-B116583			08/28/08 08:13
Mercury	0.0020	mg/L	0.0010	100	70	130			
<b>Sample ID: B08082231-001DMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B116583			08/28/08 08:16
Mercury	0.0023	mg/L	0.0010	115	70	130	14	30	
<b>Method: E245.1</b>							Analytical Run: SUB-B116583		
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								08/28/08 07:20
Mercury	0.0020	mg/L	0.0010	98	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R36973		
Sample ID: LFB0808213922-3	Laboratory Fortified Blank			Run: DIONEX_080821A			08/21/08 20:22		
Chloride	4.94	mg/L	0.50	99	90	110			
Fluoride	2.08	mg/L	0.10	104	90	110			
Nitrogen, Nitrate as N	2.46	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.52	mg/L	0.10	101	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: LFB0808213922-4	Laboratory Fortified Blank			Run: DIONEX_080821A			08/21/08 20:38		
Chloride	4.75	mg/L	0.50	95	90	110			
Fluoride	2.00	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.34	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
Sample ID: R08080296-001AMS	Sample Matrix Spike			Run: DIONEX_080821A			08/21/08 21:11		
Chloride	11.5	mg/L	0.50	89	80	120			
Fluoride	2.23	mg/L	0.10	95	80	120			
Nitrogen, Nitrate as N	2.53	mg/L	0.10	95	80	120			
Nitrogen, Nitrite as N	2.51	mg/L	0.10	100	80	120			
Sulfate	63.4	mg/L	1.0	74	80	120			S
Sample ID: R08080296-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080821A			08/21/08 21:27		
Chloride	11.2	mg/L	0.50	85	80	120	1.9	10	
Fluoride	2.14	mg/L	0.10	91	80	120	4.1	10	
Nitrogen, Nitrate as N	2.42	mg/L	0.10	91	80	120	4.4	10	
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	80	120	4.1	10	
Sulfate	62.8	mg/L	1.0	70	80	120	0.9	10	S
Sample ID: R08080301-003AMS	Sample Matrix Spike			Run: DIONEX_080821A			08/22/08 00:44		
Chloride	257	mg/L	5.4	92	80	120			
Fluoride	105	mg/L	0.56	99	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	98	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120			
Sulfate	2070	mg/L	3.4	104	80	120			
Sample ID: R08080301-003AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080821A			08/22/08 01:01		
Chloride	251	mg/L	5.4	90	80	120	2.4	10	
Fluoride	102	mg/L	0.56	97	80	120	2.7	10	
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120	2.6	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120	2.6	10	
Sulfate	2010	mg/L	3.4	97	80	120	2.6	10	
Sample ID: R08080323-001AMS	Sample Matrix Spike			Run: DIONEX_080821A			08/22/08 03:45		
Chloride	10.3	mg/L	0.50	89	80	120			
Fluoride	2.20	mg/L	0.10	94	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R36973		
Sample ID: R08080323-001AMS	Sample Matrix Spike		Run: DIONEX_080821A				08/22/08 03:45		
Nitrogen, Nitrate as N	2.44	mg/L	0.10	92	80	120			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	80	120			
Sulfate	63.8	mg/L	1.0	74	80	120			S
Sample ID: R08080323-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_080821A				08/22/08 04:01		
Chloride	10.3	mg/L	0.50	89	80	120	0.1	10	
Fluoride	2.20	mg/L	0.10	94	80	120	0	10	
Nitrogen, Nitrate as N	2.44	mg/L	0.10	92	80	120	0	10	
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	80	120	0	10	
Sulfate	63.6	mg/L	1.0	72	80	120	0.4	10	S
Method: E900.0							Batch: C_GrAB-0526		
Sample ID: MB-GrAB-0526	Method Blank		Run: SUB-C108200				09/25/08 02:03		
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: UNAT-GrAB-0526	Laboratory Control Sample		Run: SUB-C108200				09/25/08 02:03		
Gross Alpha	140	pCi/L	102		70	130			
Sample ID: R08080332-009H	Sample Matrix Spike		Run: SUB-C108200				09/25/08 02:03		
Gross Alpha	120	pCi/L	90		70	130			
Sample ID: R08080332-009H	Sample Matrix Spike Duplicate		Run: SUB-C108200				09/25/08 02:03		
Gross Alpha	150	pCi/L	110		70	130	20	15.7	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved									
Sample ID: Cs137-GrAB-0526	Laboratory Control Sample		Run: SUB-C108200				09/25/08 02:03		
Gross Beta	93	pCi/L	101		70	130			
Sample ID: R08080332-009H	Sample Matrix Spike		Run: SUB-C108200				09/25/08 14:09		
Gross Beta	73	pCi/L	82		70	130			
Sample ID: R08080332-009H	Sample Matrix Spike Duplicate		Run: SUB-C108200				09/25/08 14:09		
Gross Beta	97	pCi/L	107		70	130	28	16.3	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: R08080301-002H	Sample Duplicate		Run: SUB-C108200				09/25/08 14:09		
Gross Alpha	71	pCi/L					10	40.3	
Gross Beta	16	pCi/L					59	69.5	

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R106893		
Sample ID: R08080332-007H	Sample Duplicate				Run: SUB-C106893			08/29/08 12:32	
Gross Gamma	ND	pCi/L					0	30	U
Sample ID: R08080332-009H	Sample Duplicate				Run: SUB-C106893			08/29/08 12:32	
Gross Gamma	1000	pCi/L					7.9	30	
Sample ID: MB-R106893	Method Blank				Run: SUB-C106893			08/29/08 12:32	
Gross Gamma	ND	pCi/L							U
Sample ID: LCS-R106893	Laboratory Control Sample				Run: SUB-C106893			08/29/08 12:32	
Cesium 137	39000	pCi/L	20	95	70	130			
Cobalt 60	49000	pCi/L	20	99	70	130			
Method: E903.0							Batch: C_19720		
Sample ID: C08080968-001FMS	Sample Matrix Spike				Run: SUB-C107779			09/17/08 15:43	
Radium 226	140	pCi/L		96	70	130			
Sample ID: C08080968-001FMSD	Sample Matrix Spike Duplicate				Run: SUB-C107779			09/17/08 15:43	
Radium 226	150	pCi/L		98	70	130	6.9	25.2	
Sample ID: LCS-19720	Laboratory Control Sample				Run: SUB-C107779			09/17/08 18:56	
Radium 226	74	pCi/L		96	70	130			
Sample ID: MB-19720	Method Blank				Run: SUB-C107779			09/17/08 18:56	
Radium 226	-0.4	pCi/L							U
Method: E903.0							Batch: C_RA226-3058		
Sample ID: C08080934-001EMS	Sample Matrix Spike				Run: SUB-C107589			09/15/08 14:53	
Radium 226	14	pCi/L		91	70	130			
Sample ID: C08080934-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C107589			09/15/08 14:53	
Radium 226	14	pCi/L		92	70	130	0.5	24.6	
Sample ID: MB-RA226-3058	Method Blank				Run: SUB-C107589			09/15/08 18:05	
Radium 226	-0.2	pCi/L							U
Sample ID: LCS-RA226-3058	Laboratory Control Sample				Run: SUB-C107589			09/15/08 18:05	
Radium 226	6.8	pCi/L		88	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R108747		
Sample ID: R08080332-0011	Sample Matrix Spike					Run: SUB-C108747			09/28/08 13:33
Thorium 230	21.4	pCi/L	0.20	95	70	130			
Sample ID: R08080332-0011	Sample Matrix Spike Duplicate					Run: SUB-C108747			09/28/08 13:33
Thorium 230	25.8	pCi/L	0.20	111	70	130	19	40.7	
Sample ID: LCS-19720	Laboratory Control Sample					Run: SUB-C108747			09/29/08 13:22
Thorium 230	47.0	pCi/L	0.20	102	70	130			
Sample ID: MB-19720	Method Blank					Run: SUB-C108747			09/29/08 13:22
Thorium 230	0.6	pCi/L							U
Method: E907.0							Batch: C_RA-TH-ISO-0633		
Sample ID: LCS-RA-TH-ISO-0633	Laboratory Control Sample					Run: SUB-C108242			09/19/08 13:54
Thorium 230	6.17	pCi/L	0.20	102	70	130			
Sample ID: R08080301-004H	Sample Matrix Spike					Run: SUB-C108242			09/20/08 12:26
Thorium 230	10.5	pCi/L	0.20	86	70	130			
Sample ID: R08080301-004H	Sample Matrix Spike Duplicate					Run: SUB-C108242			09/20/08 12:26
Thorium 230	10.9	pCi/L	0.20	91	70	130	4.1	40.3	
Sample ID: MB-RA-TH-ISO-0633	Method Blank					Run: SUB-C108242			09/21/08 12:56
Thorium 230	-0.02	pCi/L							U
Method: E909.0M							Batch: C_19720		
Sample ID: R08080332-009I	Sample Matrix Spike					Run: SUB-C108784			09/12/08 10:37
Lead 210	240	pCi/L		89	70	130			
Sample ID: R08080332-009I	Sample Matrix Spike Duplicate					Run: SUB-C108784			09/12/08 10:37
Lead 210	300	pCi/L		111	70	130	23	30	
Sample ID: MB-R108784	Method Blank					Run: SUB-C108784			09/12/08 10:37
Lead 210	-6	pCi/L							U
Sample ID: LCS-R108784	Laboratory Control Sample					Run: SUB-C108784			09/12/08 10:37
Lead 210	100	pCi/L		92	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080301

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R107511		
Sample ID: R08080332-005H	Sample Matrix Spike				Run: SUB-C107511			09/04/08 07:39	
Lead 210	410	pCi/L		70	70	130			
Sample ID: R08080332-005H	Sample Matrix Spike Duplicate				Run: SUB-C107511			09/04/08 07:39	
Lead 210	450	pCi/L		77	70	130	9.5	30	
Sample ID: MB-R107511	Method Blank				Run: SUB-C107511			09/04/08 07:39	
Lead 210	-3	pCi/L						U	
Sample ID: LCS-R107511	Laboratory Control Sample				Run: SUB-C107511			09/04/08 07:39	
Lead 210	86	pCi/L		76	70	130			
<b>Method: RMO-3008</b>							Batch: C_19720		
Sample ID: C08081029-005IMS	Sample Matrix Spike				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	36	pCi/L	1.0	83	70	130			
Sample ID: C08081029-005IMSD	Sample Matrix Spike Duplicate				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	48	pCi/L	1.0	111	70	130	29	30	
Sample ID: LCS-R108077	Laboratory Control Sample				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	81	pCi/L	1.0	95	70	130			
Sample ID: MB-R108077	Method Blank				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	0.9	pCi/L						U	
<b>Method: RMO-3008</b>							Batch: C_R107620		
Sample ID: C08081029-005HMS	Sample Matrix Spike				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	79	pCi/L	1.0	93	70	130			
Sample ID: C08081029-005HMSD	Sample Matrix Spike Duplicate				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	82	pCi/L	1.0	97	70	130	3.7	30	
Sample ID: LCS-R107620	Laboratory Control Sample				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	44	pCi/L	1.0	102	70	130			
Sample ID: MB-R107620	Method Blank				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	ND	pCi/L						U	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>Bureau LeSpec</b>		Project Name, PWS, Permit, Etc. <b>Powerful Dewey Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>LeSpec</b>		Contact Name: <b>Corey Foreman</b>		Phone/Fax: <b>605-342-1397</b>	Email: <b>eric.kunze@energylab.com</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1 Dew Burd GW 3026		8/19/2008	16:25	W	SEE ATTACHED Normal Turnaround (TAT) <b>RUSH</b> Comments: All GW. Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page
2 Dew Burd GW 3026		8/19/2008	16:35	W	
3 Dew Burd GW 698		8/19/2008	17:35	W	
4 Dew Burd GW 681		8/19/2008	19:08	W	
5 Dew Burd GW 689		8/19/2008	19:18	W	
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Relinquished by (print): <b>Eric Kunze</b>	Date/Time: <b>8/19/08 21:50</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Daniel Newman</b>
Sample Disposal:		Return to Client:	Lab Disposal:	Received by Laboratory:	Date/Time: <b>9/20/08 800</b>
					Signature: <b>[Signature]</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





## ANALYTICAL SUMMARY REPORT

November 14, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08080332 Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 9 samples for RESPEC Inc on 8/21/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08080332-001	DewBurd GW688	08/20/08 10:07	08/21/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08080332-002	DewBurd GW680	08/20/08 10:23	08/21/08	Aqueous	Same As Above
R08080332-003	DewBurd GW622	08/20/08 12:59	08/21/08	Aqueous	Same As Above
R08080332-004	DewBurd GW615	08/20/08 13:26	08/21/08	Aqueous	Same As Above
R08080332-005	DewBurd GW695	08/20/08 14:20	08/21/08	Aqueous	Same As Above
R08080332-006	DewBurd GW696	08/20/08 15:10	08/21/08	Aqueous	Same As Above
R08080332-007	DewBurd GW694	08/20/08 15:45	08/21/08	Aqueous	Same As Above
R08080332-008	DewBurd GW697	08/20/08 17:10	08/21/08	Aqueous	Same As Above



## ANALYTICAL SUMMARY REPORT

R08080332-009 DewBurd BLK01	08/20/08 17:25 08/21/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
-----------------------------	-------------------------	---------	---

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

  
Linda Larson  
Rapid City - Project Manager



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08080332

Date: 14-Nov-08

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.  
- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08081026

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis. The MDC of 0.2 pCi/L for Ra226 was not achievable on all samples due to insufficient volume.

End of comments imported for SUBBED Workorder: C08081026



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-001  
Client Sample ID: DewBurd GW688

Report Date: 11/14/08  
Collection Date: 08/20/08 10:07  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	08/21/08 14:44/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 14:44/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	08/21/08 14:44/mb
Calcium	51.7	mg/L		0.5		2	E200.7	09/02/08 15:56/eli-c
Chloride	11	mg/L		1		1	E300.0	08/22/08 20:03/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/22/08 20:03/jmh
Magnesium	21.6	mg/L		0.5		2	E200.7	09/02/08 15:56/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:28/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 20:03/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 20:03/jmh
Potassium	12.1	mg/L		0.5		2	E200.7	09/02/08 15:56/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	09/02/08 15:56/eli-c
Sodium	196	mg/L	D	2		2	E200.7	09/02/08 15:56/eli-c
Sulfate	425	mg/L	D	3		50	E300.0	08/22/08 19:14/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1430	umhos/cm		5.0		1	A2510 B	08/22/08 11:55/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.35	s.u.		0.01		1	A4500-H B	08/22/08 14:01/tb
Sodium Adsorption Ratio (SAR)	5.8	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	08/25/08 16:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 15:56/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/27/08 12:44/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 15:56/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 15:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:00/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 15:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 03:00/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	09/02/08 15:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:00/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	09/02/08 15:56/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 03:00/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 15:56/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 15:56/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 11:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:07/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/04/08 03:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-001  
Client Sample ID: DewBurd GW688

Report Date: 11/14/08  
Collection Date: 08/20/08 10:07  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 03:00/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/02/08 15:56/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 15:56/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:14/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:30/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	11.8	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	3.4	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	11.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	3.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	3.8	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1.7	pCi/L				1	E903.0	09/20/08 21:07/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	09/20/08 21:07/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-6	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-001  
Client Sample ID: DewBurd GW688

Report Date: 11/14/08  
Collection Date: 08/20/08 10:07  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/28/08 13:33/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	449	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	90.9	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 03:07/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/28/08 17:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:10/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 03:07/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:07/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:10/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:10/eli-c
Iron	0.24	mg/L		0.03		2	E200.7	09/02/08 19:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:07/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	09/02/08 19:10/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:55/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:10/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:10/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 03:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:14/eli-c
Strontium	1.3	mg/L		0.1		2	E200.7	09/02/08 19:10/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 03:07/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 03:07/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 19:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.75	%				1	A1030 E	11/04/08 00:00/jmh
Anions	12.5	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	13.2	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	829	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-002  
Client Sample ID: DewBurd GW680

Report Date: 11/14/08  
Collection Date: 08/20/08 10:23  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	160	mg/L		5		1	A2320 B	08/21/08 14:47/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 14:47/mb
Bicarbonate as HCO <sub>3</sub>	195	mg/L		5		1	A2320 B	08/21/08 14:47/mb
Calcium	395	mg/L		0.5		2	E200.7	09/02/08 16:08/eli-c
Chloride	13	mg/L		1		1	E300.0	08/22/08 20:36/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/22/08 20:36/jmh
Magnesium	129	mg/L		0.5		2	E200.7	09/02/08 16:08/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 18:29/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 20:36/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 20:36/jmh
Potassium	18.8	mg/L		0.5		2	E200.7	09/02/08 16:08/eli-c
Silica	3.8	mg/L		0.5		2	E200.7	09/02/08 16:08/eli-c
Sodium	138	mg/L	D	2		2	E200.7	09/02/08 16:08/eli-c
Sulfate	1430	mg/L	D	3		50	E300.0	08/22/08 20:20/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2920	umhos/cm		5.0		1	A2510 B	08/22/08 11:59/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.65	s.u.		0.01		1	A4500-H B	08/22/08 14:05/tb
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	08/25/08 16:02/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 16:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/27/08 12:49/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 16:08/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/02/08 16:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:14/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 16:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 03:14/eli-c
Iron	0.20	mg/L		0.03		2	E200.7	09/02/08 16:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:14/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/02/08 16:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 03:14/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 16:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 16:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:21/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/04/08 03:14/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-002  
Client Sample ID: DewBurd GW680

Report Date: 11/14/08  
Collection Date: 08/20/08 10:23  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0188	mg/L		0.0003		1	E200.8	09/04/08 03:14/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/02/08 16:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 16:08/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:19/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:32/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4330	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	67.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	8.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	1190	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	16.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	9.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	15.2	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.6	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1270	pCi/L				1	E903.0	09/20/08 21:10/eli-c
Radium 226 precision (±)	45.6	pCi/L				1	E903.0	09/20/08 21:10/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	3200	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	120	pCi/L				1	E901.1	08/29/08 12:32/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-4	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	1.0	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.62	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	2.1	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-002  
Client Sample ID: DewBurd GW680

Report Date: 11/14/08  
Collection Date: 08/20/08 10:23  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/28/08 13:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	112000	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	530	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	09/04/08 00:03/eli-c
Arsenic	0.005	mg/L	D	0.004		1	E200.8	10/18/08 14:48/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/03/08 03:26/eli-c
Beryllium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:03/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/03/08 03:26/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	09/04/08 00:03/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/03/08 03:26/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/03/08 03:26/eli-c
Iron	0.31	mg/L		0.03		2	E200.7	09/03/08 03:26/eli-c
Lead	ND	mg/L		0.001		10	E200.8	09/04/08 00:03/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/03/08 03:26/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 08:58/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/03/08 03:26/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/03/08 03:26/eli-c
Selenium	ND	mg/L	D	0.003		10	E200.8	09/04/08 00:03/eli-c
Silver	ND	mg/L	D	0.02		10	E200.8	09/04/08 00:03/eli-c
Strontium	7.2	mg/L		0.1		2	E200.7	09/03/08 03:26/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	09/04/08 00:03/eli-c
Uranium	0.0180	mg/L	D	0.0005		10	E200.8	09/04/08 00:03/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/03/08 03:26/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	5.11	%				1	A1030 E	11/04/08 00:00/jmh
Anions	33.2	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	36.8	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	2230	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-003  
Client Sample ID: DewBurd GW622

Report Date: 11/14/08  
Collection Date: 08/20/08 12:59  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	184	mg/L		5		1	A2320 B	08/21/08 15:18/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:18/mb
Bicarbonate as HCO3	224	mg/L		5		1	A2320 B	08/21/08 15:18/mb
Calcium	95.2	mg/L		0.5		2	E200.7	09/02/08 17:01/eli-c
Chloride	10	mg/L		1		1	E300.0	08/22/08 21:09/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	08/22/08 21:09/jmh
Magnesium	32.3	mg/L		0.5		2	E200.7	09/02/08 17:01/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:33/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 21:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 21:09/jmh
Potassium	10.6	mg/L		0.5		2	E200.7	09/02/08 17:01/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	09/02/08 17:01/eli-c
Sodium	183	mg/L	D	2		2	E200.7	09/02/08 17:01/eli-c
Sulfate	504	mg/L	D	3		50	E300.0	08/22/08 20:53/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1460	umhos/cm		5.0		1	A2510 B	08/22/08 12:00/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.84	s.u.		0.01		1	A4500-H B	08/22/08 14:05/tb
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	08/25/08 16:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:01/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/04/08 03:20/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:01/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:20/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 03:20/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 17:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:20/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	09/02/08 17:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 03:20/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:01/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:01/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:28/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/04/08 03:20/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-003  
Client Sample ID: DewBurd GW622

Report Date: 11/14/08  
Collection Date: 08/20/08 12:59  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0050	mg/L		0.0003		1	E200.8	09/04/08 03:20/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/02/08 17:01/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:01/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:23/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:35/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	27.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	12.4	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	4.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	0.1	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	4.4	pCi/L				1	E903.0	09/20/08 22:40/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	09/20/08 22:40/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-4	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-003  
Client Sample ID: DewBurd GW622

Report Date: 11/14/08  
Collection Date: 08/20/08 12:59  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/28/08 13:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1370	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	101	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 03:27/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/28/08 18:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:14/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 03:27/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:27/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:14/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:14/eli-c
Iron	1.00	mg/L		0.03		2	E200.7	09/02/08 19:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:27/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	09/02/08 19:14/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 09:00/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:14/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:14/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 03:27/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:35/eli-c
Strontium	1.6	mg/L		0.1		2	E200.7	09/02/08 19:14/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 03:27/eli-c
Uranium	0.0050	mg/L		0.0003		1	E200.8	09/04/08 03:27/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 19:14/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.93	%				1	A1030 E	11/04/08 00:00/jmh
Anions	14.5	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	15.7	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	957	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-004  
Client Sample ID: DewBurd GW615

Report Date: 11/14/08  
Collection Date: 08/20/08 13:26  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	142	mg/L		5		1	A2320 B	08/21/08 15:20/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	08/21/08 15:20/mb
Bicarbonate as HCO <sub>3</sub>	173	mg/L		5		1	A2320 B	08/21/08 15:20/mb
Calcium	78.0	mg/L		0.5		2	E200.7	09/02/08 17:05/eli-c
Chloride	5	mg/L		1		1	E300.0	08/22/08 21:42/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/22/08 21:42/jmh
Magnesium	22.7	mg/L		0.5		2	E200.7	09/02/08 17:05/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	08/21/08 18:36/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 21:42/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 21:42/jmh
Potassium	9.1	mg/L		0.5		2	E200.7	09/02/08 17:05/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	09/02/08 17:05/eli-c
Sodium	138	mg/L	D	2		2	E200.7	09/02/08 17:05/eli-c
Sulfate	401	mg/L	D	3		50	E300.0	08/22/08 21:25/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1250	umhos/cm		5.0		1	A2510 B	08/22/08 12:02/tb
Oxidation-Reduction Potential	330	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.03	s.u.		0.01		1	A4500-H B	08/22/08 14:10/tb
Sodium Adsorption Ratio (SAR)	3.5	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	740	mg/L		5		1	A2540 C	08/25/08 16:03/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:05/eli-c
Arsenic	0.018	mg/L		0.001		1	E200.8	10/27/08 12:54/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:05/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:05/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/02/08 17:05/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 03:34/eli-c
Iron	0.73	mg/L		0.03		2	E200.7	09/02/08 17:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:34/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/02/08 17:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 03:34/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:05/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:05/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:41/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/04/08 03:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-004  
Client Sample ID: DewBurd GW615

Report Date: 11/14/08  
Collection Date: 08/20/08 13:26  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0023	mg/L		0.0003		1	E200.8	09/04/08 03:34/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/02/08 17:05/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:05/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:27/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:37/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	17.3	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	2.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	9.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	3.2	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	4.6	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1.8	pCi/L				1	E903.0	09/21/08 00:11/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	09/21/08 00:11/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-6	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-004  
Client Sample ID: DewBurd GW615

Report Date: 11/14/08  
Collection Date: 08/20/08 13:26  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/28/08 13:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1880	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	106	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 03:41/eli-c
Arsenic	0.021	mg/L		0.001		1	E200.8	10/28/08 18:32/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 03:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:31/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/02/08 19:31/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:31/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:31/eli-c
Iron	1.32	mg/L		0.03		2	E200.7	09/02/08 19:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:41/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/02/08 19:31/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/28/08 09:07/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:31/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 03:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:48/eli-c
Strontium	1.4	mg/L		0.1		2	E200.7	09/02/08 19:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 03:41/eli-c
Uranium	0.0023	mg/L		0.0003		1	E200.8	09/04/08 03:41/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 19:31/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.92	%				1	A1030 E	11/04/08 00:00/jmh
Anions	11.4	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	12.0	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	751	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-005  
Client Sample ID: DewBurd GW695

Report Date: 11/14/08  
Collection Date: 08/20/08 14:20  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	172	mg/L		5		1	A2320 B	08/21/08 15:22/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:22/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	08/21/08 15:22/mb
Calcium	52.7	mg/L		0.5		2	E200.7	09/02/08 17:09/eli-c
Chloride	12	mg/L		1		1	E300.0	08/22/08 23:20/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	08/22/08 23:20/jmh
Magnesium	18.9	mg/L		0.5		2	E200.7	09/02/08 17:09/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:37/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 23:20/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 23:20/jmh
Potassium	8.6	mg/L		0.5		2	E200.7	09/02/08 17:09/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	09/02/08 17:09/eli-c
Sodium	258	mg/L	D	2		2	E200.7	09/02/08 17:09/eli-c
Sulfate	466	mg/L	D	3		50	E300.0	08/22/08 22:31/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1650	umhos/cm		5.0		1	A2510 B	08/22/08 12:03/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.08	s.u.		0.01		1	A4500-H B	08/22/08 14:11/tb
Sodium Adsorption Ratio (SAR)	7.8	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	900	mg/L		5		1	A2540 C	08/25/08 16:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:09/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/04/08 03:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:09/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:47/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 03:47/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 17:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:47/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	09/02/08 17:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 03:47/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:09/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:09/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 17:55/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/04/08 03:47/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-005  
Client Sample ID: DewBurd GW695

Report Date: 11/14/08  
Collection Date: 08/20/08 14:20  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0026	mg/L		0.0003		1	E200.8	09/04/08 03:47/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/02/08 17:09/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:09/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:32/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:39/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	21.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	8.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	4.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	-1	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.3	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	3.9	pCi/L				1	E903.0	09/21/08 01:41/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	09/21/08 01:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	450	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	60	pCi/L				1	E901.1	08/29/08 12:32/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-6	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.005	pCi/L	U			1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-005  
Client Sample ID: DewBurd GW695

Report Date: 11/14/08  
Collection Date: 08/20/08 14:20  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	09/28/08 13:33/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1950	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	107	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 03:54/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/28/08 18:37/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:35/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 03:54/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 03:54/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:35/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:35/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	09/02/08 19:35/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 03:54/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	09/02/08 19:35/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/29/08 13:59/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:35/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:35/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 03:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 18:02/eli-c
Strontium	0.9	mg/L		0.1		2	E200.7	09/02/08 19:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 03:54/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	09/04/08 03:54/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 19:35/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.38	%				1	A1030 E	11/04/08 00:00/jmh
Anions	13.5	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	15.6	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	931	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080332-006  
**Client Sample ID:** DewBurd GW696

**Report Date:** 11/14/08  
**Collection Date:** 08/20/08 15:10  
**Date Received:** 08/21/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	182	mg/L		5		1	A2320 B	08/21/08 15:25/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:25/mb
Bicarbonate as HCO3	222	mg/L		5		1	A2320 B	08/21/08 15:25/mb
Calcium	32.3	mg/L		0.5		2	E200.7	09/02/08 17:13/eli-c
Chloride	13	mg/L		1		1	E300.0	08/22/08 23:53/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/22/08 23:53/jmh
Magnesium	11.0	mg/L		0.5		2	E200.7	09/02/08 17:13/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/22/08 23:53/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/22/08 23:53/jmh
Potassium	9.3	mg/L		0.5		2	E200.7	09/02/08 17:13/eli-c
Silica	4.5	mg/L		0.5		2	E200.7	09/02/08 17:13/eli-c
Sodium	297	mg/L	D	2		2	E200.7	09/02/08 17:13/eli-c
Sulfate	495	mg/L	D	3		50	E300.0	08/22/08 23:37/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1690	umhos/cm		5.0		1	A2510 B	08/22/08 12:04/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.29	s.u.		0.01		1	A4500-H B	08/22/08 14:12/tb
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	08/25/08 16:05/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:13/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/04/08 04:28/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:13/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 04:28/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:13/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 04:28/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 17:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 04:28/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/02/08 17:13/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 04:28/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:13/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:13/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/05/08 01:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/05/08 01:44/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-006  
Client Sample ID: DewBurd GW696

Report Date: 11/14/08  
Collection Date: 08/20/08 15:10  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 04:28/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/04/08 04:28/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:13/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	7.1	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	2.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	6.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	4.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	3.4	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	-0.3	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.10	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1.3	pCi/L				1	E903.0	09/21/08 03:12/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/21/08 03:12/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.2	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.6	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	09/17/08 15:43/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/17/08 15:43/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 15:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-006  
Client Sample ID: DewBurd GW696

Report Date: 11/14/08  
Collection Date: 08/20/08 15:10  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/28/08 13:33/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	09/28/08 13:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	343	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	86.3	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 04:35/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/04/08 04:35/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:39/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 04:35/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:39/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 04:35/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:39/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:39/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	09/02/08 19:39/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 04:35/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/02/08 19:39/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/29/08 14:01/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:39/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:39/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 04:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 18:36/eli-c
Strontium	0.8	mg/L		0.1		2	E200.7	09/02/08 19:39/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 04:35/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 04:35/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 19:39/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.56	%				1	A1030 E	11/04/08 00:00/jmh
Anions	14.3	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	15.7	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	978	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-007  
Client Sample ID: DewBurd GW694

Report Date: 11/14/08  
Collection Date: 08/20/08 15:45  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	202	mg/L		5		1	A2320 B	08/21/08 15:28/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:28/mb
Bicarbonate as HCO3	246	mg/L		5		1	A2320 B	08/21/08 15:28/mb
Calcium	103	mg/L		0.5		2	E200.7	09/02/08 17:17/eli-c
Chloride	9	mg/L		1		1	E300.0	08/23/08 00:26/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/23/08 00:26/jmh
Magnesium	36.9	mg/L		0.5		2	E200.7	09/02/08 17:17/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:40/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/23/08 00:26/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/23/08 00:26/jmh
Potassium	13.4	mg/L		0.5		2	E200.7	09/02/08 17:17/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	09/02/08 17:17/eli-c
Sodium	182	mg/L	D	2		2	E200.7	09/02/08 17:17/eli-c
Sulfate	540	mg/L	D	3		50	E300.0	08/23/08 00:10/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1570	umhos/cm		5.0		1	A2510 B	08/22/08 12:05/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	08/25/08 00:00/jmh
pH	7.81	s.u.		0.01		1	A4500-H B	08/22/08 14:12/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	990	mg/L		5		1	A2540 C	08/25/08 16:06/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:17/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/27/08 13:00/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 04:42/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 04:42/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 17:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 04:42/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	09/02/08 17:17/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 04:42/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:17/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:17/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:11/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/05/08 01:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/05/08 01:50/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-007  
Client Sample ID: DewBurd GW694

Report Date: 11/14/08  
Collection Date: 08/20/08 15:45  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0005	mg/L		0.0003		1	E200.8	09/04/08 04:42/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/04/08 04:42/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:17/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:40/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	12.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	10.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	4.7	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	0.0	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1.8	pCi/L				1	E903.0	09/21/08 04:42/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	09/21/08 04:42/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/29/08 12:32/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-7	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-007  
Client Sample ID: DewBurd GW694

Report Date: 11/14/08  
Collection Date: 08/20/08 15:45  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	401	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	86.8	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 04:48/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/28/08 18:42/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 04:48/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 04:48/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:43/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:43/eli-c
Iron	0.15	mg/L		0.03		2	E200.7	09/02/08 19:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 04:48/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	09/02/08 19:43/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/29/08 14:04/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:43/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 04:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 18:42/eli-c
Strontium	2.9	mg/L		0.1		2	E200.7	09/02/08 19:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 04:48/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	09/04/08 04:48/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	09/02/08 19:43/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.72	%				1	A1030 E	11/04/08 00:00/jmh
Anions	15.6	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	16.4	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	1020	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	11/04/08 00:00/jmh

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-008  
Client Sample ID: DewBurd GW697

Report Date: 11/14/08  
Collection Date: 08/20/08 17:10  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	172	mg/L		5		1	A2320 B	08/21/08 15:31/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:31/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	08/21/08 15:31/mb
Calcium	53.5	mg/L		0.5		2	E200.7	09/02/08 17:21/eli-c
Chloride	8	mg/L		1		1	E300.0	08/23/08 00:59/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/23/08 00:59/jmh
Magnesium	17.5	mg/L		0.5		2	E200.7	09/02/08 17:21/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:41/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/23/08 00:59/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/23/08 00:59/jmh
Potassium	8.6	mg/L		0.5		2	E200.7	09/02/08 17:21/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	09/02/08 17:21/eli-c
Sodium	219	mg/L	D	2		2	E200.7	09/02/08 17:21/eli-c
Sulfate	452	mg/L	D	3		50	E300.0	08/23/08 00:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5.0		1	A2510 B	08/22/08 12:06/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	08/25/08 00:00/jmh
pH	8.03	s.u.		0.01		1	A4500-H B	08/22/08 14:13/tb
Sodium Adsorption Ratio (SAR)	6.7	unitless		0.10		1	Calculation	11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	840	mg/L		5		1	A2540 C	08/25/08 16:06/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/02/08 17:21/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/27/08 13:05/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 17:21/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 17:21/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 04:55/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 17:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/04/08 04:55/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	09/02/08 17:21/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 04:55/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	09/02/08 17:21/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/04/08 04:55/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 17:21/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 17:21/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	09/01/08 12:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/05/08 01:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/05/08 01:57/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-008  
Client Sample ID: DewBurd GW697

Report Date: 11/14/08  
Collection Date: 08/20/08 17:10  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 04:55/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/04/08 04:55/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:21/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:45/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5.3	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	3.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	8.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	3.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	-2	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.3	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	1.2	pCi/L				1	E903.0	09/21/08 06:13/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/21/08 06:13/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	850	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-10	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.4	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-008  
Client Sample ID: DewBurd GW697

Report Date: 11/14/08  
Collection Date: 08/20/08 17:10  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	09/29/08 13:22/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	367	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	85.4	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 05:02/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/28/08 18:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:47/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 05:02/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 05:02/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:47/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:47/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	09/02/08 19:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 05:02/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	09/02/08 19:47/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/29/08 14:06/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:47/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:47/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 05:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 18:49/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	09/02/08 19:47/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 05:02/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 05:02/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 19:47/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.84	%				1	A1030 E	11/04/08 00:00/jmh
Anions	13.1	meq/L				1	A1030 E	11/04/08 00:00/jmh
Cations	13.9	meq/L				1	A1030 E	11/04/08 00:00/jmh
Solids, Total Dissolved Calculated	874	mg/L				1	A1030 E	11/04/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	11/04/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-009  
Client Sample ID: DewBurd BLK01

Report Date: 11/14/08  
Collection Date: 08/20/08 17:25  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	08/21/08 15:33/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/21/08 15:33/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	08/21/08 15:33/mb
Calcium	ND	mg/L		0.5		2	E200.7	09/02/08 17:25/eli-c
Chloride	ND	mg/L		1		1	E300.0	08/23/08 01:48/jmh
Fluoride	0.1	mg/L		0.1		1	E300.0	08/23/08 01:48/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	09/02/08 17:25/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/21/08 18:42/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/23/08 01:48/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/23/08 01:48/jmh
Potassium	ND	mg/L		0.5		2	E200.7	09/02/08 17:25/eli-c
Silica	ND	mg/L		0.5		2	E200.7	09/02/08 17:25/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	09/02/08 17:25/eli-c
Sulfate	1	mg/L		1		1	E300.0	08/23/08 01:48/jmh

### PHYSICAL PROPERTIES

Conductivity @ 25 C	5.2	umhos/cm		5.0		1	A2510 B 08/22/08 12:07/tb
Oxidation-Reduction Potential	370	mV				1	A2580 B 08/25/08 00:00/jmh
pH	5.39	s.u.		0.01		1	A4500-H B 08/22/08 14:22/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation 11/04/08 09:20/ADM
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C 08/25/08 16:07/mb

- SAR calculations may not be appropriate for near blank results.

### METALS - DISSOLVED

Aluminum	ND	mg/L		0.1		2	E200.7 09/02/08 17:25/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8 09/04/08 05:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7 09/02/08 17:25/eli-c
Boron	ND	mg/L		0.1		2	E200.7 09/02/08 17:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8 09/04/08 05:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7 09/02/08 17:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8 09/04/08 05:09/eli-c
Iron	ND	mg/L		0.03		2	E200.7 09/02/08 17:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8 09/04/08 05:09/eli-c
Manganese	ND	mg/L		0.01		2	E200.7 09/02/08 17:25/eli-c
Mercury	ND	mg/L		0.001		1	E200.8 09/04/08 05:09/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7 09/02/08 17:25/eli-c
Nickel	ND	mg/L		0.05		2	E200.7 09/02/08 17:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B 09/01/08 12:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8 09/05/08 02:04/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08080332-009  
Client Sample ID: DewBurd BLK01

Report Date: 11/14/08  
Collection Date: 08/20/08 17:25  
Date Received: 08/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		1	E200.8	09/05/08 02:04/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 05:09/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/04/08 05:09/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 17:25/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/11/08 00:49/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/08 16:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	09/01/08 11:59/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	0.1	pCi/L	U			1	E900.0	09/25/08 02:03/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Alpha MDC	0.9	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta	-4	pCi/L	U			1	E900.0	09/25/08 02:03/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Gross Beta MDC	2.6	pCi/L				1	E900.0	09/25/08 02:03/eli-c
Lead 210	-0.2	pCi/L	U			1	E909.0M	09/04/08 07:39/eli-c
Lead 210 precision (±)	6.4	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Lead 210 MDC	10.7	pCi/L				1	E909.0M	09/04/08 07:39/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	09/03/08 19:15/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	09/03/08 19:15/eli-c
Radium 226	0.02	pCi/L	U			1	E903.0	09/21/08 07:43/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/21/08 07:43/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/21/08 12:59/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	09/21/08 12:59/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	08/29/08 12:32/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	08/29/08 12:32/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-8	pCi/L	U			1	E909.0M	09/12/08 10:37/eli-c
Lead 210 precision (±)	10.5	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Lead 210 MDC	17.8	pCi/L				1	E909.0M	09/12/08 10:37/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	09/15/08 14:35/eli-c
Polonium 210 precision (±)	0.33	pCi/L				1	RMO-3008	09/15/08 14:35/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	09/17/08 17:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/17/08 17:18/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08080332-009  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 11/14/08  
**Collection Date:** 08/20/08 17:25  
**Date Received:** 08/21/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 MDC	0.5	pCi/L				1	E903.0	09/17/08 17:18/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/29/08 13:22/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	09/29/08 13:22/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	192	pCi/L		100		1	D5072-92	08/25/08 17:46/eli-c
Radon 222 precision (±)	82.9	pCi/L				1	D5072-92	08/25/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	09/04/08 05:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/04/08 05:16/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/02/08 19:51/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/04/08 05:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/02/08 19:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/04/08 05:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/02/08 19:51/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/02/08 19:51/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/02/08 19:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/04/08 05:16/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	09/02/08 19:51/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/29/08 14:09/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/02/08 19:51/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/02/08 19:51/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/04/08 05:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/04/08 18:56/eli-c
Strontium	ND	mg/L		0.1		2	E200.7	09/02/08 19:51/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/04/08 05:16/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	09/04/08 05:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/02/08 19:51/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080821A-ALK-SEL-W		
Sample ID: R08080332-002AMS	Sample Matrix Spike					Run: PH_COND1-R_080821A			08/21/08 14:51
Alkalinity, Total as CaCO <sub>3</sub>	262	mg/L	5.0	96	80	120			
Sample ID: R08080332-002AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080821A			08/21/08 14:53
Alkalinity, Total as CaCO <sub>3</sub>	264	mg/L	5.0	98	80	120	0.8	10	
Method: A2510 B							Batch: 080822_1_COND-PROBE-W		
Sample ID: LCS_COND-1_080822	Laboratory Control Sample					Run: BAL-7-R_080822A			08/22/08 11:38
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080822	Laboratory Control Sample					Run: BAL-7-R_080822A			08/22/08 11:40
Conductivity @ 25 C	162	umhos/cm	5.0	108	90	110			
Sample ID: LCS2-1_080822	Laboratory Control Sample					Run: BAL-7-R_080822A			08/22/08 11:41
Conductivity @ 25 C	5010	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080822	Method Blank					Run: BAL-7-R_080822A			08/22/08 11:42
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08080332-002ADUP	Sample Duplicate					Run: BAL-7-R_080822A			08/22/08 11:59
Conductivity @ 25 C	3060	umhos/cm	5.0				4.7	10	
Method: A2540 C							Batch: 080825A-SLDS-TDS-W		
Sample ID: LCS1_080825A	Laboratory Control Sample					Run: BAL-4-R_080825B			08/25/08 15:44
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	103	90	110			
Sample ID: MBLK1_080825A	Method Blank					Run: BAL-4-R_080825B			08/25/08 15:46
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08080332-005AMS	Sample Matrix Spike					Run: BAL-4-R_080825B			08/25/08 16:04
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	112	80	120			
Sample ID: R08080332-005AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080825B			08/25/08 16:05
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	111	80	120	0.2	10	
Method: A2580 B							Batch: 080825-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample					Run: PH_COND1-R_080825A			08/25/08 00:00
Oxidation-Reduction Potential	470	mV		98	95	105			
Sample ID: R08080332-005F	Sample Duplicate					Run: PH_COND1-R_080825A			08/25/08 00:00
Oxidation-Reduction Potential	210	mV					0.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080901A		
Sample ID: MBLK	Method Blank					Run: SUB-C106784			09/01/08 11:25
Selenium	0.0008	mg/L	6E-05						
Sample ID: C08081048-003AMS	Sample Matrix Spike					Run: SUB-C106784			09/01/08 11:46
Selenium	0.071	mg/L	0.0010	81	85	115			S
Sample ID: C08081048-003AMSD	Sample Matrix Spike Duplicate					Run: SUB-C106784			09/01/08 11:48
Selenium	0.073	mg/L	0.0010	86	85	115	3.5	15	
Sample ID: 288-92-2	Laboratory Control Sample					Run: SUB-C106784			09/01/08 11:50
Selenium	0.050	mg/L	0.0010	99	90	110			
Sample ID: R08080332-009E	Sample Matrix Spike					Run: SUB-C106784			09/01/08 12:17
Selenium	0.042	mg/L	0.0010	84	85	115			S
Sample ID: R08080332-009E	Sample Matrix Spike Duplicate					Run: SUB-C106784			09/01/08 12:19
Selenium	0.044	mg/L	0.0010	88	85	115	4.5	15	
Method: A3114 B							Batch: C_SEIV3114-080831A		
Sample ID: MBLK	Method Blank					Run: SUB-C106776			08/31/08 15:53
Selenium-IV	0.0005	mg/L	6E-05						
Sample ID: C08081048-003AMS	Sample Matrix Spike					Run: SUB-C106776			08/31/08 16:12
Selenium-IV	0.052	mg/L	0.0010	87	85	115			
Sample ID: C08081048-003AMSD	Sample Matrix Spike Duplicate					Run: SUB-C106776			08/31/08 16:20
Selenium-IV	0.056	mg/L	0.0010	96	85	115	7.7	10	
Sample ID: 288-92-2	Laboratory Control Sample					Run: SUB-C106776			08/31/08 16:22
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Sample ID: R08080332-009E	Sample Matrix Spike					Run: SUB-C106776			08/31/08 16:49
Selenium-IV	0.045	mg/L	0.0010	89	85	115			
Sample ID: R08080332-009E	Sample Matrix Spike Duplicate					Run: SUB-C106776			08/31/08 16:52
Selenium-IV	0.046	mg/L	0.0010	92	85	115	2.5	10	
Method: A4500-H B							Batch: 080822_1_PH-W		
Sample ID: LCS_pH-1_080822	Laboratory Control Sample					Run: BAL-7-R_080822B			08/22/08 13:46
pH	6.87	s.u.	0.010	100	98.55	101.45			
Sample ID: R08080332-003ADUP	Sample Duplicate					Run: BAL-7-R_080822B			08/22/08 14:07
pH	7.83	s.u.	0.010				0.1	1.25	
Sample ID: R08080332-009ADUP	Sample Duplicate					Run: BAL-7-R_080822B			08/22/08 14:23
pH	5.37	s.u.	0.010				0.4	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2008-08-21_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080821A		08/21/08 14:35	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080821A		08/21/08 14:36	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080821A		08/21/08 14:37	
Nitrogen, Ammonia as N	0.25	mg/L	0.10	101	90	110			
Sample ID: R08080332-003BMS	Sample Matrix Spike					Run: TECHAA2-R_080821A		08/21/08 18:34	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	93	80	120			
Sample ID: R08080332-003BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080821A		08/21/08 18:35	
Nitrogen, Ammonia as N	0.26	mg/L	0.10	92	80	120	0.8	10	
Method: D5072-92							Batch: C_R106600		
Sample ID: MB-R106600	Method Blank					Run: SUB-C106600		08/25/08 17:46	
Radon 222	40	pCi/L						U	
Sample ID: LCS-R106600	Laboratory Control Sample					Run: SUB-C106600		08/25/08 17:46	
Radon 222	300	pCi/L	100	85	70	130			
Sample ID: R08080332-003G	Sample Duplicate					Run: SUB-C106600		08/25/08 17:46	
Radon 222	1460	pCi/L	100				6.4	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19595		
Sample ID: MB-19595	Method Blank		Run: SUB-C106856				09/03/08 02:17		
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.01						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	ND	mg/L	0.001						
Sample ID: LCS3-19595	Laboratory Control Sample		Run: SUB-C106856				09/03/08 02:21		
Barium	0.509	mg/L	0.10	102	85	115			
Boron	0.520	mg/L	0.10	104	85	115			
Chromium	0.520	mg/L	0.050	104	85	115			
Copper	0.518	mg/L	0.010	104	85	115			
Iron	2.75	mg/L	0.030	110	85	115			
Manganese	2.58	mg/L	0.010	103	85	115			
Molybdenum	0.508	mg/L	0.10	102	85	115			
Nickel	0.523	mg/L	0.050	105	85	115			
Strontium	0.487	mg/L	0.10	97	85	115			
Zinc	0.522	mg/L	0.010	104	85	115			
Sample ID: C08080990-003CMS3	Sample Matrix Spike		Run: SUB-C106856				09/03/08 02:41		
Barium	0.678	mg/L	0.10	100	70	130			
Boron	0.608	mg/L	0.10	105	70	130			
Chromium	0.524	mg/L	0.050	105	70	130			
Copper	0.522	mg/L	0.010	104	70	130			
Iron	4.25	mg/L	0.030	83	70	130			
Manganese	2.61	mg/L	0.010	102	70	130			
Molybdenum	0.520	mg/L	0.10	104	70	130			
Nickel	0.520	mg/L	0.050	104	70	130			
Strontium	0.968	mg/L	0.10	100	70	130			
Zinc	0.531	mg/L	0.010	102	70	130			
Sample ID: C08080990-003CMSD3	Sample Matrix Spike Duplicate		Run: SUB-C106856				09/03/08 02:45		
Barium	0.702	mg/L	0.10	105	70	130	3.5	20	
Boron	0.625	mg/L	0.10	108	70	130	2.8	20	
Chromium	0.531	mg/L	0.050	106	70	130	1.3	20	
Copper	0.530	mg/L	0.010	106	70	130	1.5	20	
Iron	4.47	mg/L	0.030	92	70	130	5.2	20	
Manganese	2.65	mg/L	0.010	104	70	130	1.6	20	
Molybdenum	0.532	mg/L	0.10	106	70	130	2.3	20	
Nickel	0.523	mg/L	0.050	105	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19595		
Sample ID: C08080990-003CMSD3		Sample Matrix Spike Duplicate			Run: SUB-C106856			09/03/08 02:45	
Strontium	0.962	mg/L	0.10	98	70	130	0.6	20	
Zinc	0.546	mg/L	0.010	105	70	130	2.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R106856		
Sample ID: MB-080902A	Method Blank		Run: SUB-C106856				09/02/08 14:38		
Silica	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.008						
Cadmium	ND	mg/L	0.0008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Copper	ND	mg/L	0.005						
Iron	0.005	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Vanadium	0.03	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080902A	Laboratory Fortified Blank		Run: SUB-C106856				09/02/08 14:42		
Silica	0.38	mg/L	0.10	96	85	125			
Aluminum	1.00	mg/L	0.10	100	85	125			
Barium	1.0	mg/L	0.10	101	85	125			
Boron	0.96	mg/L	0.10	96	85	125			
Cadmium	1.0	mg/L	0.010	101	85	125			
Calcium	54	mg/L	0.50	107	85	125			
Chromium	1.0	mg/L	0.050	103	85	125			
Copper	1.0	mg/L	0.010	103	85	125			
Iron	1.1	mg/L	0.030	106	85	125			
Magnesium	53	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.00	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	102	85	125			
Potassium	45	mg/L	0.50	91	85	125			
Sodium	50	mg/L	0.77	100	85	125			
Strontium	1.0	mg/L	0.10	102	85	125			
Vanadium	1.1	mg/L	0.10	109	85	125			
Zinc	1.0	mg/L	0.010	103	85	125			
Sample ID: C08081029-002CMS2	Sample Matrix Spike		Run: SUB-C106856				09/02/08 17:49		
Aluminum	2.06	mg/L	0.10	102	70	130			
Barium	2.10	mg/L	0.10	104	70	130			
Boron	2.27	mg/L	0.10	105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R106856		
Sample ID: C08081029-002CMS2	Sample Matrix Spike		Run: SUB-C106856				09/02/08 17:49		
Cadmium	2.09	mg/L	0.010	104	70	130			
Chromium	2.11	mg/L	0.050	106	70	130			
Copper	2.10	mg/L	0.010	105	70	130			
Iron	24.2	mg/L	0.030		70	130			A
Manganese	3.64	mg/L	0.010	101	70	130			
Molybdenum	2.05	mg/L	0.10	102	70	130			
Nickel	2.07	mg/L	0.050	104	70	130			
Strontium	9.22	mg/L	0.10	98	70	130			
Vanadium	2.03	mg/L	0.10	102	70	130			
Zinc	2.11	mg/L	0.010	105	70	130			
Calcium	580	mg/L	1.0		70	130			A
Magnesium	252	mg/L	1.0	105	70	130			
Potassium	114	mg/L	1.0	93	70	130			
Silica	2.77	mg/L	0.10	67	70	130			S
Sodium	278	mg/L	1.5	106	70	130			
Sample ID: C08081029-002CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C106856				09/02/08 17:53		
Aluminum	2.05	mg/L	0.10	101	70	130	0.7	20	
Barium	2.09	mg/L	0.10	104	70	130	0.4	20	
Boron	2.27	mg/L	0.10	105	70	130	0	20	
Cadmium	2.02	mg/L	0.010	101	70	130	3.1	20	
Chromium	2.10	mg/L	0.050	105	70	130	0.7	20	
Copper	2.08	mg/L	0.010	104	70	130	0.9	20	
Iron	23.6	mg/L	0.030		70	130	2.3	20	A
Manganese	3.57	mg/L	0.010	98	70	130	1.8	20	
Molybdenum	2.07	mg/L	0.10	103	70	130	0.8	20	
Nickel	2.05	mg/L	0.050	102	70	130	1.2	20	
Strontium	9.00	mg/L	0.10	87	70	130	2.4	20	
Vanadium	2.03	mg/L	0.10	101	70	130	0.2	20	
Zinc	2.11	mg/L	0.010	105	70	130	0	20	
Calcium	569	mg/L	1.0		70	130	2	20	A
Magnesium	247	mg/L	1.0	101	70	130	1.7	20	
Potassium	113	mg/L	1.0	91	70	130	1.1	20	
Silica	2.80	mg/L	0.10	71	70	130	1	20	
Sodium	278	mg/L	1.5	106	70	130	0	20	
Sample ID: R08080332-001C	Sample Matrix Spike		Run: SUB-C106856				09/02/08 16:00		
Aluminum	2.05	mg/L	0.10	102	70	130			
Barium	2.03	mg/L	0.10	101	70	130			
Boron	1.97	mg/L	0.10	98	70	130			
Cadmium	2.04	mg/L	0.010	102	70	130			
Chromium	2.06	mg/L	0.050	103	70	130			
Copper	2.05	mg/L	0.010	102	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R106856		
Sample ID: R08080332-001C	Sample Matrix Spike		Run: SUB-C106856				09/02/08 16:00		
Iron	2.14	mg/L	0.030	105	70	130			
Manganese	2.10	mg/L	0.010	103	70	130			
Molybdenum	1.98	mg/L	0.10	99	70	130			
Nickel	2.05	mg/L	0.050	103	70	130			
Strontium	3.22	mg/L	0.10	100	70	130			
Vanadium	2.17	mg/L	0.10	109	70	130			
Zinc	2.08	mg/L	0.010	104	70	130			
Calcium	157	mg/L	1.0	106	70	130			
Magnesium	129	mg/L	1.0	107	70	130			
Potassium	102	mg/L	1.0	90	70	130			
Silica	4.85	mg/L	0.10		70	130			A
Sodium	300	mg/L	1.5	104	70	130			
Silicon	2.27	mg/L	0.047	113	70	130			
Sample ID: R08080332-001C	Sample Matrix Spike Duplicate		Run: SUB-C106856				09/02/08 16:04		
Aluminum	2.09	mg/L	0.10	105	70	130	2.1	20	
Barium	2.05	mg/L	0.10	102	70	130	0.7	20	
Boron	2.02	mg/L	0.10	101	70	130	2.8	20	
Cadmium	2.03	mg/L	0.010	102	70	130	0.4	20	
Chromium	2.11	mg/L	0.050	105	70	130	2	20	
Copper	2.10	mg/L	0.010	105	70	130	2.4	20	
Iron	2.20	mg/L	0.030	108	70	130	2.8	20	
Manganese	2.13	mg/L	0.010	104	70	130	1.3	20	
Molybdenum	2.02	mg/L	0.10	101	70	130	1.9	20	
Nickel	2.07	mg/L	0.050	104	70	130	1	20	
Strontium	3.29	mg/L	0.10	104	70	130	2.4	20	
Vanadium	2.22	mg/L	0.10	111	70	130	2	20	
Zinc	2.11	mg/L	0.010	105	70	130	1.4	20	
Calcium	162	mg/L	1.0	110	70	130	2.8	20	
Magnesium	132	mg/L	1.0	110	70	130	2.5	20	
Potassium	101	mg/L	1.0	89	70	130	1.2	20	
Silica	4.93	mg/L	0.10		70	130	1.5	20	A
Sodium	294	mg/L	1.5	98	70	130	2.1	20	
Silicon	2.30	mg/L	0.047	115	70	130	1.5	20	
Method: E200.7_8							Batch: C_19720		
Sample ID: MB-19720	Method Blank		Run: SUB-C107379				09/10/08 23:44		
Uranium	2E-07	mg/L							
Sample ID: LCS1-19720	Laboratory Control Sample		Run: SUB-C107379				09/10/08 23:48		
Uranium	5.46E-05	mg/L	0.00030	103	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_19595		
<b>Sample ID: MB-19595</b>	Method Blank			Run: SUB-C106973			09/03/08 22:42		
Antimony	ND	mg/L	0.0003						
Arsenic	0.007	mg/L							
Beryllium	ND	mg/L	0.0003						
Cadmium	ND	mg/L	4E-05						
Lead	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0003						
Silver	ND	mg/L	0.002						
Thallium	ND	mg/L	0.0001						
Uranium	ND	mg/L	5E-05						
<b>Sample ID: LCS3-19595</b>	Laboratory Control Sample			Run: SUB-C106973			09/03/08 22:48		
Antimony	0.543	mg/L	0.050	109	85	115			
Arsenic	0.535	mg/L	0.0010	106	85	115			
Beryllium	0.261	mg/L	0.010	104	85	115			
Cadmium	0.273	mg/L	0.010	109	85	115			
Lead	0.509	mg/L	0.050	102	85	115			
Selenium	0.528	mg/L	0.0032	106	85	115			
Silver	0.0495	mg/L	0.016	99	85	115			
Thallium	0.502	mg/L	0.10	100	85	115			
Uranium	0.498	mg/L	0.00048	100	85	115			
<b>Sample ID: C08080990-003CMS3</b>	Sample Matrix Spike			Run: SUB-C106973			09/04/08 00:44		
Antimony	0.521	mg/L	0.050	104	70	130			
Arsenic	0.519	mg/L	0.0010	101	70	130			
Beryllium	0.251	mg/L	0.010	100	70	130			
Cadmium	0.262	mg/L	0.010	105	70	130			
Lead	0.493	mg/L	0.050	98	70	130			
Selenium	0.506	mg/L	0.0032	101	70	130			
Silver	0.0475	mg/L	0.016	95	70	130			
Thallium	0.483	mg/L	0.10	97	70	130			
Uranium	0.486	mg/L	0.00048	96	70	130			
<b>Sample ID: C08080990-003CMSD3</b>	Sample Matrix Spike Duplicate			Run: SUB-C106973			09/04/08 00:51		
Antimony	0.516	mg/L	0.050	103	70	130	0.8	20	
Arsenic	0.552	mg/L	0.0010	108	70	130	6.1	20	
Beryllium	0.251	mg/L	0.010	101	70	130	0.3	20	
Cadmium	0.260	mg/L	0.010	104	70	130	0.9	20	
Lead	0.485	mg/L	0.050	96	70	130	1.7	20	
Selenium	0.553	mg/L	0.0032	111	70	130	8.9	20	
Silver	0.0490	mg/L	0.016	98	70	130	3.1	20	
Thallium	0.485	mg/L	0.10	97	70	130	0.2	20	
Uranium	0.479	mg/L	0.00048	95	70	130	1.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19595		
Sample ID: MB-19595	Method Blank		Run: SUB-C109482				10/18/08 14:16		
Arsenic	0.003	mg/L	5E-05						
Lead	ND	mg/L	5E-05						
Selenium	0.0007	mg/L	0.0002						
Uranium	ND	mg/L	3E-05						
Method: E200.8							Batch: C_19720		
Sample ID: C08081244-005CMS4	Post Digestion Spike		Run: SUB-C107379				09/11/08 02:12		
Uranium	0.0135	mg/L	0.00030	101	70	130			
Sample ID: C08081244-005CMSD4	Post Digestion Spike Duplicate		Run: SUB-C107379				09/11/08 02:16		
Uranium	0.0135	mg/L	0.00030	101	70	130	0.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R106973		
Sample ID: LRB	Method Blank		Run: SUB-C106973				09/03/08 13:38		
Antimony	0.0001	mg/L	4E-06						
Arsenic	ND	mg/L	4E-05						
Beryllium	ND	mg/L	4E-06						
Cadmium	ND	mg/L	3E-06						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Mercury	ND	mg/L	1E-05						
Selenium	ND	mg/L	0.0001						
Thallium	ND	mg/L	4E-06						
Uranium	3E-06	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C106973				09/03/08 13:45		
Antimony	0.0553	mg/L	0.0010	110	85	115			
Arsenic	0.0552	mg/L	0.0010	110	85	115			
Beryllium	0.0539	mg/L	0.0010	108	85	115			
Cadmium	0.0553	mg/L	0.0010	111	85	115			
Copper	0.0559	mg/L	0.0010	112	85	115			
Lead	0.0547	mg/L	0.0010	109	85	115			
Mercury	0.00540	mg/L	0.0010	108	85	115			
Selenium	0.0559	mg/L	0.0010	112	85	115			
Thallium	0.0518	mg/L	0.0010	104	85	115			
Uranium	0.0530	mg/L	0.00030	106	85	115			
Vanadium	0.0540	mg/L	0.0010	108	85	115			
Sample ID: R08080332-009D	Post Digestion Spike		Run: SUB-C106973				09/04/08 05:22		
Antimony	0.0539	mg/L	0.050	108	70	130			
Arsenic	0.0549	mg/L	0.0010	110	70	130			
Beryllium	0.0565	mg/L	0.010	113	70	130			
Cadmium	0.0545	mg/L	0.010	109	70	130			
Copper	0.0544	mg/L	0.010	109	70	130			
Lead	0.0515	mg/L	0.050	103	70	130			
Mercury	0.00532	mg/L	0.0010	106	70	130			
Selenium	0.0590	mg/L	0.0010	118	70	130			
Thallium	0.0508	mg/L	0.10	102	70	130			
Uranium	0.0467	mg/L	0.00030	93	70	130			
Vanadium	0.0528	mg/L	0.10	106	70	130			
Sample ID: R08080332-009D	Post Digestion Spike Duplicate		Run: SUB-C106973				09/04/08 05:57		
Antimony	0.0538	mg/L	0.050	108	70	130	0.1	20	
Arsenic	0.0544	mg/L	0.0010	109	70	130	0.9	20	
Beryllium	0.0582	mg/L	0.010	116	70	130	2.9	20	
Cadmium	0.0546	mg/L	0.010	109	70	130	0.3	20	
Copper	0.0549	mg/L	0.010	110	70	130	1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R106973		
Sample ID: R08080332-009D	Post Digestion Spike Duplicate			Run: SUB-C106973			09/04/08 05:57		
Lead	0.0516	mg/L	0.050	103	70	130	0.1	20	
Mercury	0.00537	mg/L	0.0010	107	70	130	0.9	20	
Selenium	0.0605	mg/L	0.0010	121	70	130	2.5	20	
Thallium	0.0507	mg/L	0.10	101	70	130	0	20	
Uranium	0.0467	mg/L	0.00030	93	70	130	0	20	
Vanadium	0.0535	mg/L	0.10	107	70	130	0	20	
Method: E200.8							Batch: C_R107055		
Sample ID: LRB	Method Blank			Run: SUB-C107055			09/04/08 14:04		
Silver	2E-05	mg/L	7E-06						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C107055			09/04/08 14:11		
Silver	0.0202	mg/L	0.0010	101	85	115			
Sample ID: R08080332-009D	Post Digestion Spike			Run: SUB-C107055			09/04/08 19:03		
Silver	0.0177	mg/L	0.010	89	70	130			
Thorium 232	0.0496	mg/L	0.0010	99	70	130			
Sample ID: R08080332-009D	Post Digestion Spike Duplicate			Run: SUB-C107055			09/04/08 19:10		
Silver	0.0169	mg/L	0.010	85	70	130	4.8	20	
Thorium 232	0.0504	mg/L	0.0010	101	70	130	1.7	20	
Sample ID: C08080940-001BMS4	Post Digestion Spike			Run: SUB-C107055			09/05/08 02:45		
Silver	0.0152	mg/L	0.010	76	70	130			
Thorium 232	0.0541	mg/L	0.0010	108	70	130			
Sample ID: C08080940-001BMSD4	Post Digestion Spike Duplicate			Run: SUB-C107055			09/05/08 02:52		
Silver	0.0176	mg/L	0.010	88	70	130	15	20	
Thorium 232	0.0540	mg/L	0.0010	108	70	130	0.2	20	
Sample ID: LRB	Method Blank			Run: SUB-C107055			09/04/08 14:04		
Thorium 232	ND	mg/L	9E-06						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C107055			09/04/08 14:11		
Thorium 232	0.0486	mg/L	0.0010	97	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R109913		
Sample ID: LRB	Method Blank					Run: SUB-C109913			10/27/08 12:28
Arsenic	ND	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank					Run: SUB-C109913			10/27/08 12:33
Arsenic	0.0513	mg/L	0.0010	103	85	115			
Sample ID: C08090704-001DMS4	Post Digestion Spike					Run: SUB-C109913			10/27/08 13:58
Arsenic	0.0525	mg/L	0.0010	101	70	130			
Sample ID: C08090704-001DMSD4	Post Digestion Spike Duplicate					Run: SUB-C109913			10/27/08 14:04
Arsenic	0.0521	mg/L	0.0010	100	70	130	0.7	20	
Method: E200.8							Batch: C_R109991		
Sample ID: LRB	Method Blank					Run: SUB-C109991			10/28/08 12:02
Arsenic	0.0001	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank					Run: SUB-C109991			10/28/08 12:08
Arsenic	0.0516	mg/L	0.0010	103	85	115			
Sample ID: C08100151-026BMS4	Post Digestion Spike					Run: SUB-C109991			10/28/08 19:35
Arsenic	0.502	mg/L	0.0010	100	70	130			
Sample ID: C08100151-026BMSD4	Post Digestion Spike Duplicate					Run: SUB-C109991			10/28/08 19:40
Arsenic	0.496	mg/L	0.0010	99	70	130	1.1	20	
Method: E245.1							Batch: B_34292		
Sample ID: MB-34292	Method Blank					Run: SUB-B116583			08/28/08 07:30
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-34292	Laboratory Fortified Blank					Run: SUB-B116583			08/28/08 07:35
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: B08082232-005FMS	Sample Matrix Spike					Run: SUB-B116583			08/28/08 08:41
Mercury	0.0017	mg/L	0.0010	87	70	130			
Sample ID: B08082232-005FMSD	Sample Matrix Spike Duplicate					Run: SUB-B116583			08/28/08 08:44
Mercury	0.0020	mg/L	0.0010	99	70	130	12	30	
Sample ID: R08080295-006F	Sample Matrix Spike					Run: SUB-B116583			08/28/08 07:40
Mercury	0.0022	mg/L	0.0010	111	70	130			
Sample ID: R08080295-006F	Sample Matrix Spike Duplicate					Run: SUB-B116583			08/28/08 07:42
Mercury	0.0024	mg/L	0.0010	118	70	130	5.7	30	

### Qualifiers:

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ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: B_34345		
Sample ID: MB-34345	Method Blank				Run: SUB-B116687		08/29/08 13:08		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-34345	Laboratory Fortified Blank				Run: SUB-B116687		08/29/08 13:10		
Mercury	0.0019	mg/L	0.0010	97	85	115			
Sample ID: B08082181-001BMS	Sample Matrix Spike				Run: SUB-B116687		08/29/08 13:14		
Mercury	0.0019	mg/L	0.00020	97	70	130			
Sample ID: B08082181-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-B116687		08/29/08 13:17		
Mercury	0.0018	mg/L	0.00020	90	70	130	6.9	10	
Method: E245.1							Analytical Run: SUB-B116583		
Sample ID: QCS	Initial Calibration Verification Standard						08/28/08 07:20		
Mercury	0.0020	mg/L	0.0010	98	90	110			
Method: E245.1							Analytical Run: SUB-B116687		
Sample ID: QCS	Initial Calibration Verification Standard						08/29/08 12:51		
Mercury	0.0019	mg/L	0.0010	96	90	110			

### Qualifiers:

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ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R36997		
Sample ID: LFB0808223153-3	Laboratory Fortified Blank			Run: DIONEX_080822A			08/22/08 18:41		
Chloride	4.87	mg/L	0.50	97	90	110			
Fluoride	2.08	mg/L	0.10	104	90	110			
Nitrogen, Nitrate as N	2.39	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
Sample ID: LFB0808223153-4	Laboratory Fortified Blank			Run: DIONEX_080822A			08/22/08 18:58		
Chloride	4.87	mg/L	0.50	97	90	110			
Fluoride	2.07	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.37	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
Sample ID: R08080332-001AMS	Sample Matrix Spike			Run: DIONEX_080822A			08/22/08 19:31		
Chloride	252	mg/L	5.4	90	80	120			
Fluoride	103	mg/L	0.56	98	80	120			
Nitrogen, Nitrate as N	118	mg/L	1.3	94	80	120			
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120			
Sulfate	1100	mg/L	3.4	90	80	120			
Sample ID: R08080332-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080822A			08/22/08 19:47		
Chloride	256	mg/L	5.4	91	80	120	1.7	10	
Fluoride	105	mg/L	0.56	99	80	120	1.6	10	
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120	1.3	10	
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120	1.5	10	
Sulfate	1110	mg/L	3.4	92	80	120	0.9	10	
Sample ID: R08080332-005AMS	Sample Matrix Spike			Run: DIONEX_080822A			08/22/08 22:48		
Chloride	256	mg/L	5.4	92	80	120			
Fluoride	105	mg/L	0.56	101	80	120			
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120			
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120			
Sulfate	1170	mg/L	3.4	94	80	120			
Sample ID: R08080332-005AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080822A			08/22/08 23:04		
Chloride	256	mg/L	5.4	91	80	120	0.3	10	
Fluoride	105	mg/L	0.56	101	80	120	0	10	
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120	0.1	10	
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120	0.2	10	
Sulfate	1170	mg/L	3.4	93	80	120	0.6	10	
Sample ID: R08080332-009AMS	Sample Matrix Spike			Run: DIONEX_080822A			08/23/08 02:05		
Chloride	4.92	mg/L	0.50	91	80	120			
Fluoride	1.91	mg/L	0.10	90	80	120			

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R36997		
Sample ID: R08080332-009AMS	Sample Matrix Spike				Run: DIONEX_080822A		08/23/08 02:05		
Nitrogen, Nitrate as N	2.40	mg/L	0.10	96	80	120			
Nitrogen, Nitrite as N	2.49	mg/L	0.10	100	80	120			
Sulfate	14.7	mg/L	1.0	90	80	120			
Sample ID: R08080332-009AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_080822A		08/23/08 02:21		
Chloride	4.91	mg/L	0.50	91	80	120	0.2	10	
Fluoride	1.90	mg/L	0.10	89	80	120	0.5	10	
Nitrogen, Nitrate as N	2.39	mg/L	0.10	96	80	120	0.4	10	
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	80	120	0.4	10	
Sulfate	14.7	mg/L	1.0	90	80	120	0.2	10	
Method: E900.0							Batch: C_GrAB-0526		
Sample ID: MB-GrAB-0526	Method Blank				Run: SUB-C108200		09/25/08 02:03		
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: UNAT-GrAB-0526	Laboratory Control Sample				Run: SUB-C108200		09/25/08 02:03		
Gross Alpha	140	pCi/L		102	70	130			
Sample ID: R08080332-009H	Sample Matrix Spike				Run: SUB-C108200		09/25/08 02:03		
Gross Alpha	120	pCi/L		90	70	130			
Sample ID: R08080332-009H	Sample Matrix Spike Duplicate				Run: SUB-C108200		09/25/08 02:03		
Gross Alpha	150	pCi/L		110	70	130	20	15.7	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: Cs137-GrAB-0526	Laboratory Control Sample				Run: SUB-C108200		09/25/08 02:03		
Gross Beta	93	pCi/L		101	70	130			
Sample ID: R08080332-009H	Sample Matrix Spike				Run: SUB-C108200		09/25/08 14:09		
Gross Beta	73	pCi/L		82	70	130			
Sample ID: R08080332-009H	Sample Matrix Spike Duplicate				Run: SUB-C108200		09/25/08 14:09		
Gross Beta	97	pCi/L		107	70	130	28	16.3	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R106893		
Sample ID: R08080332-007H	Sample Duplicate					Run: SUB-C106893		08/29/08 12:32	
Gross Gamma	ND	pCi/L					0	30	U
Sample ID: R08080332-009H	Sample Duplicate					Run: SUB-C106893		08/29/08 12:32	
Bismuth 214	110	pCi/L	20				38	30	R
Sample ID: MB-R106893	Method Blank					Run: SUB-C106893		08/29/08 12:32	
Gross Gamma	ND	pCi/L							U
Sample ID: LCS-R106893	Laboratory Control Sample					Run: SUB-C106893		08/29/08 12:32	
Cesium 137	39000	pCi/L	20	95	70	130			
Cobalt 60	49000	pCi/L	20	99	70	130			
Method: E903.0							Batch: C_19720		
Sample ID: C08080968-001FMS	Sample Matrix Spike					Run: SUB-C107779		09/17/08 15:43	
Radium 226	140	pCi/L		96	70	130			
Sample ID: C08080968-001FMSD	Sample Matrix Spike Duplicate					Run: SUB-C107779		09/17/08 15:43	
Radium 226	150	pCi/L		98	70	130	6.9	25.2	
Sample ID: LCS-19720	Laboratory Control Sample					Run: SUB-C107779		09/17/08 18:56	
Radium 226	74	pCi/L		96	70	130			
Sample ID: MB-19720	Method Blank					Run: SUB-C107779		09/17/08 18:56	
Radium 226	-0.4	pCi/L							U
Method: E903.0							Batch: C_RA226-3072		
Sample ID: C08081143-001EMS	Sample Matrix Spike					Run: SUB-C108014		09/21/08 10:44	
Radium 226	15	pCi/L		94	70	130			
Sample ID: C08081143-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C108014		09/21/08 12:14	
Radium 226	14	pCi/L		84	70	130	10	25.1	
Sample ID: MB-RA226-3072	Method Blank					Run: SUB-C108014		09/21/08 22:47	
Radium 226	-0.04	pCi/L							U
Sample ID: LCS-RA226-3072	Laboratory Control Sample					Run: SUB-C108014		09/22/08 00:18	
Radium 226	7.7	pCi/L		98	70	130			

### Qualifiers:

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U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/14/08

Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R108747		
Sample ID: R08080332-001I	Sample Matrix Spike				Run: SUB-C108747			09/28/08 13:33	
Thorium 230	21.4	pCi/L	0.20	95	70	130			
Sample ID: R08080332-001I	Sample Matrix Spike Duplicate				Run: SUB-C108747			09/28/08 13:33	
Thorium 230	25.8	pCi/L	0.20	111	70	130	19	40.7	
Sample ID: LCS-19720	Laboratory Control Sample				Run: SUB-C108747			09/29/08 13:22	
Thorium 230	47.0	pCi/L	0.20	102	70	130			
Sample ID: MB-19720	Method Blank				Run: SUB-C108747			09/29/08 13:22	
Thorium 230	0.6	pCi/L							U
Method: E907.0							Batch: C_RA-TH-ISO-0634		
Sample ID: LCS-RA-TH-ISO-0634	Laboratory Control Sample				Run: SUB-C108243			09/21/08 12:59	
Thorium 230	5.53	pCi/L	0.20	91	70	130			
Sample ID: R08080332-004H	Sample Matrix Spike				Run: SUB-C108243			09/21/08 12:59	
Thorium 230	11.2	pCi/L	0.20	92	70	130			
Sample ID: R08080332-004H	Sample Matrix Spike Duplicate				Run: SUB-C108243			09/21/08 12:59	
Thorium 230	10.8	pCi/L	0.20	88	70	130	4.4	40.6	
Sample ID: MB-RA-TH-ISO-0634	Method Blank				Run: SUB-C108243			09/22/08 08:48	
Thorium 230	0.01	pCi/L							U
Method: E909.0M							Batch: C_19720		
Sample ID: R08080332-009I	Sample Matrix Spike				Run: SUB-C108784			09/12/08 10:37	
Lead 210	240	pCi/L		89	70	130			
Sample ID: R08080332-009I	Sample Matrix Spike Duplicate				Run: SUB-C108784			09/12/08 10:37	
Lead 210	300	pCi/L		111	70	130	23	30	
Sample ID: MB-R108784	Method Blank				Run: SUB-C108784			09/12/08 10:37	
Lead 210	-6	pCi/L							U
Sample ID: LCS-R108784	Laboratory Control Sample				Run: SUB-C108784			09/12/08 10:37	
Lead 210	100	pCi/L		92	70	130			

### Qualifiers:

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 11/14/08  
Work Order: R08080332

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R107511		
Sample ID: R08080332-005H	Sample Matrix Spike				Run: SUB-C107511			09/04/08 07:39	
Lead 210	410	pCi/L		70	70	130			
Sample ID: R08080332-005H	Sample Matrix Spike Duplicate				Run: SUB-C107511			09/04/08 07:39	
Lead 210	450	pCi/L		77	70	130	9.5	30	
Sample ID: MB-R107511	Method Blank				Run: SUB-C107511			09/04/08 07:39	
Lead 210	-3	pCi/L							U
Sample ID: LCS-R107511	Laboratory Control Sample				Run: SUB-C107511			09/04/08 07:39	
Lead 210	86	pCi/L		76	70	130			
Method: RMO-3008							Batch: C_19720		
Sample ID: C08081029-005IMS	Sample Matrix Spike				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	36	pCi/L	1.0	83	70	130			
Sample ID: C08081029-005IMSD	Sample Matrix Spike Duplicate				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	48	pCi/L	1.0	111	70	130	29	30	
Sample ID: LCS-R108077	Laboratory Control Sample				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	81	pCi/L	1.0	95	70	130			
Sample ID: MB-R108077	Method Blank				Run: SUB-C108077			09/15/08 14:35	
Polonium 210	0.9	pCi/L							U
Method: RMO-3008							Batch: C_R107620		
Sample ID: C08081029-005HMS	Sample Matrix Spike				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	79	pCi/L	1.0	93	70	130			
Sample ID: C08081029-005HMSD	Sample Matrix Spike Duplicate				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	82	pCi/L	1.0	97	70	130	3.7	30	
Sample ID: LCS-R107620	Laboratory Control Sample				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	44	pCi/L	1.0	102	70	130			
Sample ID: MB-R107620	Method Blank				Run: SUB-C107620			09/03/08 19:15	
Polonium 210	ND	pCi/L							U

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ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>Power fed DE</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address:		Contact Name: <b>Cory Foreman</b>		Phone/Fax: <b>respec.com</b>	Email: <b>Eric.Krantz</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
<b>Special Report/Formats - ELI must be notified prior to sample submittal for the following:</b>					
<input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTW <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1. Dew Burd GW 688		8/20/08	10:07	W	<b>As per Quot</b>
2. Dew Burd GW 680		8/20/08	10:23	W	
3. Dew Burd GW 622		8/20/08	12:59	W	
4. Dew Burd GW 615		8/20/08	13:26	W	
5. Dew Burd GW 695		8/20/08	14:20	W	
6. Dew Burd GW 696		8/20/08	15:10	W	
7. Dew Burd GW 694		8/20/08	15:45	W	
8. Dew Burd GW 697		8/20/08	17:10	W	
9. Dew Burd GW 698		8/20/08	17:25	W	
10. Dew Burd GW 601		8/20/08	17:25	W	
Custody Record Signature: <b>Eric Krantz</b> Date/Time: <b>8/20/08 17:25</b>		Received by (print): <b>Eric Krantz</b> Date/Time: <b>8/20/08 17:25</b>		Received by Laboratory: <b>Eric Krantz</b> Date/Time: <b>8/20/08 17:25</b>	
Sample Disposal: Return to Client: _____		Lab Disposal: _____		Signature: <b>Eric Krantz</b> Date/Time: <b>8/20/08 17:25</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in your analytical report. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

November 20, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08090314

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 5 samples for RESPEC Inc on 9/23/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08090314-001	DewBurd GW680	09/22/08 11:18	09/23/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08090314-002	DewBurd GW680	09/22/08 11:22	09/23/08	Aqueous	Same As Above
R08090314-003	DewBurd GW698	09/22/08 13:05	09/23/08	Aqueous	Same As Above
R08090314-004	DewBurd GW622	09/22/08 16:00	09/23/08	Aqueous	Same As Above
R08090314-005	DewBurd GW615	09/22/08 16:30	09/23/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:



Linda Larson

Rapid City - Project Manager



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08090314

Date: 20-Nov-08

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08090975

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08090975



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-001  
**Client Sample ID:** DewBurd GW680

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 11:18  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	252	mg/L		5		1	A2320 B	09/24/08 09:03/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	09/24/08 09:03/mb
Bicarbonate as HCO <sub>3</sub>	307	mg/L		5		1	A2320 B	09/24/08 09:03/mb
Calcium	402	mg/L		0.5		2	E200.7	09/30/08 17:04/eli-c
Chloride	12	mg/L		1		1	E300.0	09/24/08 22:12/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/24/08 22:12/jmh
Magnesium	128	mg/L		0.5		2	E200.7	09/30/08 17:04/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	09/23/08 12:48/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/24/08 22:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/24/08 22:12/jmh
Potassium	19.4	mg/L		0.5		2	E200.7	09/30/08 17:04/eli-c
Sodium	144	mg/L		2		2	E200.7	09/30/08 17:04/eli-c
Sulfate	1400	mg/L	D	3		50	E300.0	09/24/08 21:55/jmh
Silica	8.7	mg/L		0.2		2	E200.7	09/30/08 17:04/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2440	umhos/cm		5.0		1	A2510 B	09/25/08 10:07/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.24	s.u.		0.01		1	A4500-H B	09/25/08 11:08/tb
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	11/12/08 08:56/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	09/23/08 15:43/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/30/08 17:04/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	09/30/08 19:04/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 17:04/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/30/08 17:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/30/08 19:04/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 17:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/30/08 19:04/eli-c
Iron	0.24	mg/L		0.03		2	E200.7	09/30/08 17:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/30/08 19:04/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/30/08 17:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/30/08 19:04/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 17:04/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 17:04/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/30/08 19:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/30/08 19:04/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-001  
**Client Sample ID:** DewBurd GW680

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 11:18  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0191	mg/L		0.0003		1	E200.8	09/30/08 19:04/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/30/08 17:04/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 17:04/eli-c
METALS - SUSPENDED								
Uranium	0.0003	mg/L		0.0003		1	E200.8	09/30/08 19:21/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:06/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5470	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha precision (±)	73.7	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha MDC	7.4	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta	2290	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta precision (±)	24.9	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta MDC	11.0	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Lead 210	14.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.6	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	10/01/08 14:38/eli-c
Polonium 210 precision (±)	0.89	pCi/L				1	RMO-3008	10/01/08 14:38/eli-c
Radium 226	1440	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Radium 226 precision (±)	8.2	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Thorium 230	ND	pCi/L	U	0.2		1	E907.0	10/20/08 15:17/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	10/20/08 15:17/eli-c
Gross Gamma	820	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	74	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.5	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.54	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.56	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	5.1	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-001  
**Client Sample ID:** DewBurd GW680

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 11:18  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	72700	pCi/L		100		1	D5072-92	09/24/08 12:00/eli-c
Radon 222 precision (±)	305	pCi/L				1	D5072-92	09/24/08 12:00/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	10/02/08 18:05/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/03/08 12:54/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 22:20/eli-c
Beryllium	ND	mg/L	D	0.002		10	E200.8	10/02/08 18:05/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/30/08 22:20/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 22:20/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 22:20/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/30/08 22:20/eli-c
Iron	0.33	mg/L		0.03		2	E200.7	09/30/08 22:20/eli-c
Lead	ND	mg/L		0.001		10	E200.8	10/02/08 18:05/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/30/08 22:20/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 10:23/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 22:20/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 22:20/eli-c
Selenium	ND	mg/L	D	0.005		10	E200.8	10/02/08 18:05/eli-c
Silver	ND	mg/L		0.005		10	E200.8	10/02/08 18:05/eli-c
Strontium	7.3	mg/L		0.1		2	E200.7	09/30/08 22:20/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	10/02/08 18:05/eli-c
Uranium	0.0177	mg/L	D	0.0005		10	E200.8	10/02/08 18:05/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 22:20/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.94	%				1	A1030 E	11/13/08 00:00/ADM
Anions	34.6	meq/L				1	A1030 E	11/13/08 00:00/ADM
Cations	37.4	meq/L				1	A1030 E	11/13/08 00:00/ADM
Solids, Total Dissolved Calculated	2280	mg/L				1	A1030 E	11/13/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	11/13/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-002  
Client Sample ID: DewBurd GW680

Report Date: 11/20/08  
Collection Date: 09/22/08 11:22  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	252	mg/L		5		1	A2320 B	09/24/08 09:06/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	09/24/08 09:06/mb
Bicarbonate as HCO <sub>3</sub>	307	mg/L		5		1	A2320 B	09/24/08 09:06/mb
Calcium	396	mg/L		0.5		2	E200.7	09/30/08 17:08/eli-c
Chloride	12	mg/L		1		1	E300.0	09/24/08 22:44/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/24/08 22:44/jmh
Magnesium	128	mg/L		0.5		2	E200.7	09/30/08 17:08/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	09/23/08 12:49/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/24/08 22:44/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/24/08 22:44/jmh
Potassium	19.2	mg/L		0.5		2	E200.7	09/30/08 17:08/eli-c
Sodium	142	mg/L		2		2	E200.7	09/30/08 17:08/eli-c
Sulfate	1400	mg/L	D	3		50	E300.0	09/24/08 22:28/jmh
Silica	8.6	mg/L		0.2		2	E200.7	09/30/08 17:08/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2440	umhos/cm		5.0		1	A2510 B	09/25/08 10:09/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.25	s.u.		0.01		1	A4500-H B	09/25/08 11:10/tb
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	11/12/08 08:56/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	09/23/08 15:43/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/30/08 17:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	09/30/08 19:11/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 17:08/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/30/08 17:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/30/08 19:11/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 17:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/30/08 19:11/eli-c
Iron	0.23	mg/L		0.03		2	E200.7	09/30/08 17:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/30/08 19:11/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/30/08 17:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/30/08 19:11/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 17:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 17:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/30/08 19:11/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/30/08 19:11/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-002  
Client Sample ID: DewBurd GW680

Report Date: 11/20/08  
Collection Date: 09/22/08 11:22  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0192	mg/L		0.0003		1	E200.8	09/30/08 19:11/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/30/08 17:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 17:08/eli-c
METALS - SUSPENDED								
Uranium	0.0004	mg/L		0.0003		1	E200.8	09/30/08 19:25/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:18/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5620	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha precision (±)	74.7	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha MDC	7.4	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta	2260	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta precision (±)	24.7	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta MDC	11.0	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Lead 210	15.7	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.6	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	10/01/08 14:38/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	10/01/08 14:38/eli-c
Radium 226	1420	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Radium 226 precision (±)	8.0	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Thorium 230	ND	pCi/L	U	0.2		1	E907.0	10/20/08 15:17/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	10/20/08 15:17/eli-c
Gross Gamma	890	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	75	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	2.7	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.93	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.73	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	5.9	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	10/09/08 07:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-002  
Client Sample ID: DewBurd GW680

Report Date: 11/20/08  
Collection Date: 09/22/08 11:22  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.5	pCi/L		0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	70400	pCi/L		100		1	D5072-92	09/24/08 12:00/eli-c
Radon 222 precision (±)	300	pCi/L				1	D5072-92	09/24/08 12:00/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	10/02/08 18:12/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/03/08 13:01/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 22:24/eli-c
Beryllium	ND	mg/L	D	0.002		10	E200.8	10/02/08 18:12/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	09/30/08 22:24/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 22:24/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 22:24/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/30/08 22:24/eli-c
Iron	0.34	mg/L		0.03		2	E200.7	09/30/08 22:24/eli-c
Lead	ND	mg/L		0.001		10	E200.8	10/02/08 18:12/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	09/30/08 22:24/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 10:30/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 22:24/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 22:24/eli-c
Selenium	ND	mg/L	D	0.005		10	E200.8	10/02/08 18:12/eli-c
Silver	ND	mg/L		0.005		10	E200.8	10/02/08 18:12/eli-c
Strontium	7.4	mg/L		0.1		2	E200.7	09/30/08 22:24/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	10/02/08 18:12/eli-c
Uranium	0.0179	mg/L		0.0005		10	E200.8	10/02/08 18:12/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 22:24/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.43	%				1	A1030 E	11/13/08 00:00/ADM
Anions	34.5	meq/L				1	A1030 E	11/13/08 00:00/ADM
Cations	37.0	meq/L				1	A1030 E	11/13/08 00:00/ADM
Solids, Total Dissolved Calculated	2270	mg/L				1	A1030 E	11/13/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	11/13/08 00:00/ADM

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 13:05  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	122	mg/L		5		1	A2320 B	09/24/08 09:09/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	09/24/08 09:09/mb
Bicarbonate as HCO3	149	mg/L		5		1	A2320 B	09/24/08 09:09/mb
Calcium	370	mg/L		0.5		2	E200.7	09/30/08 17:12/eli-c
Chloride	9	mg/L		1		1	E300.0	09/24/08 23:17/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/24/08 23:17/jmh
Magnesium	133	mg/L		0.5		2	E200.7	09/30/08 17:12/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	09/23/08 12:50/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/24/08 23:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/24/08 23:17/jmh
Potassium	14.4	mg/L		0.5		2	E200.7	09/30/08 17:12/eli-c
Sodium	83	mg/L		2		2	E200.7	09/30/08 17:12/eli-c
Sulfate	1470	mg/L	D	3		50	E300.0	09/24/08 23:01/jmh
Silica	11.5	mg/L		0.2		2	E200.7	09/30/08 17:12/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2300	umhos/cm		5.0		1	A2510 B	09/25/08 10:11/tb
Oxidation-Reduction Potential	-38.3	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.02	s.u.		0.01		1	A4500-H B	09/25/08 11:11/tb
Sodium Adsorption Ratio (SAR)	0.94	unitless		0.10		1	Calculation	11/12/08 08:56/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	09/23/08 15:44/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/30/08 17:12/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/30/08 19:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 17:12/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 17:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/30/08 19:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 17:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/30/08 19:18/eli-c
Iron	3.87	mg/L		0.03		2	E200.7	09/30/08 17:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/30/08 19:18/eli-c
Manganese	2.41	mg/L		0.01		2	E200.7	09/30/08 17:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/30/08 19:18/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 17:12/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 17:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/30/08 19:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/30/08 19:18/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 13:05  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.103	mg/L		0.0003		1	E200.8	09/30/08 19:18/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/30/08 17:12/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 17:12/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0006	mg/L		0.0003		1	E200.8	09/30/08 19:29/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:20/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	36.3	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha precision (±)	4.3	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta	19.8	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	10/12/08 05:27/eli-c
Lead 210	2.2	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.4	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	10/01/08 14:38/eli-c
Polonium 210 precision (±)	0.55	pCi/L				1	RMO-3008	10/01/08 14:38/eli-c
Radium 226	410	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Radium 226 precision (±)	4.4	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Thorium 230	ND	pCi/L	U	0.2		1	E907.0	10/20/08 15:17/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/20/08 15:17/eli-c
Gross Gamma	240	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	50	pCi/L				1	E901.1	10/13/08 15:50/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.5	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.059	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 13:05  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	29500	pCi/L		100		1	D5072-92	09/24/08 12:00/eli-c
Radon 222 precision (±)	196	pCi/L				1	D5072-92	09/24/08 12:00/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		10	E200.8	10/02/08 18:19/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/03/08 13:35/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 22:28/eli-c
Beryllium	ND	mg/L	D	0.002		10	E200.8	10/02/08 18:19/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 22:28/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 22:28/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 22:28/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/30/08 22:28/eli-c
Iron	5.15	mg/L		0.03		2	E200.7	09/30/08 22:28/eli-c
Lead	ND	mg/L		0.001		10	E200.8	10/02/08 18:19/eli-c
Manganese	2.57	mg/L		0.01		2	E200.7	09/30/08 22:28/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 10:32/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 22:28/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 22:28/eli-c
Selenium	ND	mg/L	D	0.005		10	E200.8	10/02/08 18:19/eli-c
Silver	ND	mg/L		0.005		10	E200.8	10/02/08 18:19/eli-c
Strontium	4.9	mg/L		0.1		2	E200.7	09/30/08 22:28/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	10/02/08 18:19/eli-c
Uranium	0.102	mg/L		0.0005		10	E200.8	10/02/08 18:19/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 22:28/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.650	%				1	A1030 E	11/13/08 00:00/ADM
Anions	33.2	meq/L				1	A1030 E	11/13/08 00:00/ADM
Cations	33.7	meq/L				1	A1030 E	11/13/08 00:00/ADM
Solids, Total Dissolved Calculated	2180	mg/L				1	A1030 E	11/13/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	11/13/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-004  
**Client Sample ID:** DewBurd GW622

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 16:00  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	182	mg/L		5		1	A2320 B	09/24/08 09:10/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	09/24/08 09:10/mb
Bicarbonate as HCO3	222	mg/L		5		1	A2320 B	09/24/08 09:10/mb
Calcium	91.9	mg/L		0.5		2	E200.7	09/30/08 17:16/eli-c
Chloride	10	mg/L		1		1	E300.0	09/25/08 00:56/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	09/25/08 00:56/jmh
Magnesium	31.8	mg/L		0.5		2	E200.7	09/30/08 17:16/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/23/08 12:53/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 00:56/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 00:56/jmh
Potassium	10.3	mg/L		0.5		2	E200.7	09/30/08 17:16/eli-c
Sodium	180	mg/L		2		2	E200.7	09/30/08 17:16/eli-c
Sulfate	528	mg/L	D	3		50	E300.0	09/25/08 00:06/jmh
Silica	8.9	mg/L		0.2		2	E200.7	09/30/08 17:16/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1270	umhos/cm		5.0		1	A2510 B	09/25/08 10:12/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.78	s.u.		0.01		1	A4500-H B	09/25/08 11:13/tb
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.10		1	Calculation	11/12/08 08:56/ADM
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	09/23/08 15:45/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	09/30/08 17:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/30/08 19:51/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 17:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 17:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/30/08 19:51/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 17:16/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/30/08 19:51/eli-c
Iron	0.03	mg/L		0.03		2	E200.7	09/30/08 17:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/30/08 19:51/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	09/30/08 17:16/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/30/08 19:51/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 17:16/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 17:16/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/30/08 19:51/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/30/08 19:51/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-004  
Client Sample ID: DewBurd GW622

Report Date: 11/20/08  
Collection Date: 09/22/08 16:00  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0055	mg/L		0.0003		1	E200.8	09/30/08 19:51/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/30/08 17:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 17:16/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:33/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:22/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1470	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Alpha precision (±)	37.3	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Alpha MDC	7.0	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta	678	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta precision (±)	14.6	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta MDC	11.0	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Lead 210	-1	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	-0.1	pCi/L	U	1.0		1	RMO-3008	10/01/08 14:38/eli-c
Polonium 210 precision (±)	0.44	pCi/L				1	RMO-3008	10/01/08 14:38/eli-c
Radium 226	3.0	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	10/14/08 11:05/eli-c
Thorium 230	ND	pCi/L	U	0.2		1	E907.0	10/20/08 15:17/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	10/20/08 15:17/eli-c
Gross Gamma	0.0	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.2	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.39	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.47	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090314-004  
**Client Sample ID:** DewBurd GW622

**Report Date:** 11/20/08  
**Collection Date:** 09/22/08 16:00  
**Date Received:** 09/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	992	pCi/L		100		1	D5072-92	09/24/08 12:00/eli-c
Radon 222 precision (±)	54.5	pCi/L				1	D5072-92	09/24/08 12:00/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	10/02/08 18:26/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/03/08 13:42/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 22:32/eli-c
Beryllium	ND	mg/L	D	0.002		10	E200.8	10/02/08 18:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 22:32/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 22:32/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 22:32/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/30/08 22:32/eli-c
Iron	1.18	mg/L		0.03		2	E200.7	09/30/08 22:32/eli-c
Lead	ND	mg/L		0.001		10	E200.8	10/02/08 18:26/eli-c
Manganese	0.19	mg/L		0.01		2	E200.7	09/30/08 22:32/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 10:35/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 22:32/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 22:32/eli-c
Selenium	ND	mg/L	D	0.005		10	E200.8	10/02/08 18:26/eli-c
Silver	ND	mg/L		0.005		10	E200.8	10/02/08 18:26/eli-c
Strontium	1.6	mg/L		0.1		2	E200.7	09/30/08 22:32/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	10/02/08 18:26/eli-c
Uranium	0.0050	mg/L		0.0005		10	E200.8	10/02/08 18:26/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 22:32/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.20	%				1	A1030 E	11/13/08 00:00/ADM
Anions	15.0	meq/L				1	A1030 E	11/13/08 00:00/ADM
Cations	15.3	meq/L				1	A1030 E	11/13/08 00:00/ADM
Solids, Total Dissolved Calculated	986	mg/L				1	A1030 E	11/13/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.920					1	A1030 E	11/13/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-005  
Client Sample ID: DewBurd GW615

Report Date: 11/20/08  
Collection Date: 09/22/08 16:30  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	138	mg/L		5		1	A2320 B	09/24/08 11:53/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	09/24/08 11:53/mb
Bicarbonate as HCO <sub>3</sub>	168	mg/L		5		1	A2320 B	09/24/08 11:53/mb
Calcium	75.3	mg/L		0.5		2	E200.7	09/30/08 17:20/eli-c
Chloride	5	mg/L		1		1	E300.0	09/25/08 01:29/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	09/25/08 01:29/jmh
Magnesium	21.8	mg/L		0.5		2	E200.7	09/30/08 17:20/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	09/23/08 12:57/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 01:29/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 01:29/jmh
Potassium	8.9	mg/L		0.5		2	E200.7	09/30/08 17:20/eli-c
Sodium	136	mg/L		2		2	E200.7	09/30/08 17:20/eli-c
Sulfate	421	mg/L	D	3		50	E300.0	09/25/08 01:12/jmh
Silica	9.1	mg/L		0.2		2	E200.7	09/30/08 17:20/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1010	umhos/cm		5.0		1	A2510 B	09/25/08 10:14/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.49	s.u.		0.01		1	A4500-H B	09/25/08 11:15/tb
Sodium Adsorption Ratio (SAR)	3.5	unitless		0.10		1	Calculation	11/12/08 08:56/ADM
Solids, Total Dissolved TDS @ 180 C	670	mg/L		5		1	A2540 C	09/23/08 15:45/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	09/30/08 17:20/eli-c
Arsenic	0.020	mg/L		0.001		1	E200.8	09/30/08 19:58/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 17:20/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 17:20/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 17:20/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 17:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/30/08 19:58/eli-c
Iron	0.95	mg/L		0.03		2	E200.7	09/30/08 17:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/30/08 19:58/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/30/08 17:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/30/08 19:58/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 17:20/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 17:20/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:52/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/30/08 19:58/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/30/08 19:58/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-005  
Client Sample ID: DewBurd GW615

Report Date: 11/20/08  
Collection Date: 09/22/08 16:30  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0026	mg/L		0.0003		1	E200.8	09/30/08 19:58/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	09/30/08 17:20/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 17:20/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:37/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:24/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	21.5	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Alpha precision (±)	3.1	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Alpha MDC	2.5	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta	9.9	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Gross Beta MDC	3.5	pCi/L				1	E900.0	10/12/08 05:28/eli-c
Lead 210	-1	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	2.0	pCi/L				1	E903.0	10/14/08 12:40/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/14/08 12:40/eli-c
Thorium 230	ND	pCi/L	U	0.2		1	E907.0	10/20/08 15:17/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	10/20/08 15:17/eli-c
Gross Gamma	0.0	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.2	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	-0.040	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.20	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	-0.06	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090314-005  
Client Sample ID: DewBurd GW615

Report Date: 11/20/08  
Collection Date: 09/22/08 16:30  
Date Received: 09/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.7	pCi/L		0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1500	pCi/L		100		1	D5072-92	09/24/08 12:00/eli-c
Radon 222 precision (±)	59.7	pCi/L				1	D5072-92	09/24/08 12:00/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/02/08 22:10/eli-c
Arsenic	0.022	mg/L		0.001		1	E200.8	11/03/08 13:48/eli-c
Barium	ND	mg/L		0.1		2	E200.7	09/30/08 22:36/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/02/08 22:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/30/08 22:36/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	09/30/08 22:36/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	09/30/08 22:36/eli-c
Copper	ND	mg/L		0.01		2	E200.7	09/30/08 22:36/eli-c
Iron	1.40	mg/L		0.03		2	E200.7	09/30/08 22:36/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 22:10/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	09/30/08 22:36/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 10:37/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	09/30/08 22:36/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	09/30/08 22:36/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/02/08 22:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 22:10/eli-c
Strontium	1.4	mg/L		0.1		2	E200.7	09/30/08 22:36/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/02/08 22:10/eli-c
Uranium	0.0023	mg/L		0.0003		1	E200.8	10/02/08 22:10/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	09/30/08 22:36/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.170	%				1	A1030 E	11/13/08 00:00/ADM
Anions	11.7	meq/L				1	A1030 E	11/13/08 00:00/ADM
Cations	11.7	meq/L				1	A1030 E	11/13/08 00:00/ADM
Solids, Total Dissolved Calculated	776	mg/L				1	A1030 E	11/13/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.860					1	A1030 E	11/13/08 00:00/ADM

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B			Batch: 080924A-ALK-SEL-W						
Sample ID: LCS1_080924A	Laboratory Control Sample				Run: PH_COND1-R_080924A			09/24/08 08:54	
Alkalinity, Total as CaCO <sub>3</sub>	984	mg/L	5.0	98	90	110			
Sample ID: MBLK1_080924A	Method Blank				Run: PH_COND1-R_080924A			09/24/08 08:58	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08090323-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080924A			09/24/08 12:16	
Alkalinity, Total as CaCO <sub>3</sub>	210	mg/L	5.0	106	80	120			
Sample ID: R08090323-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080924A			09/24/08 12:20	
Alkalinity, Total as CaCO <sub>3</sub>	196	mg/L	5.0	92	80	120	6.9	10	
Method: A2510 B			Batch: 080925_1_COND-PROBE-W						
Sample ID: LCS_COND-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A			09/25/08 10:00	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A			09/25/08 10:02	
Conductivity @ 25 C	147	umhos/cm	5.0	98	90	110			
Sample ID: LCS2-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A			09/25/08 10:04	
Conductivity @ 25 C	4930	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080925	Method Blank				Run: PH_COND2-R_080925A			09/25/08 10:06	
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C			Batch: 080923A-SLDS-TDS-W						
Sample ID: LCS1_080923A	Laboratory Control Sample				Run: BAL-4-R_080924A			09/23/08 15:35	
Solids, Total Dissolved TDS @ 180 C	190	mg/L	5.0	97	90	110			
Sample ID: MBLK1_080923A	Method Blank				Run: BAL-4-R_080924A			09/23/08 15:36	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08090295-001BMS	Sample Matrix Spike				Run: BAL-4-R_080924A			09/23/08 15:41	
Solids, Total Dissolved TDS @ 180 C	1600	mg/L	5.0	98	80	120			
Sample ID: R08090295-001BMDS	Sample Matrix Spike Duplicate				Run: BAL-4-R_080924A			09/23/08 15:42	
Solids, Total Dissolved TDS @ 180 C	1600	mg/L	5.0	100	80	120	0.3	10	
Sample ID: R08090314-005AMS	Sample Matrix Spike				Run: BAL-4-R_080924A			09/23/08 15:45	
Solids, Total Dissolved TDS @ 180 C	890	mg/L	5.0	112	80	120			
Sample ID: R08090314-005AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080924A			09/23/08 15:46	
Solids, Total Dissolved TDS @ 180 C	880	mg/L	5.0	106	80	120	1.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: 080925-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080925A		09/25/08 00:00		
Oxidation-Reduction Potential	480	mV		101	95	105			
Sample ID: R08090314-005F	Sample Duplicate				Run: PH_COND1-R_080925A		09/25/08 00:00		
Oxidation-Reduction Potential	230	mV					1	10	
Method: A3114 B							Batch: C_SE3114-081002B		
Sample ID: MBLK	Method Blank				Run: SUB-C108588		10/02/08 10:59		
Selenium-IV	ND	mg/L	0.0003						
Sample ID: 288-142-5	Laboratory Control Sample				Run: SUB-C108588		10/02/08 11:03		
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: R08090314-001E	Sample Matrix Spike Duplicate				Run: SUB-C108588		10/02/08 11:10		
Selenium-IV	0.052	mg/L	0.0010	103	85	115	0.5	10	
Sample ID: R08090314-001E	Sample Matrix Spike				Run: SUB-C108588		10/02/08 11:15		
Selenium-IV	0.052	mg/L	0.0010	103	85	115			
Sample ID: R08090356-006E	Sample Matrix Spike				Run: SUB-C108588		10/02/08 11:45		
Selenium-IV	0.053	mg/L	0.0010	106	85	115			
Sample ID: R08090356-006E	Sample Matrix Spike Duplicate				Run: SUB-C108588		10/02/08 11:47		
Selenium-IV	0.053	mg/L	0.0010	106	85	115	0.2	10	
Method: A3114 B							Batch: C_SE3114-081002D		
Sample ID: MBLK	Method Blank				Run: SUB-C108610		10/02/08 15:23		
Selenium	ND	mg/L	0.0003						
Sample ID: 288-142-5	Laboratory Control Sample				Run: SUB-C108610		10/02/08 15:26		
Selenium	0.052	mg/L	0.0010	103	90	110			
Sample ID: R08090314-001E	Sample Matrix Spike				Run: SUB-C108610		10/02/08 15:30		
Selenium	0.054	mg/L	0.0010	108	85	115			
Sample ID: R08090314-001E	Sample Matrix Spike Duplicate				Run: SUB-C108610		10/02/08 15:32		
Selenium	0.053	mg/L	0.0010	106	85	115	1.8	15	
Sample ID: R08090356-006E	Sample Matrix Spike				Run: SUB-C108610		10/02/08 16:16		
Selenium	0.050	mg/L	0.0010	100	85	115			
Sample ID: R08090356-006E	Sample Matrix Spike Duplicate				Run: SUB-C108610		10/02/08 16:19		
Selenium	0.050	mg/L	0.0010	100	85	115	0.7	15	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080925_1_PH-W		
Sample ID: LCS_pH-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925B		09/25/08 11:06		
pH	6.80	s.u.	0.010	99	98.55	101.45			
Method: A4500-NH3 G							Batch: A2008-09-23_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080923A		09/23/08 11:45		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080923A		09/23/08 11:46		
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080923A		09/23/08 11:47		
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	90	110			
Sample ID: R08090291-003BMS	Sample Matrix Spike				Run: TECHAA2-R_080923A		09/23/08 12:41		
Nitrogen, Ammonia as N	0.17	mg/L	0.10	70	80	120			S
Sample ID: R08090291-003BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080923A		09/23/08 12:42		
Nitrogen, Ammonia as N	0.16	mg/L	0.10	63	80	120	10	10	SR
Sample ID: R08090314-004BMS	Sample Matrix Spike				Run: TECHAA2-R_080923A		09/23/08 12:55		
Nitrogen, Ammonia as N	0.30	mg/L	0.10	122	80	120			S
Sample ID: R08090314-004BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080923A		09/23/08 12:56		
Nitrogen, Ammonia as N	0.32	mg/L	0.10	126	80	120	3.6	10	S
Method: D5072-92							Batch: C_R108590		
Sample ID: MB-R108590	Method Blank				Run: SUB-C108590		09/25/08 16:45		
Radon 222	20	pCi/L							U
Sample ID: LCS-R108590	Laboratory Control Sample				Run: SUB-C108590		09/25/08 16:45		
Radon 222	302	pCi/L	100	93	70	130			
Sample ID: R08090314-005G	Sample Duplicate				Run: SUB-C108590		09/24/08 12:00		
Radon 222	1340	pCi/L	100				12	30	

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 11/20/08

Project: Edgemont

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_19902		
Sample ID: MB-19902	Method Blank		Run: SUB-C108485				09/30/08 22:00		
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.01						
Cadmium	ND	mg/L	0.001						
Chromium	ND	mg/L	0.004						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.007						
Nickel	ND	mg/L	0.005						
Strontium	ND	mg/L	0.0004						
Zinc	ND	mg/L	0.001						
Sample ID: LCS3-19902	Laboratory Control Sample		Run: SUB-C108485				09/30/08 22:04		
Barium	0.508	mg/L	0.10	102	85	115			
Boron	0.516	mg/L	0.10	100	85	115			
Cadmium	0.257	mg/L	0.010	103	85	115			
Chromium	0.508	mg/L	0.050	102	85	115			
Copper	0.510	mg/L	0.010	102	85	115			
Iron	2.81	mg/L	0.030	112	85	115			
Manganese	2.58	mg/L	0.010	103	85	115			
Molybdenum	0.511	mg/L	0.10	102	85	115			
Nickel	0.508	mg/L	0.050	102	85	115			
Strontium	0.507	mg/L	0.10	101	85	115			
Zinc	0.506	mg/L	0.010	101	85	115			
Sample ID: C08091030-001BMS3	Sample Matrix Spike		Run: SUB-C108485				09/30/08 22:44		
Barium	0.622	mg/L	0.10	104	70	130			
Cadmium	0.261	mg/L	0.0010	104	70	130			
Chromium	0.515	mg/L	0.050	103	70	130			
Copper	0.522	mg/L	0.010	103	70	130			
Manganese	2.62	mg/L	0.010	105	70	130			
Nickel	0.511	mg/L	0.050	102	70	130			
Zinc	0.516	mg/L	0.010	102	70	130			
Sample ID: C08091030-001BMSD3	Sample Matrix Spike Duplicate		Run: SUB-C108485				09/30/08 22:48		
Barium	0.614	mg/L	0.10	102	70	130	1.3	20	
Cadmium	0.257	mg/L	0.0010	103	70	130	1.7	20	
Chromium	0.509	mg/L	0.050	102	70	130	1.2	20	
Copper	0.517	mg/L	0.010	102	70	130	1	20	
Manganese	2.57	mg/L	0.010	102	70	130	2	20	
Nickel	0.505	mg/L	0.050	101	70	130	1.2	20	
Zinc	0.507	mg/L	0.010	100	70	130	1.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R108485		
Sample ID: MB-080930A	Method Blank		Run: SUB-C108485				09/30/08 13:29		
Silicon	0.04	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.02	mg/L	0.008						
Cadmium	ND	mg/L	0.0008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Copper	ND	mg/L	0.005						
Iron	0.005	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	ND	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Vanadium	0.005	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Silica	0.09	mg/L	0.04						
Sample ID: LFB-080930A	Laboratory Fortified Blank		Run: SUB-C108485				09/30/08 13:33		
Silicon	0.47	mg/L	0.021	108	85	125			
Aluminum	1.00	mg/L	0.10	100	85	125			
Barium	1.0	mg/L	0.10	103	85	125			
Boron	1.0	mg/L	0.10	102	85	125			
Cadmium	1.0	mg/L	0.010	100	85	125			
Calcium	55	mg/L	0.50	110	85	125			
Chromium	1.0	mg/L	0.050	103	85	125			
Copper	1.0	mg/L	0.010	104	85	125			
Iron	1.1	mg/L	0.030	106	85	125			
Magnesium	54	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	104	85	125			
Molybdenum	1.0	mg/L	0.10	101	85	125			
Nickel	1.0	mg/L	0.050	101	85	125			
Potassium	46	mg/L	0.50	92	85	125			
Sodium	50	mg/L	0.77	100	85	125			
Strontium	1.1	mg/L	0.10	105	85	125			
Vanadium	1.1	mg/L	0.10	106	85	125			
Zinc	1.0	mg/L	0.010	103	85	125			
Silica	1.0	mg/L	0.044	46	85	125			S
Sample ID: C08091067-005BMS2	Sample Matrix Spike		Run: SUB-C108485				09/30/08 19:30		
Aluminum	2.11	mg/L	0.10	105	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R108485		
Sample ID: C08091067-005BMS2	Sample Matrix Spike			Run: SUB-C108485			09/30/08 19:30		
Barium	2.11	mg/L	0.10	105	70	130			
Boron	2.15	mg/L	0.10	104	70	130			
Cadmium	2.05	mg/L	0.010	103	70	130			
Chromium	2.12	mg/L	0.050	106	70	130			
Copper	2.10	mg/L	0.010	105	70	130			
Iron	2.25	mg/L	0.030	112	70	130			
Manganese	2.16	mg/L	0.010	105	70	130			
Molybdenum	2.03	mg/L	0.10	101	70	130			
Nickel	2.09	mg/L	0.050	104	70	130			
Silicon	7.96	mg/L	0.10		70	130			A
Strontium	2.81	mg/L	0.10	105	70	130			
Vanadium	2.23	mg/L	0.10	111	70	130			
Zinc	2.13	mg/L	0.010	106	70	130			
Calcium	180	mg/L	1.0	110	70	130			
Magnesium	137	mg/L	1.0	110	70	130			
Potassium	98.6	mg/L	1.0	95	70	130			
Sodium	152	mg/L	1.5	103	70	130			
Silica	17.0	mg/L	0.21		70	130			A
Sample ID: C08091067-005BMSD2	Sample Matrix Spike Duplicate			Run: SUB-C108485			09/30/08 19:34		
Aluminum	2.06	mg/L	0.10	103	70	130	2.1	20	
Barium	2.13	mg/L	0.10	105	70	130	0.9	20	
Boron	2.20	mg/L	0.10	106	70	130	2.1	20	
Cadmium	2.08	mg/L	0.010	104	70	130	1.5	20	
Chromium	2.14	mg/L	0.050	107	70	130	1.2	20	
Copper	2.14	mg/L	0.010	107	70	130	1.5	20	
Iron	2.30	mg/L	0.030	115	70	130	2.4	20	
Manganese	2.18	mg/L	0.010	106	70	130	0.8	20	
Molybdenum	2.06	mg/L	0.10	103	70	130	1.7	20	
Nickel	2.10	mg/L	0.050	105	70	130	0.5	20	
Silicon	8.09	mg/L	0.10		70	130	1.7	20	A
Strontium	2.78	mg/L	0.10	104	70	130	1.1	20	
Vanadium	2.27	mg/L	0.10	113	70	130	1.9	20	
Zinc	2.17	mg/L	0.010	108	70	130	2.3	20	
Calcium	181	mg/L	1.0	110	70	130	0.2	20	
Magnesium	137	mg/L	1.0	110	70	130	0.1	20	
Potassium	97.7	mg/L	1.0	95	70	130	0.8	20	
Sodium	154	mg/L	1.5	104	70	130	0.8	20	
Silica	17.3	mg/L	0.21		70	130	1.7	20	A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7_8							Batch: C_R108648		
Sample ID: LRB	Method Blank		Run: SUB-C108648				10/02/08 13:13		
Antimony	0.0001	mg/L	2E-05						
Arsenic	ND	mg/L	0.0002						
Beryllium	ND	mg/L	3E-05						
Lead	ND	mg/L	1E-05						
Selenium	ND	mg/L	0.0003						
Silver	7E-05	mg/L	2E-05						
Thallium	ND	mg/L	2E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C108648				10/02/08 13:20		
Antimony	0.0495	mg/L	0.0010	99	85	115			
Arsenic	0.0502	mg/L	0.0010	100	85	115			
Beryllium	0.0514	mg/L	0.0010	103	85	115			
Lead	0.0501	mg/L	0.0010	100	85	115			
Selenium	0.0522	mg/L	0.0010	104	85	115			
Silver	0.0203	mg/L	0.0010	101	85	115			
Thallium	0.0495	mg/L	0.0010	99	85	115			
Uranium	0.0470	mg/L	0.00030	94	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_19902		
<b>Sample ID: MB-19902</b>	Method Blank		Run: SUB-C108648				10/02/08 17:04		
Antimony	ND	mg/L	0.0002						
Arsenic	0.004	mg/L	0.001						
Beryllium	ND	mg/L	0.0002						
Lead	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0005						
Silver	ND	mg/L	0.0005						
Thallium	ND	mg/L	4E-05						
Uranium	ND	mg/L	5E-05						
<b>Sample ID: LCS3-19902</b>	Laboratory Control Sample		Run: SUB-C108648				10/02/08 17:38		
Antimony	0.541	mg/L	0.050	108	85	115			
Arsenic	0.550	mg/L	0.011	109	85	115			
Beryllium	0.237	mg/L	0.010	95	85	115			
Lead	0.502	mg/L	0.050	100	85	115			
Selenium	0.596	mg/L	0.0049	119	85	115			S
Silver	0.0438	mg/L	0.010	88	85	115			
Thallium	0.504	mg/L	0.10	101	85	115			
Uranium	0.566	mg/L	0.00049	113	85	115			
<b>Sample ID: C08091030-001BMS3</b>	Sample Matrix Spike		Run: SUB-C108648				10/02/08 20:49		
Antimony	0.531	mg/L	0.050	106	70	130			
Arsenic	0.553	mg/L	0.011	111	70	130			
Beryllium	0.243	mg/L	0.010	97	70	130			
Lead	0.491	mg/L	0.050	98	70	130			
Selenium	0.568	mg/L	0.0049	114	70	130			
Silver	0.0442	mg/L	0.010	88	70	130			
Thallium	0.496	mg/L	0.10	99	70	130			
Uranium	0.540	mg/L	0.00049	108	70	130			
<b>Sample ID: C08091030-001BMSD3</b>	Sample Matrix Spike Duplicate		Run: SUB-C108648				10/02/08 20:56		
Antimony	0.553	mg/L	0.050	111	70	130	4.1	20	
Arsenic	0.524	mg/L	0.011	105	70	130	5.4	20	
Beryllium	0.251	mg/L	0.010	100	70	130	3.2	20	
Lead	0.506	mg/L	0.050	101	70	130	3.1	20	
Selenium	0.528	mg/L	0.0049	106	70	130	7.4	20	
Silver	0.0466	mg/L	0.010	93	70	130	5.2	20	
Thallium	0.504	mg/L	0.10	101	70	130	1.6	20	
Uranium	0.548	mg/L	0.00049	109	70	130	1.5	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108490		
Sample ID: LRB	Method Blank				Run: SUB-C108490		09/30/08 12:20		
Uranium	2E-06	mg/L	2E-06						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C108490		09/30/08 12:24		
Uranium	0.0495	mg/L	0.00030	99	85	115			
Sample ID: 15 ppb CTRL	Laboratory Control Sample				Run: SUB-C108490		09/30/08 16:41		
Uranium	0.017	mg/L	0.0050	115	70	130			
Sample ID: 30 ppb CTRL	Laboratory Control Sample				Run: SUB-C108490		09/30/08 16:45		
Uranium	0.034	mg/L	0.0050	113	70	130			
Sample ID: 45 ppb CTRL	Laboratory Control Sample				Run: SUB-C108490		09/30/08 16:49		
Uranium	0.049	mg/L	0.0050	109	70	130			
Sample ID: C08090557-005AMS	Sample Matrix Spike				Run: SUB-C108490		09/30/08 18:49		
Uranium	0.046	mg/L	0.00030	93	70	130			
Sample ID: C08090557-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C108490		09/30/08 18:53		
Uranium	0.047	mg/L	0.00030	93	70	130	0.7	20	
Sample ID: C08091148-031AMS2	Sample Matrix Spike				Run: SUB-C108490		09/30/08 22:17		
Uranium	0.024	mg/L	0.0050	76	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108491		
Sample ID: LRB	Method Blank		Run: SUB-C108491				09/30/08 13:11		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C108491				09/30/08 13:18		
Arsenic	0.0524	mg/L	0.0010	105	85	115			
Cadmium	0.0517	mg/L	0.0010	103	85	115			
Copper	0.0530	mg/L	0.0010	106	85	115			
Lead	0.0515	mg/L	0.0010	103	85	115			
Mercury	0.00511	mg/L	0.0010	102	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Thorium 232	0.0506	mg/L	0.0010	101	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			
Sample ID: R08090314-005C	Post Digestion Spike		Run: SUB-C108491				09/30/08 20:05		
Arsenic	0.0714	mg/L	0.0010	102	70	130			
Cadmium	0.0500	mg/L	0.010	100	70	130			
Copper	0.0485	mg/L	0.010	96	70	130			
Lead	0.0515	mg/L	0.050	102	70	130			
Mercury	0.00517	mg/L	0.0010	103	70	130			
Silver	0.0150	mg/L	0.010	75	70	130			
Thorium 232	0.0527	mg/L	0.0010	105	70	130			
Uranium	0.0551	mg/L	0.00030	105	70	130			
Sample ID: R08090314-005C	Post Digestion Spike Duplicate		Run: SUB-C108491				09/30/08 20:12		
Arsenic	0.0714	mg/L	0.0010	102	70	130	0	20	
Cadmium	0.0499	mg/L	0.010	100	70	130	0.3	20	
Copper	0.0482	mg/L	0.010	96	70	130	0.7	20	
Lead	0.0507	mg/L	0.050	101	70	130	1.5	20	
Mercury	0.00514	mg/L	0.0010	103	70	130	0.5	20	
Silver	0.0153	mg/L	0.010	77	70	130	2.1	20	
Thorium 232	0.0531	mg/L	0.0010	106	70	130	0.7	20	
Uranium	0.0552	mg/L	0.00030	105	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108648		
Sample ID: C08091079-003BMS4	Post Digestion Spike			Run: SUB-C108648			10/02/08 23:32		
Antimony	0.0529	mg/L	0.050	105	70	130			
Arsenic	0.0524	mg/L	0.0016	105	70	130			
Beryllium	0.0430	mg/L	0.010	86	70	130			
Lead	0.0499	mg/L	0.050	100	70	130			
Selenium	0.0561	mg/L	0.0010	107	70	130			
Silver	0.0163	mg/L	0.010	81	70	130			
Thallium	0.0500	mg/L	0.10	100	70	130			
Uranium	0.0577	mg/L	0.00030	96	70	130			
Sample ID: C08091079-003BMSD4	Post Digestion Spike Duplicate			Run: SUB-C108648			10/02/08 23:39		
Antimony	0.0532	mg/L	0.050	106	70	130	0.7	20	
Arsenic	0.0523	mg/L	0.0016	105	70	130	0.2	20	
Beryllium	0.0438	mg/L	0.010	88	70	130	1.8	20	
Lead	0.0494	mg/L	0.050	99	70	130	0	20	
Selenium	0.0558	mg/L	0.0010	106	70	130	0.7	20	
Silver	0.0165	mg/L	0.010	82	70	130	1.1	20	
Thallium	0.0495	mg/L	0.10	99	70	130	0	20	
Uranium	0.0571	mg/L	0.00030	95	70	130	1	20	
Method: E200.8							Batch: C_R110289		
Sample ID: LRB	Method Blank			Run: SUB-C110289			11/03/08 12:07		
Arsenic	ND	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C110289			11/03/08 12:14		
Arsenic	0.0494	mg/L	0.0010	99	85	115			
Sample ID: C08100994-020AMS4	Post Digestion Spike			Run: SUB-C110289			11/03/08 18:07		
Arsenic	0.0502	mg/L	0.0010	100	70	130			
Sample ID: C08100994-020AMSD4	Post Digestion Spike Duplicate			Run: SUB-C110289			11/03/08 18:14		
Arsenic	0.0496	mg/L	0.0010	98	70	130	1.2	20	
Sample ID: C08100981-001AMS4	Post Digestion Spike			Run: SUB-C110289			11/04/08 06:33		
Arsenic	0.0467	mg/L	0.0010	84	70	130			
Sample ID: C08100981-001AMSD4	Post Digestion Spike Duplicate			Run: SUB-C110289			11/04/08 06:40		
Arsenic	0.0478	mg/L	0.0010	86	70	130	2.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 11/20/08  
Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Batch: B_34942
Sample ID: MB-34942	Method Blank					Run: SUB-B118320			09/29/08 09:37
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-34942	Laboratory Fortified Blank					Run: SUB-B118320			09/29/08 09:44
Mercury	0.0019	mg/L	0.0010	95	85	115			
Sample ID: B08092320-001DMS	Sample Matrix Spike					Run: SUB-B118320			09/29/08 10:25
Mercury	0.0025	mg/L	0.0010	124	70	130			
Sample ID: B08092320-001DMSD	Sample Matrix Spike Duplicate					Run: SUB-B118320			09/29/08 10:28
Mercury	0.0021	mg/L	0.0010	105	70	130	16	30	
Method: E245.1									Analytical Run: SUB-B118320
Sample ID: QCS	Initial Calibration Verification Standard								09/29/08 09:22
Mercury	0.0018	mg/L	0.0010	92	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R37666		
Sample ID: LFB0809244728-3	Laboratory Fortified Blank		Run: DIONEX_080924A				09/24/08 17:00		
Chloride	4.82	mg/L	0.50	96	90	110			
Fluoride	2.02	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: LFB0809244728-4	Laboratory Fortified Blank		Run: DIONEX_080924A				09/24/08 17:16		
Chloride	4.93	mg/L	0.50	99	90	110			
Fluoride	2.07	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.53	mg/L	0.10	101	90	110			
Sulfate	15.0	mg/L	1.0	100	90	110			
Sample ID: R08090331-009AMS	Sample Matrix Spike		Run: DIONEX_080924A				09/24/08 21:06		
Chloride	48.5	mg/L	0.50		80	120			A
Fluoride	1.30	mg/L	0.10	53	80	120			S
Nitrogen, Nitrate as N	9.18	mg/L	0.10	81	80	120			
Nitrogen, Nitrite as N	2.62	mg/L	0.10	94	80	120			
Sulfate	3490	mg/L	1.0		80	120			A
Sample ID: R08090331-009AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_080924A				09/24/08 21:22		
Chloride	49.0	mg/L	0.50		80	120	0.9	10	A
Fluoride	1.21	mg/L	0.10	48	80	120	7.2	10	S
Nitrogen, Nitrate as N	9.25	mg/L	0.10	84	80	120	0.8	10	
Nitrogen, Nitrite as N	2.66	mg/L	0.10	95	80	120	1.5	10	
Sulfate	3500	mg/L	1.0		80	120	0.3	10	A
Sample ID: R08090314-004AMS	Sample Matrix Spike		Run: DIONEX_080924A				09/25/08 00:23		
Chloride	254	mg/L	5.4	91	80	120			
Fluoride	104	mg/L	0.56	97	80	120			
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	100	80	120			
Sulfate	1190	mg/L	3.4	89	80	120			
Sample ID: R08090314-004AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_080924A				09/25/08 00:39		
Chloride	243	mg/L	5.4	86	80	120	4.7	10	
Fluoride	99.2	mg/L	0.56	93	80	120	4.8	10	
Nitrogen, Nitrate as N	114	mg/L	1.3	91	80	120	5.2	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	4.9	10	
Sulfate	1160	mg/L	3.4	84	80	120	3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0536		
<b>Sample ID: MB-GrAB-0536</b>	Method Blank				Run: SUB-C109284			10/11/08 07:02	
Gross Alpha	0.6	pCi/L							
Gross Beta	-0.4	pCi/L							U
<b>Sample ID: UNAT-GrAB-0536</b>	Laboratory Control Sample				Run: SUB-C109284			10/11/08 07:02	
Gross Alpha	120	pCi/L		87	70	130			
<b>Sample ID: C08090586-002FMS</b>	Sample Matrix Spike				Run: SUB-C109284			10/11/08 07:02	
Gross Beta	98.7	pCi/L		108	70	130			
<b>Sample ID: C08090586-002FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C109284			10/11/08 07:02	
Gross Beta	89.2	pCi/L		98	70	130	10	16	
<b>Sample ID: C08090975-004HDUP</b>	Sample Duplicate				Run: SUB-C109284			10/12/08 05:28	
Gross Alpha	1700	pCi/L					13	14.9	
Gross Beta	690	pCi/L					2.3	14.3	
<b>Method: E901.1</b>							Batch: C_R109497		
<b>Sample ID: MB-R109497</b>	Method Blank				Run: SUB-C109497			10/13/08 15:50	
Americium 241		pCi/L							
Barium 133		pCi/L							
Bismuth 212		pCi/L							
Bismuth 214		pCi/L							
Cesium 134		pCi/L							
Cesium 137		pCi/L							
Cobalt 60		pCi/L							
Iodine 125		pCi/L							
Iodine 131		pCi/L							
Lead 212		pCi/L							
Lead 214		pCi/L							
Manganese 54		pCi/L							
Potassium 40		pCi/L							
Radium 223		pCi/L							
Radium 224		pCi/L							
Thallium 208		pCi/L							
Thorium 228		pCi/L							
Thorium 234		pCi/L							
Zinc 65		pCi/L							
Radium 228		pCi/L							
Gross Gamma		pCi/L							
<b>Sample ID: LCS-R109497</b>	Laboratory Control Sample				Run: SUB-C109497			10/13/08 15:50	
Cesium 137	46000	pCi/L	20	106	70	130			
Cobalt 60	32000	pCi/L	20	102	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 11/20/08  
Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_R109056		
Sample ID: C08090526-001AMS	Sample Matrix Spike				Run: SUB-C109056			10/09/08 12:39	
Radium 226	9.0	pCi/g-dry	80		70	130			
Sample ID: C08090526-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C109056			10/09/08 12:39	
Radium 226	8.8	pCi/g-dry	82		70	130	1.5	20.9	
Sample ID: LCS-19954	Laboratory Control Sample				Run: SUB-C109056			10/09/08 12:39	
Radium 226	0.015	pCi/g-dry	95		70	130			
Sample ID: MB-19954	Method Blank				Run: SUB-C109056			10/09/08 12:39	
Radium 226	0.0001	pCi/g-dry							U
Method: E903.0							Batch: C_RA226-3131		
Sample ID: C08091031-001DMS	Sample Matrix Spike				Run: SUB-C109203			10/14/08 12:40	
Radium 226	15	pCi/L	98		70	130			
Sample ID: C08091031-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C109203			10/14/08 12:40	
Radium 226	15	pCi/L	93		70	130	5.7	23.7	
Sample ID: MB-RA226-3131	Method Blank				Run: SUB-C109203			10/14/08 15:07	
Radium 226	0.2	pCi/L							
Sample ID: LCS-RA226-3131	Laboratory Control Sample				Run: SUB-C109203			10/14/08 15:07	
Radium 226	7.8	pCi/L	96		70	130			
Method: E907.0							Batch: C_19925		
Sample ID: C08090975-001IMS	Sample Matrix Spike				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	12.4	pCi/L	0.20	114	70	130			
Sample ID: C08090975-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	15.8	pCi/L	0.20	139	70	130	24	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: LCS-19925	Laboratory Control Sample				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	19.5	pCi/L	0.20	86	70	130			
Sample ID: MB-19925	Method Blank				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	-1	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0656		
<b>Sample ID: LCS-RA-TH-ISO-0656</b>	Laboratory Control Sample				Run: SUB-C109544				10/20/08 08:48
Thorium 230	6.53	pCi/L	0.20	109	70	130			
<b>Sample ID: C08090823-001DMS</b>	Sample Matrix Spike				Run: SUB-C109544				10/20/08 08:48
Thorium 230	15.8	pCi/L	0.20	97	70	130			
<b>Sample ID: C08090823-001DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C109544				10/20/08 08:48
Thorium 230	14.5	pCi/L	0.20	90	70	130	8.7	41.5	
<b>Sample ID: MB-RA-TH-ISO-0656</b>	Method Blank				Run: SUB-C109544				10/20/08 15:17
Thorium 230	-0.03	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_ 19925		
<b>Sample ID: C08090341-005AMS</b>	Sample Matrix Spike				Run: SUB-C108927				10/01/08 08:40
Lead 210	1210	pCi/Filter		56	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: C08090341-005AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C108927				10/01/08 08:40
Lead 210	1430	pCi/Filter		75	70	130	17	30	
<b>Sample ID: MB-R108927</b>	Method Blank				Run: SUB-C108927				10/01/08 08:40
Lead 210	1	pCi/L							U
<b>Sample ID: LCS-R108927</b>	Laboratory Control Sample				Run: SUB-C108927				10/01/08 08:40
Lead 210	120	pCi/L		106	70	130			
<b>Method: E909.0M</b>							Batch: C_R109120		
<b>Sample ID: C08090975-005HMS</b>	Sample Matrix Spike				Run: SUB-C109120				10/02/08 10:37
Lead 210	640	pCi/L		111	70	130			
<b>Sample ID: C08090975-005HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C109120				10/02/08 10:37
Lead 210	450	pCi/L		77	70	130	36	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
<b>Sample ID: R08090356-005H</b>	Sample Duplicate				Run: SUB-C109120				10/02/08 10:37
Lead 210	1.9	pCi/L					2100	30	UR
Lead 210 MDC	9.0	pCi/L							
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
<b>Sample ID: MB-R109120</b>	Method Blank				Run: SUB-C109120				10/02/08 10:37
Lead 210	-0.8	pCi/L							U
<b>Sample ID: LCS-R109120</b>	Laboratory Control Sample				Run: SUB-C109120				10/02/08 10:37
Lead 210	120	pCi/L		101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090314

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_PO210-0149		
Sample ID: R08090356-009J	Sample Matrix Spike				Run: SUB-C109078		10/02/08 14:54		
Polonium 210	44	pCi/L	1.0	102	70	130			
Sample ID: R08090356-009J	Sample Matrix Spike Duplicate				Run: SUB-C109078		10/02/08 14:54		
Polonium 210	55	pCi/L	1.0	128	70	130	22	61.7	
Sample ID: LCS-PO210-0149	Laboratory Control Sample				Run: SUB-C109078		10/03/08 08:57		
Polonium 210	41	pCi/L	1.0	95	70	130			
Sample ID: MB-PO210-0149	Method Blank				Run: SUB-C109078		10/03/08 08:57		
Polonium 210	0.07	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.



Page 1 of 1

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## ANALYTICAL SUMMARY REPORT

November 20, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08090356 Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 9 samples for RESPEC Inc on 9/24/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08090356-001	DewBurd GW689	09/23/08 13:43	09/24/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08090356-002	DewBurd GW681	09/23/08 13:55	09/24/08	Aqueous	Same As Above
R08090356-003	DewBurd GW704	09/23/08 12:30	09/24/08	Aqueous	Same As Above
R08090356-004	DewBurd GW699	09/23/08 11:45	09/24/08	Aqueous	Same As Above
R08090356-005	DewBurd GW694	09/23/08 10:00	09/24/08	Aqueous	Same As Above
R08090356-006	DewBurd GW696	09/23/08 9:35	09/24/08	Aqueous	Same As Above
R08090356-007	DewBurd GW695	09/23/08 11:00	09/24/08	Aqueous	Same As Above
R08090356-008	DewBurd GW3026	09/23/08 11:25	09/24/08	Aqueous	Same As Above



## ANALYTICAL SUMMARY REPORT

R08090356-009 DewBurd BLK01

09/23/08 15:10 09/24/08

Aqueous

Metals by ICP/ICPMS, Dissolved  
Metals by ICP/ICPMS, Suspended  
Metals by ICP/ICPMS, Total  
Alkalinity  
Conductivity  
Mercury, Total  
Selenium, Dissolved  
Selenium, Dissolved  
Selenium, Dissolved  
Anions by Ion Chromatography  
Nitrogen, Ammonia  
Oxidation Reduction Potential  
pH  
Digestion, Total Metals  
Digestion, Total Metals  
Dissolved Filtration  
Digestion, Mercury by CVAA  
Gross Alpha, Gross Beta  
Gross Gamma, Dissolved  
Lead 210, Dissolved  
Lead 210, Suspended  
Polonium 210, Dissolved  
Polonium 210, Suspended  
Radium 226, Dissolved  
Radium 226, Suspended  
Radon 222  
Thorium, Isotopic  
Thorium, Suspended Isotopic  
Sodium Adsorption Ratio  
Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: 

Linda Larson

Rapid City - Project Manager



CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08090356

Date: 20-Nov-08

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005

eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002

eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942

eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006

eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945

eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08091068

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis. The MDC of 0.2 pCi/L for Ra226 was not achievable on all samples due to insufficient volume.

End of comments imported for SUBBED Workorder: C08091068





## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-001  
**Client Sample ID:** DewBurd GW689

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 13:43  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	150	mg/L		5		1	A2320 B	10/02/08 14:12/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:12/mb
Bicarbonate as HCO3	183	mg/L		5		1	A2320 B	10/02/08 14:12/mb
Calcium	44.6	mg/L		0.5		2	E200.7	10/10/08 11:27/eli-c
Chloride	5	mg/L		1		1	E300.0	09/25/08 13:33/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	09/25/08 13:33/jmh
Magnesium	15.0	mg/L		0.5		2	E200.7	10/10/08 11:27/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:09/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 13:33/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 13:33/jmh
Potassium	6.9	mg/L		0.5		2	E200.7	10/10/08 11:27/eli-c
Sodium	165	mg/L		2		2	E200.7	10/10/08 11:27/eli-c
Sulfate	362	mg/L	D	3		50	E300.0	09/25/08 12:44/jmh
Silica	10.3	mg/L		0.2		2	E200.7	10/10/08 11:27/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	840	umhos/cm		5.0		1	A2510 B	09/25/08 10:31/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	09/25/08 11:16/tb
Sodium Adsorption Ratio (SAR)	5.5	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	700	mg/L		5		1	A2540 C	09/30/08 13:52/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 11:27/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/02/08 04:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 11:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:10/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 11:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:10/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	10/02/08 04:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:10/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:10/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 15:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:10/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-001  
**Client Sample ID:** DewBurd GW689

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 13:43  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0030	mg/L		0.0003		1	E200.8	10/02/08 04:10/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:10/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:41/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	30.9	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	3.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	9.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	3.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	3.8	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.4	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	7.5	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	960	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.2	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.16	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	10/09/08 07:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-001  
**Client Sample ID:** DewBurd GW689

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 13:43  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1520	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	74.9	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		10	E200.8	10/03/08 05:05/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/03/08 16:43/eli-c
Barium	ND	mg/L		0.1		10	E200.8	10/03/08 05:05/eli-c
Beryllium	ND	mg/L		0.002		10	E200.8	10/03/08 05:05/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/02/08 20:27/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	10/03/08 05:05/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	10/03/08 05:05/eli-c
Copper	ND	mg/L		0.01		10	E200.8	10/03/08 05:05/eli-c
Iron	0.45	mg/L		0.03		2	E200.7	10/02/08 20:27/eli-c
Lead	ND	mg/L		0.001		10	E200.8	10/03/08 05:05/eli-c
Manganese	0.05	mg/L		0.01		10	E200.8	10/03/08 05:05/eli-c
Mercury	ND	mg/L		0.001		2	E245.1	09/29/08 12:54/eli-b
Molybdenum	ND	mg/L		0.1		10	E200.8	10/03/08 05:05/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	10/03/08 05:05/eli-c
Selenium	ND	mg/L		0.001		10	E200.8	10/03/08 05:05/eli-c
Silver	ND	mg/L		0.005		10	E200.8	10/03/08 05:05/eli-c
Strontium	0.9	mg/L		0.1		10	E200.8	10/03/08 05:05/eli-c
Thallium	ND	mg/L		0.001		10	E200.8	10/03/08 05:05/eli-c
Uranium	0.0030	mg/L		0.0005		10	E200.8	10/03/08 05:05/eli-c
Zinc	0.09	mg/L		0.01		10	E200.8	10/03/08 05:05/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.520	%				1	A1030 E	11/17/08 00:00/jmh
Anions	10.7	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	10.8	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	718	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-002  
Client Sample ID: DewBurd GW681

Report Date: 11/20/08  
Collection Date: 09/23/08 13:55  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	10/02/08 14:15/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:15/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	10/02/08 14:15/mb
Calcium	65.0	mg/L		0.5		2	E200.7	10/10/08 11:39/eli-c
Chloride	16	mg/L		1		1	E300.0	09/25/08 14:06/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	09/25/08 14:06/jmh
Magnesium	24.6	mg/L		0.5		2	E200.7	10/10/08 11:39/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:11/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 14:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 14:06/jmh
Potassium	9.3	mg/L		0.5		2	E200.7	10/10/08 11:39/eli-c
Sodium	212	mg/L		2		2	E200.7	10/10/08 11:39/eli-c
Sulfate	515	mg/L	D	3		50	E300.0	09/25/08 13:50/jmh
Silica	8.5	mg/L		0.2		2	E200.7	10/10/08 11:39/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1020	umhos/cm		5.0		1	A2510 B	09/25/08 10:33/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.84	s.u.		0.01		1	A4500-H B	09/25/08 11:18/tb
Sodium Adsorption Ratio (SAR)	5.7	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	09/30/08 13:53/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 11:39/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/02/08 04:17/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 11:39/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:17/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:17/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 11:39/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:17/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	10/02/08 04:17/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:17/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:17/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:17/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:17/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-002  
Client Sample ID: DewBurd GW681

Report Date: 11/20/08  
Collection Date: 09/23/08 13:55  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0093	mg/L		0.0003		1	E200.8	10/02/08 04:17/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:17/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:17/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:45/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:33/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1180	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	24.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	4.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	264	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	5.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	4.5	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	28.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.8	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.8	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	445	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	4.1	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	1200	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.9	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.7	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.88	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.63	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	0.9	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-002  
**Client Sample ID:** DewBurd GW681

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 13:55  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	304000	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	704	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 16:50/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/03/08 16:50/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 16:50/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 16:50/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 21:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 16:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 16:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 16:50/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	10/10/08 21:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 16:50/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/03/08 16:50/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:07/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 16:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 16:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 16:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 16:50/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	10/03/08 16:50/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 16:50/eli-c
Uranium	0.0098	mg/L		0.0003		1	E200.8	10/03/08 16:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 16:50/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.190	%				1	A1030 E	11/17/08 00:00/jmh
Anions	14.7	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	14.7	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	969	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.920					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-003  
Client Sample ID: DewBurd GW704

Report Date: 11/20/08  
Collection Date: 09/23/08 12:30  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	74	mg/L		5		1	A2320 B	10/02/08 14:23/mb
Carbonate as CO <sub>3</sub>	12	mg/L		5		1	A2320 B	10/02/08 14:23/mb
Bicarbonate as HCO <sub>3</sub>	66	mg/L		5		1	A2320 B	10/02/08 14:23/mb
Calcium	23.0	mg/L		0.5		2	E200.7	10/10/08 11:47/eli-c
Chloride	70	mg/L	D	5		50	E300.0	09/25/08 14:23/jmh
Fluoride	0.8	mg/L		0.1		1	E300.0	09/25/08 14:39/jmh
Magnesium	14.8	mg/L		0.5		2	E200.7	10/10/08 11:47/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH <sub>3</sub> G	09/30/08 14:12/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 14:39/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 14:39/jmh
Potassium	6.8	mg/L		0.5		2	E200.7	10/10/08 11:47/eli-c
Sodium	437	mg/L		2		2	E200.7	10/10/08 11:47/eli-c
Sulfate	872	mg/L	D	3		50	E300.0	09/25/08 14:23/jmh
Silica	ND	mg/L		0.2		2	E200.7	10/10/08 11:47/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1570	umhos/cm		5.0		1	A2510 B	09/25/08 10:34/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	09/25/08 00:00/jmh
pH	9.46	s.u.		0.01		1	A4500-H B	09/25/08 11:20/tb
Sodium Adsorption Ratio (SAR)	17	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	1300	mg/L		5		1	A2540 C	09/30/08 13:53/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 11:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/02/08 04:23/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:23/eli-c
Boron	0.9	mg/L		0.1		2	E200.7	10/10/08 11:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:23/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:23/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:23/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 11:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:23/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	10/02/08 04:23/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:23/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:23/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:23/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:23/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:23/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-003  
Client Sample ID: DewBurd GW704

Report Date: 11/20/08  
Collection Date: 09/23/08 12:30  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 04:23/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:23/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:23/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:49/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:36/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	-3	pCi/L	U			1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	7.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	-5	pCi/L	U			1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	3.9	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	6.7	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	1.1	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.4	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	0.04	pCi/L	U			1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	830	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.6	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	-0.015	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-003  
**Client Sample ID:** DewBurd GW704

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 12:30  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.3	pCi/L		0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	188	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	59.3	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 16:57/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/03/08 16:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 16:57/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 16:57/eli-c
Boron	0.9	mg/L		0.1		2	E200.7	10/10/08 21:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 16:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 16:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 16:57/eli-c
Iron	0.87	mg/L		0.03		2	E200.7	10/10/08 21:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 16:57/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	10/03/08 16:57/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:09/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 16:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 16:57/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 16:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 16:57/eli-c
Strontium	2.5	mg/L		0.1		1	E200.8	10/03/08 16:57/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 16:57/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/03/08 16:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 16:57/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.140	%				1	A1030 E	11/17/08 00:00/jmh
Anions	21.6	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	21.6	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	1470	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.900					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-004  
**Client Sample ID:** DewBurd GW699

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:45  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	10/02/08 14:25/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:25/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	10/02/08 14:25/mb
Calcium	53.1	mg/L		0.5		2	E200.7	10/10/08 11:51/eli-c
Chloride	8	mg/L		1		1	E300.0	09/25/08 15:12/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	09/25/08 15:12/jmh
Magnesium	17.5	mg/L		0.5		2	E200.7	10/10/08 11:51/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:13/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 15:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 15:12/jmh
Potassium	8.2	mg/L		0.5		2	E200.7	10/10/08 11:51/eli-c
Sodium	210	mg/L		2		2	E200.7	10/10/08 11:51/eli-c
Sulfate	435	mg/L	D	3		50	E300.0	09/25/08 14:55/jmh
Silica	8.6	mg/L		0.2		2	E200.7	10/10/08 11:51/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	951	umhos/cm		5.0		1	A2510 B	09/25/08 10:37/tb
Oxidation-Reduction Potential	160	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.83	s.u.		0.01		1	A4500-H B	09/25/08 11:21/tb
Sodium Adsorption Ratio (SAR)	6.4	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	09/30/08 13:54/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 11:51/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/02/08 04:30/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:30/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 11:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:30/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:30/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:30/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	10/10/08 11:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:30/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	10/02/08 04:30/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:30/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:30/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:30/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:30/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:30/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-004  
**Client Sample ID:** DewBurd GW699

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:45  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 04:30/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:30/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:30/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/30/08 19:53/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:38/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.3	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	3.1	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	4.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	5.7	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	3.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	-2	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	-0.5	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.74	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	1	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	10/01/08 08:40/eli-c
Lead 210 precision (±)	4.6	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Lead 210 MDC	7.8	pCi/L				1	E909.0M	10/01/08 08:40/eli-c
Polonium 210	0.027	pCi/L	U			1	RMO-3008	10/09/08 09:13/eli-c
Polonium 210 precision (±)	0.27	pCi/L				1	RMO-3008	10/09/08 09:13/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0	10/09/08 07:33/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/09/08 07:33/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 07:33/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-004  
**Client Sample ID:** DewBurd GW699

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:45  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	09/30/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	313	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	61.3	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 17:04/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/03/08 17:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 17:04/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 17:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 22:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 17:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 17:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 17:04/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	10/10/08 22:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 17:04/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	10/03/08 17:04/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:12/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 17:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 17:04/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 17:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 17:04/eli-c
Strontium	1.1	mg/L		0.1		1	E200.8	10/03/08 17:04/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 17:04/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/03/08 17:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 17:04/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.88	%				1	A1030 E	11/17/08 00:00/jmh
Anions	12.7	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	13.4	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	857	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-005  
**Client Sample ID:** DewBurd GW694

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 10:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	202	mg/L		5		1	A2320 B	10/02/08 14:26/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:26/mb
Bicarbonate as HCO3	246	mg/L		5		1	A2320 B	10/02/08 14:26/mb
Calcium	101	mg/L		0.5		2	E200.7	10/10/08 11:55/eli-c
Chloride	9	mg/L		1		1	E300.0	09/25/08 16:50/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/25/08 16:50/jmh
Magnesium	37.3	mg/L		0.5		2	E200.7	10/10/08 11:55/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:14/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 16:50/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 16:50/jmh
Potassium	12.8	mg/L		0.5		2	E200.7	10/10/08 11:55/eli-c
Sodium	179	mg/L		2		2	E200.7	10/10/08 11:55/eli-c
Sulfate	533	mg/L	D	3		50	E300.0	09/25/08 16:01/jmh
Silica	ND	mg/L		0.5		2	E200.7	10/10/08 11:55/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1070	umhos/cm		5.0		1	A2510 B	09/25/08 10:39/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.63	s.u.		0.01		1	A4500-H B	09/25/08 11:22/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	09/30/08 13:54/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 11:55/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/02/08 04:37/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:37/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 11:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:37/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:37/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:37/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 11:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:37/eli-c
Manganese	0.13	mg/L		0.01		1	E200.8	10/02/08 04:37/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:37/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:37/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:37/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:37/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:37/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-005  
**Client Sample ID:** DewBurd GW694

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 10:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0005	mg/L		0.0003		1	E200.8	10/02/08 04:37/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:37/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:37/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 03:42/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:40/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	7.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	5.1	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	9.3	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	4.5	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	-2	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.76	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	1.7	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-1	pCi/L	U			1	E909.0M	10/13/08 10:21/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Polonium 210	0.17	pCi/L	U			1	RMO-3008	10/09/08 12:31/eli-c
Polonium 210 precision (±)	0.46	pCi/L				1	RMO-3008	10/09/08 12:31/eli-c
Radium 226	-0.04	pCi/L	U			1	E903.0	10/09/08 09:28/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 09:28/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 09:28/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-005  
**Client Sample ID:** DewBurd GW694

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 10:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	09/30/08 15:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	296	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	61.9	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 17:10/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/03/08 17:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 17:10/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 17:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 22:05/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 17:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 17:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 17:10/eli-c
Iron	0.18	mg/L		0.03		2	E200.7	10/10/08 22:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 17:10/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	10/03/08 17:10/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:14/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 17:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 17:10/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 17:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 17:10/eli-c
Strontium	2.7	mg/L		0.1		1	E200.8	10/03/08 17:10/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 17:10/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	10/03/08 17:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 17:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.57	%				1	A1030 E	11/17/08 00:00/jmh
Anions	15.4	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	16.2	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	993	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-006  
Client Sample ID: DewBurd GW696

Report Date: 11/20/08  
Collection Date: 09/23/08 09:35  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	180	mg/L		5		1	A2320 B	10/02/08 14:30/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/02/08 14:30/mb
Bicarbonate as HCO <sub>3</sub>	219	mg/L		5		1	A2320 B	10/02/08 14:30/mb
Calcium	30.6	mg/L		0.5		2	E200.7	10/10/08 12:11/eli-c
Chloride	12	mg/L		1		1	E300.0	09/25/08 17:23/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/25/08 17:23/jmh
Magnesium	10.6	mg/L		0.5		2	E200.7	10/10/08 12:11/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH <sub>3</sub> G	09/30/08 14:18/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 17:23/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 17:23/jmh
Potassium	8.6	mg/L		0.5		2	E200.7	10/10/08 12:11/eli-c
Sodium	280	mg/L		2		2	E200.7	10/10/08 12:11/eli-c
Sulfate	506	mg/L	D	3		50	E300.0	09/25/08 17:07/jmh
Silica	ND	mg/L		0.5		2	E200.7	10/10/08 12:11/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1100	umhos/cm		5.0		1	A2510 B	09/25/08 10:40/tb
Oxidation-Reduction Potential	190	mV				1	A2580 B	09/25/08 00:00/jmh
pH	8.15	s.u.		0.01		1	A4500-H B	09/25/08 11:25/tb
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	09/30/08 13:55/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 12:11/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/02/08 04:44/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:44/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 12:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:44/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:44/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 12:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:44/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	10/02/08 04:44/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:44/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:44/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:44/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:14/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:44/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-006  
Client Sample ID: DewBurd GW696

Report Date: 11/20/08  
Collection Date: 09/23/08 09:35  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 04:44/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:44/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:44/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 03:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5.9	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	5.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	8.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	3.9	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.89	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	1.5	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	1000	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.9	pCi/L	U			1	E909.0M	10/13/08 10:21/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Polonium 210	-0.062	pCi/L	U			1	RMO-3008	10/09/08 12:31/eli-c
Polonium 210 precision (±)	0.25	pCi/L				1	RMO-3008	10/09/08 12:31/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	10/09/08 09:28/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 09:28/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 09:28/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-006  
**Client Sample ID:** DewBurd GW696

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 09:35  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	09/30/08 15:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	09/30/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	214	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	61.0	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 17:17/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/03/08 17:17/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 17:17/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 17:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 22:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 17:17/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 17:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 17:17/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	10/10/08 22:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 17:17/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/03/08 17:17/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:21/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 17:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 17:17/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 17:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 17:17/eli-c
Strontium	0.8	mg/L		0.1		1	E200.8	10/03/08 17:17/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 17:17/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/03/08 17:17/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 17:17/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.13	%				1	A1030 E	11/17/08 00:00/jmh
Anions	14.5	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	14.8	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	957	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-007  
**Client Sample ID:** DewBurd GW695

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	196	mg/L		5		1	A2320 B	10/02/08 14:33/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:33/mb
Bicarbonate as HCO3	239	mg/L		5		1	A2320 B	10/02/08 14:33/mb
Calcium	347	mg/L		0.5		2	E200.7	10/10/08 12:15/eli-c
Chloride	15	mg/L		1		1	E300.0	09/25/08 17:56/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	09/25/08 17:56/jmh
Magnesium	113	mg/L		0.5		2	E200.7	10/10/08 12:15/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:21/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 17:56/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 17:56/jmh
Potassium	18.6	mg/L		0.5		2	E200.7	10/10/08 12:15/eli-c
Sodium	171	mg/L		2		2	E200.7	10/10/08 12:15/eli-c
Sulfate	1560	mg/L	D	3		50	E300.0	09/25/08 17:40/jmh
Silica	ND	mg/L		0.5		2	E200.7	10/10/08 12:15/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2060	umhos/cm		5.0		1	A2510 B	09/25/08 10:43/tb
Oxidation-Reduction Potential	-97.9	mV				1	A2580 B	09/25/08 00:00/jmh
pH	6.92	s.u.		0.01		1	A4500-H B	09/25/08 11:27/tb
Sodium Adsorption Ratio (SAR)	2.0	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	09/30/08 13:55/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 12:15/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/02/08 04:51/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 04:51/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	10/10/08 12:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 04:51/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 04:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 04:51/eli-c
Iron	1.26	mg/L		0.03		2	E200.7	10/10/08 12:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 04:51/eli-c
Manganese	0.84	mg/L		0.01		1	E200.8	10/02/08 04:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 04:51/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 04:51/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 04:51/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 04:51/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 04:51/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-007  
**Client Sample ID:** DewBurd GW695

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0059	mg/L		0.0003		1	E200.8	10/02/08 04:51/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 04:51/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 04:51/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L	D	0.0008		1	E200.8	10/02/08 03:50/eli-c
METALS - SPECIATED								
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	10/02/08 11:49/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	44.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	9.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	10.2	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	16.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	5.6	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	9.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	0.1	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.84	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	10.4	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	960	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2	pCi/L	U			1	E909.0M	10/13/08 10:21/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Polonium 210	0.066	pCi/L	U			1	RMO-3008	10/09/08 12:31/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	RMO-3008	10/09/08 12:31/eli-c
Radium 226	0.9	pCi/L				1	E903.0	10/09/08 09:28/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/09/08 09:28/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 09:28/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-007  
**Client Sample ID:** DewBurd GW695

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:00  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.5	pCi/L		0.2		1	E907.0	09/30/08 15:00/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/30/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	357	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	62.3	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 17:24/eli-c
Arsenic	0.016	mg/L		0.001		1	E200.8	10/03/08 17:24/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 17:24/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 17:24/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	10/10/08 22:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 17:24/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 17:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 17:24/eli-c
Iron	17.9	mg/L		0.03		2	E200.7	10/10/08 22:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 17:24/eli-c
Manganese	1.18	mg/L		0.01		1	E200.8	10/03/08 17:24/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	09/29/08 12:36/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 17:24/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 17:24/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	10/03/08 17:24/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 17:24/eli-c
Strontium	6.5	mg/L		0.1		1	E200.8	10/03/08 17:24/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 17:24/eli-c
Uranium	0.0085	mg/L		0.0003		1	E200.8	10/03/08 17:24/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 17:24/eli-c
DATA QUALITY								
A/C Balance (± 5)	-3.03	%				1	A1030 E	11/17/08 00:00/jmh
Anions	36.8	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	34.6	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	2340	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	11/17/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-008  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:25  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	10/02/08 14:35/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:35/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	10/02/08 14:35/mb
Calcium	46.4	mg/L		0.5		2	E200.7	10/10/08 12:20/eli-c
Chloride	12	mg/L		1		1	E300.0	09/25/08 18:12/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	09/25/08 18:12/jmh
Magnesium	17.3	mg/L		0.5		2	E200.7	10/10/08 12:20/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:22/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 18:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 18:12/jmh
Potassium	7.6	mg/L		0.5		2	E200.7	10/10/08 12:20/eli-c
Sodium	229	mg/L		2		2	E200.7	10/10/08 12:20/eli-c
Sulfate	514	mg/L		1		10	E300.0	09/26/08 23:57/jmh
Silica	ND	mg/L		0.5		2	E200.7	10/10/08 12:20/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1040	umhos/cm		5.0		1	A2510 B	09/25/08 10:46/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	09/25/08 00:00/jmh
pH	7.93	s.u.		0.01		1	A4500-H B	09/25/08 11:28/tb
Sodium Adsorption Ratio (SAR)	7.3	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	09/30/08 13:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 12:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/02/08 05:24/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 05:24/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 12:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 05:24/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 05:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 05:24/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 12:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 05:24/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	10/02/08 05:24/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 05:24/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 05:24/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 05:24/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 05:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 05:24/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-008  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 11:25  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0027	mg/L		0.0003		1	E200.8	10/02/08 05:24/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 05:24/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 05:24/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 03:54/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:52/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.9	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha precision (±)	7.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Alpha MDC	9.6	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta	1.8	pCi/L	U			1	E900.0	10/30/08 01:42/eli-ca
Gross Beta precision (±)	10.0	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Gross Beta MDC	16.8	pCi/L				1	E900.0	10/30/08 01:42/eli-ca
Lead 210	1.5	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.4	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	5.9	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.4	pCi/L	U			1	E909.0M	10/13/08 10:21/eli-c
Lead 210 precision (±)	5.6	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Polonium 210	0.0	pCi/L	U			1	RMO-3008	10/09/08 12:31/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	RMO-3008	10/09/08 12:31/eli-c
Radium 226	-0.06	pCi/L	U			1	E903.0	10/09/08 09:28/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 09:28/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/09/08 09:28/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-008  
Client Sample ID: DewBurd GW3026

Report Date: 11/20/08  
Collection Date: 09/23/08 11:25  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.3	pCi/L		0.2		1	E907.0	09/30/08 15:00/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	09/30/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1820	pCi/L		100		1	D5072-92	09/26/08 15:10/eli-c
Radon 222 precision (±)	79.3	pCi/L				1	D5072-92	09/26/08 15:10/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/03/08 17:31/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/03/08 17:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/03/08 17:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/03/08 17:31/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 22:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/03/08 17:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/03/08 17:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/03/08 17:31/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	10/10/08 22:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/03/08 17:31/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/03/08 17:31/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/08/08 14:07/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/03/08 17:31/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/03/08 17:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/03/08 17:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/03/08 17:31/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	10/03/08 17:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/03/08 17:31/eli-c
Uranium	0.0029	mg/L		0.0003		1	E200.8	10/03/08 17:31/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/03/08 17:31/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.10	%				1	A1030 E	11/17/08 00:00/jmh
Anions	14.5	meq/L				1	A1030 E	11/17/08 00:00/jmh
Cations	13.9	meq/L				1	A1030 E	11/17/08 00:00/jmh
Solids, Total Dissolved Calculated	931	mg/L				1	A1030 E	11/17/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	11/17/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-009  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 15:10  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	10/02/08 14:36/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 14:36/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	10/02/08 14:36/mb
Calcium	ND	mg/L		0.5		2	E200.7	10/10/08 12:24/eli-c
Chloride	ND	mg/L		1		1	E300.0	09/25/08 19:18/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	09/25/08 19:18/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	10/10/08 12:24/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/30/08 14:23/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/25/08 19:18/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/25/08 19:18/jmh
Potassium	ND	mg/L		0.5		2	E200.7	10/10/08 12:24/eli-c
Sodium	ND	mg/L		2		2	E200.7	10/10/08 12:24/eli-c
Sulfate	ND	mg/L		1		1	E300.0	09/25/08 19:18/jmh
Silica	ND	mg/L		0.2		2	E200.7	10/10/08 12:24/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	09/25/08 10:48/tb
Oxidation-Reduction Potential	380	mV				1	A2580 B	09/25/08 00:00/jmh
pH	5.59	s.u.		0.01		1	A4500-H B	09/25/08 11:33/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	11/17/08 14:15/ADM
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C	09/30/08 13:58/mb
- SAR calculations may not be appropriate for near blank results.								
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	10/10/08 12:24/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/02/08 05:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/02/08 05:31/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/10/08 12:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/02/08 05:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/02/08 05:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/02/08 05:31/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/10/08 12:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/02/08 05:31/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	10/02/08 05:31/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/02/08 05:31/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/02/08 05:31/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/02/08 05:31/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/02/08 16:26/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/02/08 05:31/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08090356-009  
Client Sample ID: DewBurd BLK01

Report Date: 11/20/08  
Collection Date: 09/23/08 15:10  
Date Received: 09/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	10/02/08 05:31/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 05:31/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/02/08 05:31/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/02/08 05:31/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	10/02/08 03:58/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/02/08 11:54/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/02/08 16:47/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	-0.8	pCi/L	U			1	E900.0	10/30/08 01:42/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0	10/30/08 01:42/eli-c
Gross Alpha MDC	1.2	pCi/L				1	E900.0	10/30/08 01:42/eli-c
Gross Beta	-3	pCi/L	U			1	E900.0	10/30/08 01:42/eli-c
Gross Beta precision (±)	1.4	pCi/L				1	E900.0	10/30/08 01:42/eli-c
Gross Beta MDC	2.5	pCi/L				1	E900.0	10/30/08 01:42/eli-c
Lead 210	-0.5	pCi/L	U			1	E909.0M	10/02/08 10:37/eli-c
Lead 210 precision (±)	5.3	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Lead 210 MDC	9.0	pCi/L				1	E909.0M	10/02/08 10:37/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	10/02/08 14:54/eli-c
Polonium 210 precision (±)	0.99	pCi/L				1	RMO-3008	10/02/08 14:54/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	10/21/08 08:28/eli-c
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	10/21/08 08:28/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	10/27/08 15:37/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	10/27/08 15:37/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/13/08 15:50/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	2.8	pCi/L	U			1	E909.0M	10/13/08 10:21/eli-c
Lead 210 precision (±)	5.5	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Lead 210 MDC	9.2	pCi/L				1	E909.0M	10/13/08 10:21/eli-c
Polonium 210	-0.079	pCi/L	U			1	RMO-3008	10/09/08 12:31/eli-c
Polonium 210 precision (±)	0.32	pCi/L				1	RMO-3008	10/09/08 12:31/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	10/09/08 09:28/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/09/08 09:28/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08090356-009  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 11/20/08  
**Collection Date:** 09/23/08 15:10  
**Date Received:** 09/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.4	pCi/L	U	0.2	1	E903.0	10/09/08 09:28/eli-c	
Thorium 230	-0.2	pCi/L			1	E907.0	09/30/08 15:00/eli-c	
Thorium 230 precision (±)	0.05	pCi/L			1	E907.0	09/30/08 15:00/eli-c	
RADIONUCLIDES - TOTAL								
Radon 222	124	pCi/L		100	1	D5072-92	09/26/08 15:10/eli-c	
Radon 222 precision (±)	57.3	pCi/L			1	D5072-92	09/26/08 15:10/eli-c	
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003	1	E200.8	10/03/08 18:05/eli-c	
Arsenic	ND	mg/L		0.001	1	E200.8	10/03/08 18:05/eli-c	
Barium	ND	mg/L		0.1	1	E200.8	10/03/08 18:05/eli-c	
Beryllium	ND	mg/L		0.001	1	E200.8	10/03/08 18:05/eli-c	
Boron	ND	mg/L		0.1	2	E200.7	10/10/08 22:33/eli-c	
Cadmium	ND	mg/L		0.005	1	E200.8	10/03/08 18:05/eli-c	
Chromium	ND	mg/L		0.05	1	E200.8	10/03/08 18:05/eli-c	
Copper	ND	mg/L		0.01	1	E200.8	10/03/08 18:05/eli-c	
Iron	0.04	mg/L		0.03	2	E200.7	10/10/08 22:33/eli-c	
Lead	ND	mg/L		0.001	1	E200.8	10/03/08 18:05/eli-c	
Manganese	ND	mg/L		0.01	1	E200.8	10/03/08 18:05/eli-c	
Mercury	ND	mg/L		0.001	1	E245.1	09/29/08 12:41/eli-b	
Molybdenum	ND	mg/L		0.1	1	E200.8	10/03/08 18:05/eli-c	
Nickel	ND	mg/L		0.05	1	E200.8	10/03/08 18:05/eli-c	
Selenium	ND	mg/L		0.001	1	E200.8	10/03/08 18:05/eli-c	
Silver	ND	mg/L		0.005	1	E200.8	10/03/08 18:05/eli-c	
Strontium	ND	mg/L		0.1	1	E200.8	10/03/08 18:05/eli-c	
Thallium	ND	mg/L		0.001	1	E200.8	10/03/08 18:05/eli-c	
Uranium	ND	mg/L		0.0003	1	E200.8	10/03/08 18:05/eli-c	
Zinc	ND	mg/L		0.01	1	E200.8	10/03/08 18:05/eli-c	

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 081002A-ALK-SEL-W							
Sample ID: LCS1_081002A	Laboratory Control Sample				Run: PH_COND1-R_081003B				10/02/08 12:07
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_081002A	Method Blank				Run: PH_COND1-R_081003B				10/02/08 12:08
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08090356-002AMS	Sample Matrix Spike				Run: PH_COND1-R_081003B				10/02/08 14:17
Alkalinity, Total as CaCO <sub>3</sub>	282	mg/L	5.0	102	80	120			
Sample ID: R08090356-002AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_081003B				10/02/08 14:19
Alkalinity, Total as CaCO <sub>3</sub>	280	mg/L	5.0	100	80	120	0.7	10	
Sample ID: R08090361-003AMS	Sample Matrix Spike				Run: PH_COND1-R_081003B				10/02/08 14:55
Alkalinity, Total as CaCO <sub>3</sub>	244	mg/L	5.0	89	80	120			
Sample ID: R08090361-003AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_081003B				10/02/08 14:59
Alkalinity, Total as CaCO <sub>3</sub>	246	mg/L	5.0	91	80	120	0.8	10	
Method: A2510 B		Batch: 080925_1_COND-PROBE-W							
Sample ID: LCS_COND-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A				09/25/08 10:00
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A				09/25/08 10:02
Conductivity @ 25 C	147	umhos/cm	5.0	98	90	110			
Sample ID: LCS2-1_080925	Laboratory Control Sample				Run: PH_COND2-R_080925A				09/25/08 10:04
Conductivity @ 25 C	4930	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080925	Method Blank				Run: PH_COND2-R_080925A				09/25/08 10:06
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08090356-009ADUP	Sample Duplicate				Run: PH_COND2-R_080925A				09/25/08 10:50
Conductivity @ 25 C	ND	umhos/cm	5.0				0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 080930A-SLDS-TDS-W		
Sample ID: LCS1_080930A	Laboratory Control Sample				Run: BAL-4-R_080930A				10/01/08 10:12
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	98	90	110			
Sample ID: MBLK1_080930A	Method Blank				Run: BAL-4-R_080930A				09/30/08 13:38
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08090343-006AMS	Sample Matrix Spike				Run: BAL-4-R_080930A				09/30/08 13:50
Solids, Total Dissolved TDS @ 180 C	890	mg/L	5.0	102	80	120			
Sample ID: R08090343-006AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080930A				09/30/08 13:50
Solids, Total Dissolved TDS @ 180 C	870	mg/L	5.0	91	80	120	2.5	10	
Sample ID: R08090356-007AMS	Sample Matrix Spike				Run: BAL-4-R_080930A				09/30/08 13:56
Solids, Total Dissolved TDS @ 180 C	2500	mg/L	5.0	105	80	120			
Sample ID: R08090356-007AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080930A				09/30/08 13:56
Solids, Total Dissolved TDS @ 180 C	2400	mg/L	5.0	62	80	120	3.5	10	S
Method: A2580 B							Batch: 080925-ORP-ISE-W		
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_080925A				09/25/08 00:00
Oxidation-Reduction Potential	480	mV		101	95	105			
Sample ID: R08090356-009F	Sample Duplicate				Run: PH_COND1-R_080925A				09/25/08 00:00
Oxidation-Reduction Potential	380	mV					1.5	10	
Method: A3114 B							Batch: C_SE3114-081002B		
Sample ID: MBLK	Method Blank				Run: SUB-C108588				10/02/08 10:59
Selenium-IV	ND	mg/L	0.0003						
Sample ID: 288-142-5	Laboratory Control Sample				Run: SUB-C108588				10/02/08 11:03
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: R08090356-006E	Sample Matrix Spike				Run: SUB-C108588				10/02/08 11:45
Selenium-IV	0.053	mg/L	0.0010	106	85	115			
Sample ID: R08090356-006E	Sample Matrix Spike Duplicate				Run: SUB-C108588				10/02/08 11:47
Selenium-IV	0.053	mg/L	0.0010	106	85	115	0.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-081002D		
Sample ID: MBLK	Method Blank					Run: SUB-C108610			10/02/08 15:23
Selenium	ND	mg/L	0.0003						
Sample ID: 288-142-5	Laboratory Control Sample					Run: SUB-C108610			10/02/08 15:26
Selenium	0.052	mg/L	0.0010	103	90	110			
Sample ID: R08090356-006E	Sample Matrix Spike					Run: SUB-C108610			10/02/08 16:16
Selenium	0.050	mg/L	0.0010	100	85	115			
Sample ID: R08090356-006E	Sample Matrix Spike Duplicate					Run: SUB-C108610			10/02/08 16:19
Selenium	0.050	mg/L	0.0010	100	85	115	0.7	15	
Method: A4500-H B							Batch: 080925_1_PH-W		
Sample ID: LCS_pH-1_080925	Laboratory Control Sample					Run: PH_COND2-R_080925B			09/25/08 11:06
pH	6.80	s.u.	0.010	99	98.55	101.45			
Sample ID: R08090356-005ADUP	Sample Duplicate					Run: PH_COND2-R_080925B			09/25/08 11:23
pH	7.64	s.u.	0.010				0.1	1.25	
Sample ID: R08090356-009ADUP	Sample Duplicate					Run: PH_COND2-R_080925B			09/25/08 11:35
pH	5.57	s.u.	0.010				0.4	1.25	
Method: A4500-NH3 G							Batch: A2008-09-30_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080930A			09/30/08 10:18
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080930A			09/30/08 10:20
Nitrogen, Ammonia as N	0.26	mg/L	0.10	105	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080930A			09/30/08 10:21
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: R08090343-006CMS	Sample Matrix Spike					Run: TECHAA2-R_080930A			09/30/08 14:05
Nitrogen, Ammonia as N	0.28	mg/L	0.10	113	80	120			
Sample ID: R08090343-006CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080930A			09/30/08 14:06
Nitrogen, Ammonia as N	0.29	mg/L	0.10	114	80	120	1.4	10	
Sample ID: R08090356-006BMS	Sample Matrix Spike					Run: TECHAA2-R_080930A			09/30/08 14:19
Nitrogen, Ammonia as N	0.59	mg/L	0.10	83	80	120			
Sample ID: R08090356-006BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080930A			09/30/08 14:20
Nitrogen, Ammonia as N	0.61	mg/L	0.10	91	80	120	3.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 11/20/08  
Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R108612		
Sample ID: R08090356-009G	Sample Duplicate				Run: SUB-C108612			09/26/08 15:10	
Radon 222	165	pCi/L	100				28	30	
Sample ID: R08090356-001G	Sample Duplicate				Run: SUB-C108612			09/26/08 15:10	
Radon 222	1870	pCi/L	100				20	30	
Sample ID: MB-R108612	Method Blank				Run: SUB-C108612			09/26/08 15:10	
Radon 222	40	pCi/L							
Sample ID: LCS-R108612	Laboratory Control Sample				Run: SUB-C108612			09/26/08 15:10	
Radon 222	301	pCi/L	100	84	70	130			
Method: E200.7							Batch: C_19936		
Sample ID: MB-19936	Method Blank				Run: SUB-C108653			10/02/08 20:10	
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-19936	Laboratory Control Sample				Run: SUB-C108653			10/02/08 20:14	
Boron	0.492	mg/L	0.10	98	85	115			
Iron	2.66	mg/L	0.030	106	85	115			
Sample ID: C08091126-006BMS3	Sample Matrix Spike				Run: SUB-C108653			10/02/08 21:40	
Boron	0.599	mg/L	0.10	104	70	130			
Iron	4.98	mg/L	0.030	117	70	130			
Sample ID: C08091126-006BMSD3	Sample Matrix Spike Duplicate				Run: SUB-C108653			10/02/08 21:44	
Boron	0.530	mg/L	0.10	90	70	130	12	20	
Iron	4.30	mg/L	0.030	90	70	130	15	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R109094		
Sample ID: MB-081009A	Method Blank		Run: SUB-C109094				10/10/08 11:19		
Aluminum	ND	mg/L	0.004						
Boron	ND	mg/L	0.008						
Iron	ND	mg/L	0.005						
Silicon	0.01	mg/L							
Calcium	ND	mg/L	0.1						
Magnesium	ND	mg/L	0.04						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Silica	0.03	mg/L							
Sample ID: LFB-081009A	Laboratory Fortified Blank		Run: SUB-C109094				10/10/08 11:23		
Aluminum	0.967	mg/L	0.10	97	85	115			
Boron	0.966	mg/L	0.10	97	85	115			
Iron	1.05	mg/L	0.030	105	85	115			
Silicon	0.349	mg/L		87	85	115			
Calcium	51.9	mg/L	0.50	104	85	115			
Magnesium	51.8	mg/L	0.50	104	85	115			
Potassium	45.0	mg/L	0.50	90	85	115			
Sodium	49.4	mg/L	0.77	99	85	115			
Silica	0.747	mg/L		87	85	115			
Sample ID: R08090356-005D	Sample Matrix Spike		Run: SUB-C109094				10/10/08 22:09		
Aluminum	1.86	mg/L	0.10	93	70	130			
Boron	1.97	mg/L	0.10	95	70	130			
Iron	2.23	mg/L	0.030	102	70	130			
Silicon	4.98	mg/L	0.10		70	130			A
Calcium	193	mg/L	1.0	96	70	130			
Magnesium	146	mg/L	1.0	108	70	130			
Sodium	251	mg/L	1.1	92	70	130			
Silica	10.7	mg/L	0.21		70	130			A
Sample ID: R08090356-005D	Sample Matrix Spike Duplicate		Run: SUB-C109094				10/10/08 22:13		
Aluminum	1.84	mg/L	0.10	92	70	130	1.1	20	
Boron	2.00	mg/L	0.10	96	70	130	1.3	20	
Iron	2.26	mg/L	0.030	104	70	130	1.3	20	
Silicon	5.06	mg/L	0.10		70	130	1.6	20	A
Calcium	198	mg/L	1.0	100	70	130	2.3	20	
Magnesium	149	mg/L	1.0	111	70	130	1.7	20	
Sodium	249	mg/L	1.1	90	70	130	0.7	20	
Silica	10.8	mg/L	0.21		70	130	1.6	20	A
Sample ID: C08100102-002BMS2	Sample Matrix Spike		Run: SUB-C109094				10/11/08 01:19		
Aluminum	1.89	mg/L	0.10	95	70	130			
Boron	2.00	mg/L	0.10	97	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R109094		
Sample ID: C08100102-002BMS2	Sample Matrix Spike		Run: SUB-C109094				10/11/08 01:19		
Iron	2.09	mg/L	0.030	103	70	130			
Silicon	9.50	mg/L	0.10		70	130			A
Calcium	154	mg/L	1.0	105	70	130			
Magnesium	116	mg/L	1.0	104	70	130			
Potassium	94.4	mg/L	1.0	93	70	130			
Sodium	229	mg/L	1.1	103	70	130			
Silica	20.3	mg/L	0.21		70	130			A
Sample ID: C08100102-002BMSD2	Sample Matrix Spike Duplicate		Run: SUB-C109094				10/11/08 01:23		
Aluminum	1.96	mg/L	0.10	98	70	130	3.5	20	
Boron	2.03	mg/L	0.10	98	70	130	1.3	20	
Iron	2.15	mg/L	0.030	106	70	130	2.9	20	
Silicon	9.63	mg/L	0.10		70	130	1.3	20	A
Calcium	154	mg/L	1.0	104	70	130	0.4	20	
Magnesium	116	mg/L	1.0	105	70	130	0.2	20	
Potassium	94.6	mg/L	1.0	93	70	130	0.2	20	
Sodium	226	mg/L	1.1	100	70	130	1.3	20	
Silica	20.6	mg/L	0.21		70	130	1.3	20	A
Method: E200.8							Batch: C_19926		
Sample ID: MB-19926	Method Blank		Run: SUB-C108564				10/02/08 03:18		
Uranium	0.0008	mg/L							
Sample ID: LCS1-19926	Laboratory Control Sample		Run: SUB-C108564				10/02/08 03:38		
Uranium	0.0554	mg/L	0.00030	104	80	120			
Sample ID: R08090356-009I	Post Digestion Spike		Run: SUB-C108564				10/02/08 04:02		
Uranium	0.0120	mg/L	0.00030	96	70	130			
Sample ID: R08090356-009I	Post Digestion Spike Duplicate		Run: SUB-C108564				10/02/08 04:06		
Uranium	0.0121	mg/L	0.00030	96	70	130	0.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19936		
Sample ID: MB-19936	Method Blank		Run: SUB-C108648				10/03/08 04:45		
Antimony	0.0004	mg/L	0.0002						
Arsenic	0.004	mg/L	0.001						
Barium	ND	mg/L	4E-05						
Beryllium	ND	mg/L	0.0002						
Cadmium	ND	mg/L	4E-05						
Chromium	0.001	mg/L	0.0007						
Copper	ND	mg/L	0.002						
Lead	ND	mg/L	5E-05						
Manganese	ND	mg/L	0.0001						
Molybdenum	ND	mg/L	0.004						
Nickel	ND	mg/L	0.0003						
Selenium	ND	mg/L	0.0005						
Silver	ND	mg/L	0.0005						
Strontium	ND	mg/L	5E-05						
Thallium	ND	mg/L	4E-05						
Uranium	ND	mg/L	5E-05						
Zinc	0.002	mg/L	0.0005						
Sample ID: LCS3-19936	Laboratory Control Sample		Run: SUB-C108648				10/03/08 04:51		
Antimony	0.520	mg/L	0.050	104	85	115			
Arsenic	0.506	mg/L	0.011	100	85	115			
Barium	0.506	mg/L	0.10	101	85	115			
Beryllium	0.244	mg/L	0.010	98	85	115			
Cadmium	0.261	mg/L	0.010	105	85	115			
Chromium	0.493	mg/L	0.050	98	85	115			
Copper	0.504	mg/L	0.021	101	85	115			
Lead	0.491	mg/L	0.050	98	85	115			
Manganese	2.50	mg/L	0.010	100	85	115			
Molybdenum	0.477	mg/L	0.10	95	85	115			
Nickel	0.493	mg/L	0.050	99	85	115			
Selenium	0.517	mg/L	0.0049	103	85	115			
Silver	0.0421	mg/L	0.010	84	85	115			S
Strontium	0.506	mg/L	0.10	101	85	115			
Thallium	0.486	mg/L	0.10	97	85	115			
Uranium	0.524	mg/L	0.00049	105	85	115			
Zinc	0.563	mg/L	0.010	112	85	115			
Sample ID: C08091126-006BMS3	Sample Matrix Spike		Run: SUB-C108648				10/03/08 06:54		
Antimony	0.520	mg/L	0.050	104	70	130			
Arsenic	0.512	mg/L	0.011	102	70	130			
Barium	0.544	mg/L	0.10	101	70	130			
Beryllium	0.239	mg/L	0.010	96	70	130			
Cadmium	0.259	mg/L	0.010	104	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_19936		
Sample ID: C08091126-006BMS3	Sample Matrix Spike		Run: SUB-C108648				10/03/08 06:54		
Chromium	0.489	mg/L	0.050	98	70	130			
Copper	0.497	mg/L	0.021	99	70	130			
Lead	0.496	mg/L	0.050	99	70	130			
Manganese	3.35	mg/L	0.010	111	70	130			
Molybdenum	0.490	mg/L	0.10	98	70	130			
Nickel	0.495	mg/L	0.050	98	70	130			
Selenium	0.504	mg/L	0.0049	101	70	130			
Silver	0.0422	mg/L	0.010	84	70	130			
Strontium	1.11	mg/L	0.10	108	70	130			
Thallium	0.490	mg/L	0.10	98	70	130			
Uranium	0.678	mg/L	0.00049	108	70	130			
Zinc	0.550	mg/L	0.010	97	70	130			
Sample ID: C08091126-006BMSD3	Sample Matrix Spike Duplicate		Run: SUB-C108648				10/03/08 07:00		
Antimony	0.451	mg/L	0.050	90	70	130	14	20	
Arsenic	0.444	mg/L	0.011	89	70	130	14	20	
Barium	0.465	mg/L	0.10	85	70	130	16	20	
Beryllium	0.202	mg/L	0.010	81	70	130	17	20	
Cadmium	0.226	mg/L	0.010	90	70	130	14	20	
Chromium	0.418	mg/L	0.050	84	70	130	16	20	
Copper	0.427	mg/L	0.021	85	70	130	15	20	
Lead	0.429	mg/L	0.050	86	70	130	14	20	
Manganese	2.64	mg/L	0.010	83	70	130	24	20	R
Molybdenum	0.425	mg/L	0.10	85	70	130	14	20	
Nickel	0.429	mg/L	0.050	85	70	130	14	20	
Selenium	0.443	mg/L	0.0049	89	70	130	13	20	
Silver	0.0398	mg/L	0.010	80	70	130	5.7	20	
Strontium	0.953	mg/L	0.10	77	70	130	15	20	
Thallium	0.434	mg/L	0.10	87	70	130	12	20	
Uranium	0.577	mg/L	0.00049	88	70	130	16	20	
Zinc	0.480	mg/L	0.010	83	70	130	14	20	

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108490		
Sample ID: LRB	Method Blank				Run: SUB-C108490			09/30/08 12:20	
Uranium	2E-06	mg/L	2E-06						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C108490			09/30/08 12:24	
Uranium	0.0495	mg/L	0.00030	99	85	115			
Sample ID: C08090557-005AMS	Sample Matrix Spike				Run: SUB-C108490			09/30/08 18:49	
Uranium	0.046	mg/L	0.00030	93	70	130			
Sample ID: C08090557-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C108490			09/30/08 18:53	
Uranium	0.047	mg/L	0.00030	93	70	130	0.7	20	
Sample ID: C08091148-031AMS2	Sample Matrix Spike				Run: SUB-C108490			09/30/08 22:17	
Uranium	0.024	mg/L	0.0050	76	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108572		
Sample ID: LRB	Method Blank		Run: SUB-C108572				10/01/08 12:40		
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	ND	mg/L	4E-05						
Copper	0.0002	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Silver	3E-05	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	0.001	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C108572				10/01/08 12:46		
Arsenic	0.0495	mg/L	0.0010	99	85	115			
Barium	0.0504	mg/L	0.0010	101	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Chromium	0.0499	mg/L	0.0010	100	85	115			
Copper	0.0500	mg/L	0.0010	100	85	115			
Lead	0.0508	mg/L	0.0010	102	85	115			
Manganese	0.0501	mg/L	0.0010	100	85	115			
Mercury	0.00514	mg/L	0.0010	103	85	115			
Molybdenum	0.0506	mg/L	0.0010	101	85	115			
Nickel	0.0496	mg/L	0.0010	99	85	115			
Silver	0.0202	mg/L	0.0010	101	85	115			
Thorium 232	0.0500	mg/L	0.0010	100	85	115			
Uranium	0.0500	mg/L	0.00030	100	85	115			
Vanadium	0.0499	mg/L	0.0010	100	85	115			
Zinc	0.0506	mg/L	0.0010	99	85	115			
Sample ID: C08091067-004BMS4	Post Digestion Spike		Run: SUB-C108572				10/02/08 03:22		
Arsenic	0.0504	mg/L	0.0010	100	70	130			
Barium	0.0987	mg/L	0.10	102	70	130			
Cadmium	0.0480	mg/L	0.010	95	70	130			
Chromium	0.0445	mg/L	0.050	89	70	130			
Copper	0.0496	mg/L	0.010	94	70	130			
Lead	0.0507	mg/L	0.050	99	70	130			
Manganese	0.0461	mg/L	0.010	88	70	130			
Mercury	0.00503	mg/L	0.0010	101	70	130			
Molybdenum	0.0523	mg/L	0.10	102	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108572		
Sample ID: C08091067-004BMS4	Post Digestion Spike		Run: SUB-C108572				10/02/08 03:22		
Nickel	0.0479	mg/L	0.050	92	70	130			
Silver	0.0134	mg/L	0.010	67	70	130			S
Thorium 232	0.0515	mg/L	0.0010	103	70	130			
Uranium	0.0695	mg/L	0.00030	105	70	130			
Vanadium	0.0463	mg/L	0.10	91	70	130			
Zinc	0.0611	mg/L	0.010	98	70	130			
Sample ID: C08091067-004BMSD4	Post Digestion Spike Duplicate		Run: SUB-C108572				10/02/08 03:56		
Arsenic	0.0500	mg/L	0.0010	99	70	130	1	20	
Barium	0.0983	mg/L	0.10	101	70	130	0	20	
Cadmium	0.0481	mg/L	0.010	95	70	130	0.1	20	
Chromium	0.0452	mg/L	0.050	90	70	130	0	20	
Copper	0.0488	mg/L	0.010	92	70	130	1.6	20	
Lead	0.0486	mg/L	0.050	95	70	130	0	20	
Manganese	0.0463	mg/L	0.010	88	70	130	0.5	20	
Mercury	0.00484	mg/L	0.0010	97	70	130	3.9	20	
Molybdenum	0.0518	mg/L	0.10	101	70	130	0	20	
Nickel	0.0481	mg/L	0.050	92	70	130	0	20	
Silver	0.0140	mg/L	0.010	70	70	130	3.8	20	
Thorium 232	0.0497	mg/L	0.0010	99	70	130	3.4	20	
Uranium	0.0675	mg/L	0.00030	101	70	130	2.8	20	
Vanadium	0.0466	mg/L	0.10	92	70	130	0	20	
Zinc	0.0587	mg/L	0.010	94	70	130	4	20	
Sample ID: R08090356-009C	Post Digestion Spike		Run: SUB-C108572				10/02/08 05:38		
Arsenic	0.0488	mg/L	0.0010	98	70	130			
Barium	0.0462	mg/L	0.10	92	70	130			
Cadmium	0.0483	mg/L	0.010	96	70	130			
Chromium	0.0454	mg/L	0.050	90	70	130			
Copper	0.0483	mg/L	0.010	97	70	130			
Lead	0.0475	mg/L	0.050	95	70	130			
Manganese	0.0458	mg/L	0.010	91	70	130			
Mercury	0.00473	mg/L	0.0010	95	70	130			
Molybdenum	0.0480	mg/L	0.10	96	70	130			
Nickel	0.0484	mg/L	0.050	97	70	130			
Silver	0.0156	mg/L	0.010	78	70	130			
Thorium 232	0.0470	mg/L	0.0010	94	70	130			
Uranium	0.0480	mg/L	0.00030	96	70	130			
Vanadium	0.0452	mg/L	0.10	90	70	130			
Zinc	0.0511	mg/L	0.010	101	70	130			
Sample ID: R08090356-009C	Post Digestion Spike Duplicate		Run: SUB-C108572				10/02/08 05:45		
Arsenic	0.0495	mg/L	0.0010	99	70	130	1.5	20	
Barium	0.0459	mg/L	0.10	92	70	130	0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108572		
Sample ID: R08090356-009C	Post Digestion Spike Duplicate				Run: SUB-C108572			10/02/08 05:45	
Cadmium	0.0486	mg/L	0.010	97	70	130	0.7	20	
Chromium	0.0458	mg/L	0.050	91	70	130	0	20	
Copper	0.0499	mg/L	0.010	100	70	130	3.3	20	
Lead	0.0480	mg/L	0.050	96	70	130	0	20	
Manganese	0.0463	mg/L	0.010	92	70	130	1.1	20	
Mercury	0.00487	mg/L	0.0010	97	70	130	2.9	20	
Molybdenum	0.0474	mg/L	0.10	95	70	130	0	20	
Nickel	0.0492	mg/L	0.050	98	70	130	0	20	
Silver	0.0137	mg/L	0.010	68	70	130	13	20	S
Thorium 232	0.0474	mg/L	0.0010	95	70	130	0.8	20	
Uranium	0.0480	mg/L	0.00030	96	70	130	0.1	20	
Vanadium	0.0454	mg/L	0.10	91	70	130	0	20	
Zinc	0.0525	mg/L	0.010	103	70	130	2.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108712		
Sample ID: LRB	Method Blank		Run: SUB-C108712				10/03/08 13:41		
Antimony	ND	mg/L	7E-05						
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Beryllium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	5E-05	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	3E-05						
Strontium	ND	mg/L	3E-05						
Thallium	ND	mg/L	1E-05						
Uranium	ND	mg/L	1E-05						
Zinc	ND	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C108712				10/03/08 13:48		
Antimony	0.0493	mg/L	0.0010	99	85	115			
Arsenic	0.0500	mg/L	0.0010	100	85	115			
Barium	0.0500	mg/L	0.0010	100	85	115			
Beryllium	0.0484	mg/L	0.0010	97	85	115			
Cadmium	0.0504	mg/L	0.0010	101	85	115			
Chromium	0.0493	mg/L	0.0010	98	85	115			
Copper	0.0520	mg/L	0.0010	104	85	115			
Lead	0.0496	mg/L	0.0010	99	85	115			
Manganese	0.0492	mg/L	0.0010	98	85	115			
Molybdenum	0.0510	mg/L	0.0010	102	85	115			
Nickel	0.0506	mg/L	0.0010	101	85	115			
Selenium	0.0498	mg/L	0.0010	100	85	115			
Silver	0.0203	mg/L	0.0010	101	85	115			
Strontium	0.0503	mg/L	0.0010	100	85	115			
Thallium	0.0498	mg/L	0.0010	100	85	115			
Uranium	0.0500	mg/L	0.00030	100	85	115			
Zinc	0.0530	mg/L	0.0010	106	85	115			
Sample ID: R08090356-009D	Post Digestion Spike		Run: SUB-C108712				10/03/08 18:12		
Antimony	0.0527	mg/L	0.050	105	70	130			
Arsenic	0.0494	mg/L	0.0010	99	70	130			
Barium	0.0485	mg/L	0.10	97	70	130			
Beryllium	0.0459	mg/L	0.010	92	70	130			
Cadmium	0.0490	mg/L	0.010	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108712		
Sample ID: R08090356-009D	Post Digestion Spike			Run: SUB-C108712			10/03/08 18:12		
Chromium	0.0485	mg/L	0.050	96	70	130			
Copper	0.0489	mg/L	0.010	98	70	130			
Lead	0.0489	mg/L	0.050	98	70	130			
Manganese	0.0490	mg/L	0.010	97	70	130			
Molybdenum	0.0499	mg/L	0.10	100	70	130			
Nickel	0.0484	mg/L	0.050	97	70	130			
Selenium	0.0488	mg/L	0.0010	98	70	130			
Silver	0.0133	mg/L	0.010	66	70	130			S
Strontium	0.0506	mg/L	0.10	101	70	130			
Thallium	0.0491	mg/L	0.10	98	70	130			
Uranium	0.0498	mg/L	0.00030	100	70	130			
Zinc	0.0508	mg/L	0.010	99	70	130			
Sample ID: R08090356-009D	Post Digestion Spike Duplicate			Run: SUB-C108712			10/03/08 18:18		
Antimony	0.0538	mg/L	0.050	108	70	130	2.1	20	
Arsenic	0.0495	mg/L	0.0010	99	70	130	0.2	20	
Barium	0.0491	mg/L	0.10	98	70	130	0	20	
Beryllium	0.0462	mg/L	0.010	92	70	130	0.8	20	
Cadmium	0.0491	mg/L	0.010	98	70	130	0.3	20	
Chromium	0.0496	mg/L	0.050	98	70	130	0	20	
Copper	0.0493	mg/L	0.010	99	70	130	0.7	20	
Lead	0.0495	mg/L	0.050	99	70	130	0	20	
Manganese	0.0502	mg/L	0.010	99	70	130	2.3	20	
Molybdenum	0.0506	mg/L	0.10	101	70	130	0	20	
Nickel	0.0485	mg/L	0.050	97	70	130	0	20	
Selenium	0.0505	mg/L	0.0010	101	70	130	3.5	20	
Silver	0.0137	mg/L	0.010	69	70	130	3.4	20	S
Strontium	0.0506	mg/L	0.10	101	70	130	0	20	
Thallium	0.0498	mg/L	0.10	100	70	130	0	20	
Uranium	0.0499	mg/L	0.00030	100	70	130	0.2	20	
Zinc	0.0512	mg/L	0.010	100	70	130	0.8	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>									Batch: B_34943
<b>Sample ID: MB-34943</b>	Method Blank					Run: SUB-B118320			09/29/08 11:38
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-34943</b>	Laboratory Fortified Blank					Run: SUB-B118320			09/29/08 11:48
Mercury	0.0021	mg/L	0.0010	104	85	115			
<b>Sample ID: B08092540-004FMS</b>	Sample Matrix Spike					Run: SUB-B118320			09/29/08 12:00
Mercury	0.0023	mg/L	0.0010	114	70	130			
<b>Sample ID: B08092540-004FMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B118320			09/29/08 12:02
Mercury	0.0022	mg/L	0.0010	112	70	130	1.3	30	
<b>Sample ID: R08090356-006D</b>	Sample Matrix Spike					Run: SUB-B118320			09/29/08 12:32
Mercury	0.0019	mg/L	0.0010	94	70	130			
<b>Sample ID: R08090356-006D</b>	Sample Matrix Spike Duplicate					Run: SUB-B118320			09/29/08 12:34
Mercury	0.0022	mg/L	0.0010	110	70	130	16	30	
<b>Method: E245.1</b>									Batch: B_35111
<b>Sample ID: MB-35111</b>	Method Blank					Run: SUB-B118836			10/08/08 13:44
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-35111</b>	Laboratory Fortified Blank					Run: SUB-B118836			10/08/08 13:53
Mercury	0.0019	mg/L	0.0010	96	85	115			
<b>Sample ID: B08100331-001CMS</b>	Sample Matrix Spike					Run: SUB-B118836			10/08/08 14:01
Mercury	0.00191	mg/L	0.0010	96	70	130			
<b>Sample ID: B08100331-001CMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B118836			10/08/08 14:03
Mercury	0.00193	mg/L	0.0010	97	70	130	1	30	
<b>Method: E245.1</b>									Analytical Run: SUB-B118320
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								09/29/08 09:22
Mercury	0.0018	mg/L	0.0010	92	90	110			
<b>Method: E245.1</b>									Analytical Run: SUB-B118836
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								10/08/08 13:35
Mercury	0.0019	mg/L	0.0010	94	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R37676		
Sample ID: LFB0809250635-3	Laboratory Fortified Blank			Run: DIONEX_080925A			09/25/08 12:11		
Chloride	4.94	mg/L	0.50	99	90	110			
Fluoride	2.07	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.40	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	2.51	mg/L	0.10	100	90	110			
Sulfate	14.9	mg/L	1.0	99	90	110			
Sample ID: LFB0809250635-4	Laboratory Fortified Blank			Run: DIONEX_080925A			09/25/08 12:28		
Chloride	4.83	mg/L	0.50	97	90	110			
Fluoride	2.02	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.34	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: R08090356-001AMS	Sample Matrix Spike			Run: DIONEX_080925A			09/25/08 13:00		
Chloride	253	mg/L	5.4	92	80	120			
Fluoride	104	mg/L	0.56	98	80	120			
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120			
Sulfate	1070	mg/L	3.4	95	80	120			
Sample ID: R08090356-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080925A			09/25/08 13:17		
Chloride	243	mg/L	5.4	88	80	120	4.1	10	
Fluoride	100	mg/L	0.56	93	80	120	4.2	10	
Nitrogen, Nitrate as N	115	mg/L	1.3	92	80	120	4.6	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	4.7	10	
Sulfate	1050	mg/L	3.4	91	80	120	2.5	10	
Sample ID: R08090356-005AMS	Sample Matrix Spike			Run: DIONEX_080925A			09/25/08 16:17		
Chloride	259	mg/L	5.4	92	80	120			
Fluoride	105	mg/L	0.56	98	80	120			
Nitrogen, Nitrate as N	120	mg/L	1.3	96	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120			
Sulfate	1210	mg/L	3.4	90	80	120			
Sample ID: R08090356-005AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080925A			09/25/08 16:34		
Chloride	250	mg/L	5.4	88	80	120	3.7	10	
Fluoride	102	mg/L	0.56	95	80	120	2.9	10	
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120	3.4	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120	2.9	10	
Sulfate	1180	mg/L	3.4	87	80	120	2.3	10	
Sample ID: R08090331-001AMS	Sample Matrix Spike			Run: DIONEX_080925A			09/25/08 19:51		
Chloride	316	mg/L	5.4	92	80	120			
Fluoride	102	mg/L	0.56	96	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R37676		
Sample ID: R08090331-001AMS	Sample Matrix Spike		Run: DIONEX_080925A				09/25/08 19:51		
Nitrogen, Nitrate as N	301	mg/L	1.3	110	80	120			
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120			
Sulfate	10200	mg/L	3.4		80	120			A
Sample ID: R08090331-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_080925A				09/25/08 20:07		
Chloride	307	mg/L	5.4	88	80	120	3	10	
Fluoride	99.8	mg/L	0.56	94	80	120	2.7	10	
Nitrogen, Nitrate as N	289	mg/L	1.3	101	80	120	3.9	10	
Nitrogen, Nitrite as N	121	mg/L	2.9	97	80	120	3	10	
Sulfate	9720	mg/L	3.4		80	120	4.5	10	A
Method: E300.0							Batch: R37751		
Sample ID: LFB0809262754-3	Laboratory Fortified Blank		Run: DIONEX_080926A				09/26/08 18:29		
Sulfate	14.8	mg/L	1.0	99	90	110			
Sample ID: LFB0809262754-4	Laboratory Fortified Blank		Run: DIONEX_080926A				09/26/08 18:45		
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: R08090360-006BMS	Sample Matrix Spike		Run: DIONEX_080926A				09/26/08 22:35		
Sulfate	735	mg/L	1.3	89	80	120			
Sample ID: R08090360-006BMDS	Sample Matrix Spike Duplicate		Run: DIONEX_080926A				09/26/08 22:51		
Sulfate	736	mg/L	1.3	89	80	120	0.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0547		
Sample ID: MB-GrAB-0547	Method Blank				Run: SUB-C110134			10/30/08 01:42	
Gross Alpha	0.1	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: UNAT-GrAB-0547	Laboratory Control Sample				Run: SUB-C110134			10/30/08 01:42	
Gross Alpha	150	pCi/L		108	70	130			
Sample ID: Cs137-GrAB-0547	Laboratory Control Sample				Run: SUB-C110134			10/30/08 01:42	
Gross Beta	88	pCi/L		96	70	130			
Sample ID: C08091239-001BMS	Sample Matrix Spike				Run: SUB-C110134			10/31/08 07:50	
Gross Alpha	151	pCi/L		106	70	130			
Sample ID: C08091239-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C110134			10/31/08 07:50	
Gross Alpha	146	pCi/L		103	70	130	3	17.5	
Sample ID: C08091239-001BMS	Sample Matrix Spike				Run: SUB-C110134			10/31/08 07:50	
Gross Beta	87.8	pCi/L		94	70	130			
Sample ID: C08091239-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C110134			10/31/08 07:50	
Gross Beta	77.8	pCi/L		83	70	130	12	16.4	
Method: E901.1							Batch: C_R109497		
Sample ID: MB-R109497	Method Blank				Run: SUB-C109497			10/13/08 15:50	
Gross Gamma		pCi/L							
Sample ID: LCS-R109497	Laboratory Control Sample				Run: SUB-C109497			10/13/08 15:50	
Cesium 137	46000	pCi/L	20	106	70	130			
Cobalt 60	32000	pCi/L	20	102	70	130			
Sample ID: R08090356-007H	Sample Duplicate				Run: SUB-C109497			10/13/08 15:50	
Gross Gamma	960	pCi/L					0.2	30	
Method: E903.0							Batch: C_R109056		
Sample ID: C08090526-001AMS	Sample Matrix Spike				Run: SUB-C109056			10/09/08 12:39	
Radium 226	9.0	pCi/g-dry		80	70	130			
Sample ID: C08090526-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C109056			10/09/08 12:39	
Radium 226	8.8	pCi/g-dry		82	70	130	1.5	20.9	
Sample ID: LCS-19954	Laboratory Control Sample				Run: SUB-C109056			10/09/08 12:39	
Radium 226	0.015	pCi/g-dry		95	70	130			
Sample ID: MB-19954	Method Blank				Run: SUB-C109056			10/09/08 12:39	
Radium 226	0.0001	pCi/g-dry							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-3147		
Sample ID: C08091069-001DMS	Sample Matrix Spike				Run: SUB-C109588			10/21/08 10:02	
Radium 226	20	pCi/L		125	70	130			
Sample ID: C08091069-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C109588			10/21/08 10:02	
Radium 226	23	pCi/L		145	70	130	14	24.4	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: MB-RA226-3147	Method Blank				Run: SUB-C109588			10/21/08 11:39	
Radium 226	-0.2	pCi/L							U
Sample ID: LCS-RA226-3147	Laboratory Control Sample				Run: SUB-C109588			10/21/08 11:39	
Radium 226	10.0	pCi/L		129	70	130			
<b>Method: E907.0</b>							Batch: C_19925		
Sample ID: C08090975-001IMS	Sample Matrix Spike				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	12.4	pCi/L	0.20	114	70	130			
Sample ID: C08090975-001IMSD	Sample Matrix Spike Duplicate				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	15.8	pCi/L	0.20	139	70	130	24	30	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: LCS-19925	Laboratory Control Sample				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	19.5	pCi/L	0.20	86	70	130			
Sample ID: MB-19925	Method Blank				Run: SUB-C109263			09/30/08 16:00	
Thorium 230	-1	pCi/L							U
<b>Method: E907.0</b>							Batch: C_R109681		
Sample ID: LCS-19876	Laboratory Control Sample				Run: SUB-C109681			09/30/08 15:00	
Thorium 230	2.5E-05	uCi/kg	2.0E-07	101	70	130			
Sample ID: MB-19876	Method Blank				Run: SUB-C109681			09/30/08 15:00	
Thorium 230	ND	uCi/kg							0.1
Sample ID: R08090356-008I	Sample Matrix Spike				Run: SUB-C109681			09/30/08 15:00	
Thorium 230	18.8	pCi/L	0.20	164	70	130			S
- Spike response is outside of the acceptance range for this analysis.									
Sample ID: R08090356-008I	Sample Matrix Spike Duplicate				Run: SUB-C109681			09/30/08 15:00	
Thorium 230	12.5	pCi/L	0.20	104	70	130	40	30	R

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_RA-TH-ISO-0663		
Sample ID: LCS-RA-TH-ISO-0663	Laboratory Control Sample				Run: SUB-C110176			10/27/08 15:37	
Thorium 230	5.43	pCi/L	0.20	91	70	130			
Sample ID: R08090356-001H	Sample Matrix Spike				Run: SUB-C110176			10/27/08 15:37	
Thorium 230	16.4	pCi/L	0.20	101	70	130			
Sample ID: R08090356-001H	Sample Matrix Spike Duplicate				Run: SUB-C110176			10/27/08 15:37	
Thorium 230	13.6	pCi/L	0.20	84	70	130	18	39.9	
Sample ID: MB-RA-TH-ISO-0663	Method Blank				Run: SUB-C110176			10/28/08 07:52	
Thorium 230	0.02	pCi/L						U	
Method: E909.0M							Batch: C_19925		
Sample ID: C08090341-005AMS	Sample Matrix Spike				Run: SUB-C108927			10/01/08 08:40	
Lead 210	1210	pCi/Filter		56	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C08090341-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C108927			10/01/08 08:40	
Lead 210	1430	pCi/Filter		75	70	130	17	30	
Sample ID: MB-R108927	Method Blank				Run: SUB-C108927			10/01/08 08:40	
Lead 210	1	pCi/L						U	
Sample ID: LCS-R108927	Laboratory Control Sample				Run: SUB-C108927			10/01/08 08:40	
Lead 210	120	pCi/L		106	70	130			
Method: E909.0M							Batch: C_19926		
Sample ID: R08090356-006I	Sample Matrix Spike				Run: SUB-C109587			10/13/08 10:21	
Lead 210	1200	pCi/L		101	70	130			
Sample ID: R08090356-006I	Sample Matrix Spike Duplicate				Run: SUB-C109587			10/13/08 10:21	
Lead 210	1200	pCi/L		101	70	130	0.3	30	
Sample ID: MB-R109587	Method Blank				Run: SUB-C109587			10/13/08 10:21	
Lead 210	1	pCi/L						U	
Sample ID: LCS-R109587	Laboratory Control Sample				Run: SUB-C109587			10/13/08 10:21	
Lead 210	110	pCi/L		89	70	130			

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 11/20/08

Work Order: R08090356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R109120		
<b>Sample ID: C08090975-005HMS</b>	Sample Matrix Spike				Run: SUB-C109120			10/02/08 10:37	
Lead 210	640	pCi/L		111	70	130			
<b>Sample ID: C08090975-005HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C109120			10/02/08 10:37	
Lead 210	450	pCi/L		77	70	130	36	30	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
<b>Sample ID: R08090356-005H</b>	Sample Duplicate				Run: SUB-C109120			10/02/08 10:37	
Lead 210	1.9	pCi/L					2100	30	UR
Lead 210 MDC	9.0	pCi/L							
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
<b>Sample ID: MB-R109120</b>	Method Blank				Run: SUB-C109120			10/02/08 10:37	
Lead 210	-0.8	pCi/L							U
<b>Sample ID: LCS-R109120</b>	Laboratory Control Sample				Run: SUB-C109120			10/02/08 10:37	
Lead 210	120	pCi/L		101	70	130			
<b>Method: RMO-3008</b>							Batch: C_PO210-0149		
<b>Sample ID: R08090356-009J</b>	Sample Matrix Spike				Run: SUB-C109078			10/02/08 14:54	
Polonium 210	44	pCi/L	1.0	102	70	130			
<b>Sample ID: R08090356-009J</b>	Sample Matrix Spike Duplicate				Run: SUB-C109078			10/02/08 14:54	
Polonium 210	55	pCi/L	1.0	128	70	130	22	61.7	
<b>Sample ID: LCS-PO210-0149</b>	Laboratory Control Sample				Run: SUB-C109078			10/03/08 08:57	
Polonium 210	41	pCi/L	1.0	95	70	130			
<b>Sample ID: MB-PO210-0149</b>	Method Blank				Run: SUB-C109078			10/03/08 08:57	
Polonium 210	0.07	pCi/L							U
<b>Method: RMO-3008</b>							Batch: C_R109370		
<b>Sample ID: LCS-19925</b>	Laboratory Control Sample				Run: SUB-C109370			10/09/08 12:31	
Polonium 210	170	pCi/L	1.0	98	70	130			
<b>Sample ID: MB-19925</b>	Method Blank				Run: SUB-C109370			10/09/08 12:31	
Polonium 210	0.3	pCi/L							U
<b>Sample ID: R08090356-009I</b>	Sample Matrix Spike				Run: SUB-C109370			10/09/08 12:31	
Polonium 210	340	pCi/L	1.0	101	70	130			
<b>Sample ID: R08090356-009I</b>	Sample Matrix Spike Duplicate				Run: SUB-C109370			10/09/08 12:31	
Polonium 210	320	pCi/L	1.0	95	70	130	5.8	47.6	

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





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Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com



## Chain of Custody and Analytical Request Record

PLEASE PRINT - Provide as much information as possible.

Page \_\_\_\_ of \_\_\_\_

Company Name: <b>Scott Envision mental</b>		Project Name, PWS, Permit, Etc. <b>Powdered DB</b>		Sample Origin State: <input type="checkbox"/> Yes <input type="checkbox"/> No	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>RESPEC</b>		Contact Name: <b>Allen Scott</b>		Phone/Fax: <b>Allen Scott</b>	Sampler: (Please Print) <b>Allen Scott</b>
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quoter/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <div><input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> Format: <input type="checkbox"/> POTW/MWTP <input type="checkbox"/> LEVEL IV <input type="checkbox"/> State: <input type="checkbox"/> NELAC <input type="checkbox"/> Other: <input type="checkbox"/></div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1 Dew Burd 6W 689		9-23	13:43	Water	<b>Aggr Quote</b>  <b>SEE ATTACHED</b> Normal Turnaround (TAT) <b>H U S</b>  Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments:  Shipped by: Cooler ID/ID: Receipt Temp: <b>3.8 °C</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal: <input type="checkbox"/> Intact <input type="checkbox"/> Y N Signature: <input type="checkbox"/> Y N March
2 Dew Burd 6W 681		9-23	13:55	11	
3 Dew Burd 6W 704		9-23	12:30	11	
4 Dew Burd 6W 697		9-23	11:45	11	
5 Dew Burd 6W 694		9-23	10:00	11	
6 Dew Burd 6W 696		9-23	9:35	11	
7 Dew Burd 6W 695		9-23	11:00	11	
8 Dew Burd 6W 691		9-23	11:25	11	
9 Dew Burd 6W 302		9-23	15:10	11	
10					
Custody Record MUST be Signed		Relinquished by (print): <b>Allen Scott</b>	Date/Time: <b>9-24-08 10:21 AM</b>	Signature: <b>Allen Scott</b>	Received by (print): <b>Frank Scott</b>
Sample Disposal:		Return to Client:	Lab Disposal:	Relinquished by (print): <b>Frank Scott</b>	Date/Time: <b>9-24-08 10:34 AM</b>
In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at <a href="http://www.energylab.com">www.energylab.com</a> for additional information, downloadable fee schedule, forms, and links.		Received by Laboratory: <b>Steve Franklin</b>			



## ANALYTICAL SUMMARY REPORT

December 29, 2008

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08100014

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample for RESPEC Inc on 10/1/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08100014-001	DewBurd GW688	09/30/08 8:30	10/01/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson  
Rapid City - Project Manager



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100014-001  
**Client Sample ID:** DewBurd GW688

**Report Date:** 12/29/08  
**Collection Date:** 09/30/08 08:30  
**Date Received:** 10/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	10/02/08 15:33/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/02/08 15:33/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	10/02/08 15:33/mb
Calcium	52.4	mg/L		0.5		2	E200.7	10/13/08 18:09/eli-c
Chloride	11	mg/L		1		1	E300.0	10/02/08 04:44/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	10/02/08 04:44/jmh
Magnesium	21.8	mg/L		0.5		2	E200.7	10/13/08 18:09/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/06/08 13:16/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/02/08 04:44/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/02/08 04:44/jmh
Potassium	12.2	mg/L		0.5		2	E200.7	10/13/08 18:09/eli-c
Sodium	203	mg/L	D	2		2	E200.7	10/13/08 18:09/eli-c
Sulfate	422	mg/L	D	3		50	E300.0	10/02/08 05:33/jmh
Silica	75.3	mg/L		0.2		1	E200.8	10/07/08 03:58/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1160	umhos/cm		5.0		1	A2510 B	10/06/08 15:55/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	10/07/08 00:00/jmh
pH	7.90	s.u.		0.01		1	A4500-H B	10/06/08 16:11/tb
Sodium Adsorption Ratio (SAR)	6.0	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	790	mg/L		5		1	A2540 C	10/06/08 10:53/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/22/08 23:22/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/27/08 17:41/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/07/08 03:58/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/13/08 18:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/07/08 03:58/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/07/08 03:58/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/08/08 14:48/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	10/13/08 18:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/07/08 03:58/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/07/08 03:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/07/08 03:58/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/07/08 03:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/07/08 03:58/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/20/08 11:44/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/22/08 23:22/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/08/08 14:48/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 1 of 3



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100014-001  
**Client Sample ID:** DewBurd GW688

**Report Date:** 12/29/08  
**Collection Date:** 09/30/08 08:30  
**Date Received:** 10/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/08/08 14:48/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/07/08 03:58/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/08/08 14:48/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/31/08 03:05/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/20/08 09:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/20/08 12:04/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.9	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Gross Alpha precision (±)	2.5	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Gross Alpha MDC	3.5	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Gross Beta	10.9	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Gross Beta MDC	4.1	pCi/L				1	E900.0	11/05/08 13:06/eli-ca
Lead 210	-0.1	pCi/L	U			1	E909.0M	10/20/08 10:13/eli-c
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	10/20/08 10:13/eli-c
Lead 210 MDC	4.2	pCi/L				1	E909.0M	10/20/08 10:13/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	10/09/08 09:08/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	RMO-3008	10/09/08 09:08/eli-c
Radium 226	0.6	pCi/L				1	E903.0	10/23/08 16:38/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/23/08 16:38/eli-c
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	10/24/08 08:42/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/24/08 08:42/eli-c
Gross Gamma	230	pCi/L				1	E901.1	10/13/08 15:50/eli-c
Gross Gamma precision (±)	84	pCi/L				1	E901.1	10/13/08 15:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.2	pCi/L	U			1	E909.0M	10/16/08 10:00/eli-c
Lead 210 precision (±)	5.2	pCi/L				1	E909.0M	10/16/08 10:00/eli-c
Lead 210 MDC	8.6	pCi/L				1	E909.0M	10/16/08 10:00/eli-c
Polonium 210	0.15	pCi/L	U			1	RMO-3008	10/23/08 08:48/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	RMO-3008	10/23/08 08:48/eli-c
Radium 226	0.09	pCi/L	U			1	E903.0	10/20/08 12:48/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/20/08 12:48/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	10/20/08 12:48/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

Page 2 of 3



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100014-001  
**Client Sample ID:** DewBurd GW688

**Report Date:** 12/29/08  
**Collection Date:** 09/30/08 08:30  
**Date Received:** 10/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	10/15/08 16:00/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	10/15/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	535	pCi/L	H	100		1	D5072-92	10/10/08 10:07/eli-c
Radon 222 precision (±)	219	pCi/L	H			1	D5072-92	10/10/08 10:07/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/09/08 13:33/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/29/08 20:58/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/08 13:33/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/09/08 13:33/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/13/08 20:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/08 13:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/08 13:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/08 13:33/eli-c
Iron	0.19	mg/L		0.03		2	E200.7	10/13/08 20:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/08 13:33/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/09/08 13:33/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/06/08 15:37/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/08 13:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/08 13:33/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/08 13:33/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/08 13:33/eli-c
Strontium	1.3	mg/L		0.1		1	E200.8	10/09/08 13:33/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/09/08 13:33/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/09/08 13:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/08 13:33/eli-c
DATA QUALITY								
A/C Balance (± 5)	4.37	%				1	A1030 E	12/10/08 00:00/jmh
Anions	12.4	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	13.6	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	1030	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.770					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
H - Analysis performed past recommended holding time.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 081002A-ALK-SEL-W							
Sample ID: LCS1_081002A	Laboratory Control Sample					Run: PH_COND1-R_081003B			10/02/08 12:07
Alkalinity, Total as CaCO3	960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_081002A	Method Blank					Run: PH_COND1-R_081003B			10/02/08 12:08
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R08090361-003AMS	Sample Matrix Spike					Run: PH_COND1-R_081003B			10/02/08 14:55
Alkalinity, Total as CaCO3	244	mg/L	5.0	89	80	120			
Sample ID: R08090361-003AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_081003B			10/02/08 14:59
Alkalinity, Total as CaCO3	246	mg/L	5.0	91	80	120	0.8	10	
Method: A2510 B		Batch: 081006_1_COND-PROBE-W							
Sample ID: LCS_COND-1_081006	Laboratory Control Sample					Run: PH_COND2-R_081006A			10/06/08 15:47
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_081006	Laboratory Control Sample					Run: PH_COND2-R_081006A			10/06/08 15:48
Conductivity @ 25 C	148	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_081006	Laboratory Control Sample					Run: PH_COND2-R_081006A			10/06/08 15:49
Conductivity @ 25 C	4900	umhos/cm	5.0	98	90	110			
Sample ID: MBLK-1_081006	Method Blank					Run: PH_COND2-R_081006A			10/06/08 15:50
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08100058-001BDUP	Sample Duplicate					Run: PH_COND2-R_081006A			10/06/08 15:59
Conductivity @ 25 C	2740	umhos/cm	5.0				0	10	
Method: A2540 C		Batch: 081006A-SLDS-TDS-W							
Sample ID: LCS1_081006A	Laboratory Control Sample					Run: BAL-4-R_081006A			10/06/08 10:45
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_081006A	Method Blank					Run: BAL-4-R_081006A			10/06/08 10:46
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08100031-001AMS	Sample Matrix Spike					Run: BAL-4-R_081006A			10/06/08 10:54
Solids, Total Dissolved TDS @ 180 C	5600	mg/L	5.0	145	80	120			S
Sample ID: R08100031-001AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_081006A			10/06/08 10:54
Solids, Total Dissolved TDS @ 180 C	5600	mg/L	5.0	115	80	120	1.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2580 B</b>							Batch: 081007-ORP-ISE-W		
<b>Sample ID: LCS</b> Oxidation-Reduction Potential	Laboratory Control Sample 470	mV		100	95	105			10/07/08 00:00
<b>Sample ID: R08100014-001F</b> Oxidation-Reduction Potential	Sample Duplicate 300	mV					1.4	10	10/07/08 00:00
<b>Method: A3114 B</b>							Batch: C_SE3114-081020A		
<b>Sample ID: MBLK</b> Selenium-IV	Method Blank ND	mg/L	0.0003						10/20/08 09:40
<b>Sample ID: 288-155-2</b> Selenium-IV	Laboratory Control Sample 0.052	mg/L	0.0010	105	90	110			10/20/08 09:42
<b>Sample ID: R08100014-001E</b> Selenium-IV	Sample Matrix Spike 0.052	mg/L	0.0010	105	85	115			10/20/08 09:47
<b>Sample ID: R08100014-001E</b> Selenium-IV	Sample Matrix Spike Duplicate 0.052	mg/L	0.0010	104	85	115	0.7	10	10/20/08 09:50
<b>Method: A3114 B</b>							Batch: C_SE3114-081020B		
<b>Sample ID: MBLK</b> Selenium	Method Blank 0.0005	mg/L	0.0003						10/20/08 11:30
<b>Sample ID: 288-155-2</b> Selenium	Laboratory Control Sample 0.047	mg/L	0.0010	93	90	110			10/20/08 11:42
<b>Sample ID: R08100014-001E</b> Selenium	Sample Matrix Spike 0.048	mg/L	0.0010	96	85	115			10/20/08 11:47
<b>Sample ID: R08100014-001E</b> Selenium	Sample Matrix Spike Duplicate 0.049	mg/L	0.0010	99	85	115	2.7	15	10/20/08 11:49
<b>Method: A4500-H B</b>							Batch: 081006_1_PH-W		
<b>Sample ID: LCS_pH-1_081006</b> pH	Laboratory Control Sample 6.79	s.u.	0.010	99	98.55	101.45			10/06/08 16:10
<b>Sample ID: R08100058-001BDUP</b> pH	Sample Duplicate 8.19	s.u.	0.010				0.5	1.25	10/06/08 16:16

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>							Batch: A2008-10-06_2_NH3_01		
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01			Run: TECHAA2-R_081006A		10/06/08 10:19	
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.26	mg/L	0.10	105	90	110		10/06/08 10:20	
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.25	mg/L	0.10	102	90	110		10/06/08 10:21	
<b>Sample ID: R08100014-001BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.46	mg/L	0.10	117	80	120		10/06/08 13:17	
<b>Sample ID: R08100014-001BMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.48	mg/L	0.10	123	80	120	3	10/06/08 13:18 10	S
<b>Method: D5072-92</b>							Batch: C_R109123		
<b>Sample ID: C08100356-011CDUP</b> Radon 222	Sample Duplicate 934	pCi/L	100			Run: SUB-C109123	8.3	10/10/08 10:07 30	
<b>Sample ID: C08100436-001ADUP</b> Radon 222	Sample Duplicate 595	pCi/L	100			Run: SUB-C109123	8	10/10/08 10:07 30	
<b>Sample ID: MB-R109123</b> Radon 222	Method Blank 10	pCi/L				Run: SUB-C109123		10/10/08 10:07 U	
<b>Sample ID: LCS-R109123</b> Radon 222	Laboratory Control Sample 303	pCi/L	100	96	70	130		10/10/08 10:07	

### Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R109160		
<b>Sample ID: MB-081013A</b>	Method Blank				Run: SUB-C109160		10/13/08 14:14		
Boron	ND	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
<b>Sample ID: LFB-081013A</b>	Laboratory Fortified Blank				Run: SUB-C109160		10/13/08 14:19		
Boron	0.99	mg/L	0.10	99	85	115			
Calcium	52	mg/L	0.50	105	85	115			
Iron	1.1	mg/L	0.030	107	85	115			
Magnesium	52	mg/L	0.50	105	85	115			
Potassium	45	mg/L	0.50	91	85	115			
Sodium	50	mg/L	0.77	99	85	115			
<b>Sample ID: C08100150-002BMS2</b>	Sample Matrix Spike				Run: SUB-C109160		10/13/08 18:21		
Boron	1.04	mg/L	0.10	102	70	130			
Iron	1.21	mg/L	0.030	113	70	130			
Calcium	81.5	mg/L	1.0	111	70	130			
Magnesium	60.0	mg/L	1.0	110	70	130			
Potassium	47.5	mg/L	1.0	92	70	130			
Sodium	63.2	mg/L	1.0	104	70	130			
<b>Sample ID: C08100150-002BMSD2</b>	Sample Matrix Spike Duplicate				Run: SUB-C109160		10/13/08 18:25		
Boron	1.02	mg/L	0.10	100	70	130	1.8	20	
Iron	1.17	mg/L	0.030	109	70	130	3	20	
Calcium	79.6	mg/L	1.0	107	70	130	2.4	20	
Magnesium	58.9	mg/L	1.0	108	70	130	1.9	20	
Potassium	47.4	mg/L	1.0	92	70	130	0.2	20	
Sodium	62.5	mg/L	1.0	103	70	130	1.1	20	
<b>Sample ID: C08100110-001BMS2</b>	Sample Matrix Spike				Run: SUB-C109160		10/13/08 20:35		
Boron	5.56	mg/L	0.10	99	70	130			
Iron	9.92	mg/L	0.044	100	70	130			
Calcium	427	mg/L	1.0	104	70	130			
Magnesium	275	mg/L	1.0	107	70	130			
Potassium	278	mg/L	1.0	85	70	130			
Sodium	1010	mg/L	2.7	89	70	130			
<b>Sample ID: C08100110-001BMSD2</b>	Sample Matrix Spike Duplicate				Run: SUB-C109160		10/13/08 20:39		
Boron	5.54	mg/L	0.10	98	70	130	0.5	20	
Iron	9.98	mg/L	0.044	102	70	130	0.5	20	
Calcium	424	mg/L	1.0	103	70	130	0.6	20	
Magnesium	272	mg/L	1.0	106	70	130	0.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R109160		
Sample ID: C08100110-001BMSD2	Sample Matrix Spike Duplicate				Run: SUB-C109160			10/13/08 20:39	
Potassium	280	mg/L	1.0	85	70	130	0.5	20	
Sodium	1020	mg/L	2.7	91	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R108822		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C108822				10/06/08 13:50		
Silicon	ND	mg/L	0.0001						
Barium	ND	mg/L	3E-05						
Cadmium	5E-06	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Lead	ND	mg/L	3E-06						
Manganese	3E-05	mg/L	6E-06						
Mercury	5E-05	mg/L	1E-05						
Molybdenum	ND	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Vanadium	ND	mg/L	3E-05						
Silica	ND	mg/L	0.0002						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C108822				10/06/08 13:57		
Silicon	0.216	mg/L	0.0010	108	85	115			
Barium	0.0510	mg/L	0.0010	102	85	115			
Cadmium	0.0503	mg/L	0.0010	101	85	115			
Chromium	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0504	mg/L	0.0010	101	85	115			
Manganese	0.0505	mg/L	0.0010	101	85	115			
Mercury	0.00508	mg/L	0.0010	101	85	115			
Molybdenum	0.0501	mg/L	0.0010	100	85	115			
Nickel	0.0505	mg/L	0.0010	101	85	115			
Vanadium	0.0517	mg/L	0.0010	103	85	115			
Silica	0.462	mg/L	0.0021	108	85	115			
<b>Sample ID: C08100156-001BMS4</b>	Post Digestion Spike		Run: SUB-C108822				10/07/08 03:31		
Barium	0.554	mg/L	0.10	105	70	130			
Cadmium	0.512	mg/L	0.010	102	70	130			
Chromium	0.520	mg/L	0.050	103	70	130			
Lead	0.488	mg/L	0.050	98	70	130			
Manganese	0.500	mg/L	0.010	99	70	130			
Mercury	0.0363	mg/L	0.0010	73	70	130			
Molybdenum	0.411	mg/L	0.10	82	70	130			
Nickel	0.535	mg/L	0.050	107	70	130			
Silicon	52.4	mg/L	0.39		70	130			A
Vanadium	0.530	mg/L	0.10	106	70	130			
Silica	112	mg/L	0.84		70	130			A
<b>Sample ID: C08100156-001BMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C108822				10/07/08 03:37		
Barium	0.559	mg/L	0.10	106	70	130	0.8	20	
Cadmium	0.516	mg/L	0.010	103	70	130	0.9	20	
Chromium	0.523	mg/L	0.050	104	70	130	0.7	20	
Lead	0.492	mg/L	0.050	98	70	130	0.8	20	
Manganese	0.504	mg/L	0.010	100	70	130	0.9	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R108822		
Sample ID: C08100156-001BMSD4	Post Digestion Spike Duplicate		Run: SUB-C108822				10/07/08 03:37		
Mercury	0.0358	mg/L	0.0010	72	70	130	1.5	20	
Molybdenum	0.411	mg/L	0.10	82	70	130	0.1	20	
Nickel	0.538	mg/L	0.050	108	70	130	0.6	20	
Silicon	50.2	mg/L	0.39		70	130	4.2	20	A
Vanadium	0.531	mg/L	0.10	106	70	130	0.2	20	
Silica	107	mg/L	0.84		70	130	4.2	20	A
Method: E200.8							Batch: C_R108976		
Sample ID: LRB	Method Blank		Run: SUB-C108976				10/08/08 12:53		
Copper	ND	mg/L	3E-05						
Silver	5E-05	mg/L	7E-06						
Uranium	ND	mg/L	2E-06						
Zinc	0.0003	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C108976				10/08/08 13:00		
Copper	0.0514	mg/L	0.0010	103	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			
Zinc	0.0524	mg/L	0.0010	104	85	115			
Sample ID: C08091107-011FMS4	Post Digestion Spike		Run: SUB-C108976				10/08/08 16:22		
Copper	0.0434	mg/L	0.010	87	70	130			
Silver	0.0114	mg/L	0.010	57	70	130			S
Thorium 232	0.0486	mg/L	0.0010	97	70	130			
Uranium	0.0521	mg/L	0.00030	99	70	130			
Zinc	0.0613	mg/L	0.010	117	70	130			
Sample ID: C08091107-011FMSD4	Post Digestion Spike Duplicate		Run: SUB-C108976				10/08/08 16:29		
Copper	0.0430	mg/L	0.010	86	70	130	1.1	20	
Silver	0.0119	mg/L	0.010	59	70	130	3.9	20	S
Thorium 232	0.0478	mg/L	0.0010	96	70	130	1.7	20	
Uranium	0.0514	mg/L	0.00030	97	70	130	1.4	20	
Zinc	0.0514	mg/L	0.010	97	70	130	17	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R109039		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C109039				10/09/08 12:45		
Antimony	0.0002	mg/L	4E-06						
Barium	ND	mg/L	3E-05						
Beryllium	4E-06	mg/L	4E-06						
Cadmium	6E-06	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Molybdenum	1E-05	mg/L	9E-06						
Nickel	ND	mg/L	3E-05						
Selenium	ND	mg/L	0.0001						
Silver	0.0001	mg/L	7E-06						
Strontium	ND	mg/L	2E-05						
Thallium	ND	mg/L	4E-06						
Uranium	ND	mg/L	2E-06						
Zinc	0.0003	mg/L	3E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C109039				10/09/08 12:52		
Antimony	0.0503	mg/L	0.0010	100	85	115			
Barium	0.0500	mg/L	0.0010	100	85	115			
Beryllium	0.0532	mg/L	0.0010	106	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Chromium	0.0503	mg/L	0.0010	101	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0498	mg/L	0.0010	100	85	115			
Manganese	0.0505	mg/L	0.0010	101	85	115			
Molybdenum	0.0502	mg/L	0.0010	100	85	115			
Nickel	0.0507	mg/L	0.0010	101	85	115			
Selenium	0.0499	mg/L	0.0010	100	85	115			
Silver	0.0194	mg/L	0.0010	96	85	115			
Strontium	0.0501	mg/L	0.0010	100	85	115			
Thallium	0.0500	mg/L	0.0010	100	85	115			
Uranium	0.0469	mg/L	0.00030	94	85	115			
Zinc	0.0535	mg/L	0.0010	106	85	115			
<b>Sample ID: C08100151-017BMS4</b>	Post Digestion Spike		Run: SUB-C109039				10/09/08 15:01		
Antimony	0.0502	mg/L	0.050	100	70	130			
Barium	0.0612	mg/L	0.10	99	70	130			
Beryllium	0.0428	mg/L	0.010	86	70	130			
Cadmium	0.0489	mg/L	0.010	98	70	130			
Chromium	0.0499	mg/L	0.050	100	70	130			
Copper	0.0476	mg/L	0.010	95	70	130			
Lead	0.0488	mg/L	0.050	98	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R109039		
Sample ID: C08100151-017BMS4	Post Digestion Spike				Run: SUB-C109039			10/09/08 15:01	
Manganese	0.0683	mg/L	0.010	98	70	130			
Molybdenum	0.0517	mg/L	0.10	103	70	130			
Nickel	0.0460	mg/L	0.050	92	70	130			
Selenium	0.0544	mg/L	0.0010	109	70	130			
Silver	0.0177	mg/L	0.010	89	70	130			
Strontium	0.205	mg/L	0.10	128	70	130			
Thallium	0.0485	mg/L	0.10	97	70	130			
Uranium	0.0485	mg/L	0.00030	96	70	130			
Zinc	0.0535	mg/L	0.010	103	70	130			
Sample ID: C08100151-017BMSD4	Post Digestion Spike Duplicate				Run: SUB-C109039			10/09/08 15:08	
Antimony	0.0497	mg/L	0.050	99	70	130	0	20	
Barium	0.0600	mg/L	0.10	97	70	130	0	20	
Beryllium	0.0426	mg/L	0.010	85	70	130	0.7	20	
Cadmium	0.0479	mg/L	0.010	96	70	130	2	20	
Chromium	0.0498	mg/L	0.050	100	70	130	0	20	
Copper	0.0467	mg/L	0.010	93	70	130	1.9	20	
Lead	0.0488	mg/L	0.050	98	70	130	0	20	
Manganese	0.0671	mg/L	0.010	95	70	130	1.8	20	
Molybdenum	0.0508	mg/L	0.10	102	70	130	0	20	
Nickel	0.0457	mg/L	0.050	91	70	130	0	20	
Selenium	0.0539	mg/L	0.0010	108	70	130	0.9	20	
Silver	0.0174	mg/L	0.010	87	70	130	1.7	20	
Strontium	0.202	mg/L	0.10	123	70	130	1.4	20	
Thallium	0.0488	mg/L	0.10	98	70	130	0	20	
Uranium	0.0487	mg/L	0.00030	96	70	130	0.4	20	
Zinc	0.0522	mg/L	0.010	101	70	130	2.5	20	
Method: E200.8							Batch: C_R109712		
Sample ID: LRB	Method Blank				Run: SUB-C109712			10/22/08 12:38	
Aluminum	0.001	mg/L	0.0001						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C109712			10/22/08 12:45	
Aluminum	0.0548	mg/L	0.0010	107	85	115			
Sample ID: C08100471-016DMS4	Post Digestion Spike				Run: SUB-C109712			10/22/08 22:41	
Aluminum	0.298	mg/L	0.10	119	70	130			
Sample ID: C08100471-016DMSD4	Post Digestion Spike Duplicate				Run: SUB-C109712			10/22/08 22:47	
Aluminum	0.295	mg/L	0.10	118	70	130	1.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R109913		
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C109913			10/27/08 12:28
Arsenic	ND	mg/L	6E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C109913			10/27/08 12:33
Arsenic	0.0513	mg/L	0.0010	103	85	115			
<b>Sample ID: C08100267-002BMS4</b>	Post Digestion Spike					Run: SUB-C109913			10/27/08 17:57
Arsenic	0.0559	mg/L	0.0010	104	70	130			
<b>Sample ID: C08100267-002BMSD4</b>	Post Digestion Spike Duplicate					Run: SUB-C109913			10/27/08 18:02
Arsenic	0.0561	mg/L	0.0010	104	70	130	0.4	20	
<b>Method: E200.8</b>							Batch: C_R110071		
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C110071			10/29/08 18:03
Arsenic	ND	mg/L	6E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C110071			10/29/08 18:09
Arsenic	0.0479	mg/L	0.0010	96	85	115			
<b>Sample ID: C08100460-002BMS4</b>	Post Digestion Spike					Run: SUB-C110071			10/29/08 22:55
Arsenic	0.0557	mg/L	0.0010	98	70	130			
<b>Sample ID: C08100460-002BMSD4</b>	Post Digestion Spike Duplicate					Run: SUB-C110071			10/29/08 23:01
Arsenic	0.0548	mg/L	0.0010	96	70	130	1.7	20	
<b>Method: E245.1</b>							Batch: B_35067		
<b>Sample ID: MB-35067</b>	Method Blank					Run: SUB-B118690			10/06/08 12:51
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-35067</b>	Laboratory Fortified Blank					Run: SUB-B118690			10/06/08 12:54
Mercury	0.0017	mg/L	0.0010	87	85	115			
<b>Sample ID: B08100347-005CMS</b>	Sample Matrix Spike					Run: SUB-B118690			10/06/08 15:25
Mercury	0.065	mg/L	0.0010		70	130			A
<b>Sample ID: B08100347-005CMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B118690			10/06/08 15:28
Mercury	0.068	mg/L	0.0010		70	130	4.8	30	A
<b>Method: E245.1</b>							Analytical Run: SUB-B118690		
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								10/06/08 12:44
Mercury	0.0019	mg/L	0.0010	94	90	110			

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R37804		
<b>Sample ID: LFB0810013653-3</b>	Laboratory Fortified Blank		Run: DIONEX_081001A				10/01/08 18:53		
Chloride	4.95	mg/L	0.50	99	90	110			
Fluoride	2.08	mg/L	0.10	104	90	110			
Nitrogen, Nitrate as N	2.46	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.54	mg/L	0.10	102	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
<b>Sample ID: LFB0810013653-4</b>	Laboratory Fortified Blank		Run: DIONEX_081001A				10/01/08 19:09		
Chloride	5.03	mg/L	0.50	101	90	110			
Fluoride	2.12	mg/L	0.10	106	90	110			
Nitrogen, Nitrate as N	2.50	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N	2.58	mg/L	0.10	103	90	110			
Sulfate	14.9	mg/L	1.0	99	90	110			
<b>Sample ID: R08100014-001AMS</b>	Sample Matrix Spike		Run: DIONEX_081001A				10/02/08 05:49		
Chloride	263	mg/L	5.4	94	80	120			
Fluoride	107	mg/L	0.56	100	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	98	80	120			
Nitrogen, Nitrite as N	128	mg/L	2.9	102	80	120			
Sulfate	1130	mg/L	3.4	94	80	120			
<b>Sample ID: R08100014-001AMSD</b>	Sample Matrix Spike Duplicate		Run: DIONEX_081001A				10/02/08 06:06		
Chloride	258	mg/L	5.4	92	80	120	2.2	10	
Fluoride	104	mg/L	0.56	97	80	120	2.4	10	
Nitrogen, Nitrate as N	119	mg/L	1.3	95	80	120	2.6	10	
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120	2.8	10	
Sulfate	1120	mg/L	3.4	92	80	120	1.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0549		
Sample ID: MB-GrAB-0549	Method Blank					Run: SUB-C110512		11/05/08 01:00	
Gross Alpha	-0.7	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: UNAT-GrAB-0549	Laboratory Control Sample					Run: SUB-C110512		11/05/08 01:00	
Gross Alpha	130	pCi/L		96	70	130			
Sample ID: C08100684-001AMS	Sample Matrix Spike					Run: SUB-C110512		11/05/08 01:00	
Gross Alpha	130	pCi/L		94	70	130			
Sample ID: C08100684-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C110512		11/05/08 01:00	
Gross Alpha	140	pCi/L		100	70	130	6.1	18.3	
Sample ID: C08100012-002DDUP	Sample Duplicate					Run: SUB-C110512		11/05/08 13:06	
Gross Alpha	4.3	pCi/L					76	434.7	U
Gross Beta	-12	pCi/L					110	196.9	U
Sample ID: Cs137-GrAB-0549	Laboratory Control Sample					Run: SUB-C110512		11/05/08 01:00	
Gross Beta	83	pCi/L		90	70	130			
Sample ID: C08100684-001AMS	Sample Matrix Spike					Run: SUB-C110512		11/05/08 01:00	
Gross Beta	96	pCi/L		98	70	130			
Sample ID: C08100684-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C110512		11/05/08 01:00	
Gross Beta	96	pCi/L		98	70	130	0.1	16.1	
Method: E901.1							Batch: C_R109497		
Sample ID: MB-R109497	Method Blank					Run: SUB-C109497		10/13/08 15:50	
Gross Gamma	ND	pCi/L							
Sample ID: LCS-R109497	Laboratory Control Sample					Run: SUB-C109497		10/13/08 15:50	
Cesium 137	46000	pCi/L	20	106	70	130			
Cobalt 60	32000	pCi/L	20	102	70	130			
Sample ID: C08091068-007HDUP	Sample Duplicate					Run: SUB-C109497		10/13/08 15:50	
Gross Gamma	960	pCi/L					0.2	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-3138		
Sample ID: C08100062-002AMS	Sample Matrix Spike					Run: SUB-C109759			10/23/08 15:01
Radium 226	22	pCi/L		85	70	130			
Sample ID: C08100062-002AMSD	Sample Matrix Spike Duplicate					Run: SUB-C109759			10/23/08 15:01
Radium 226	23	pCi/L		87	70	130	1.4	25.4	
Sample ID: MB-RA226-3138	Method Blank					Run: SUB-C109759			10/23/08 16:38
Radium 226	-0.04	pCi/L							U
Sample ID: LCS-RA226-3138	Laboratory Control Sample					Run: SUB-C109759			10/23/08 16:38
Radium 226	7.6	pCi/L		96	70	130			
Method: E903.0							Batch: C_RA226-3146		
Sample ID: C08091138-001ADUP	Sample Duplicate					Run: SUB-C109570			10/19/08 17:13
Radium 226	15.2	pCi/Filter					12	46.7	
Sample ID: C08100116-005AMS	Sample Matrix Spike					Run: SUB-C109570			10/20/08 11:18
Radium 226	144	pCi/Filter		93	70	130			
Sample ID: LCS-20083	Laboratory Control Sample					Run: SUB-C109570			10/20/08 14:18
Radium 226	16	pCi/L		100	70	130			
Sample ID: MB-20083	Method Blank					Run: SUB-C109570			10/20/08 15:49
Radium 226	-0.2	pCi/L							U
Method: E907.0							Batch: C_R110598		
Sample ID: C08091179-002AMS	Sample Matrix Spike					Run: SUB-C110598			10/15/08 16:00
Thorium 230	127	pCi/Filter	0.20	74	70	130			
Sample ID: C08091179-002AMSD	Sample Matrix Spike Duplicate					Run: SUB-C110598			10/15/08 16:00
Thorium 230	163	pCi/Filter	0.20	102	70	130	25	30	
Sample ID: LCS-20083	Laboratory Control Sample					Run: SUB-C110598			10/15/08 16:00
Thorium 230	43.3	pCi/Filter	0.20	93	70	130			
Sample ID: MB-20083	Method Blank					Run: SUB-C110598			10/15/08 16:00
Thorium 230	0.10	pCi/Filter							U

### Qualifiers:

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0661		
<b>Sample ID: LCS-RA-TH-ISO-0661</b>	Laboratory Control Sample				Run: SUB-C110006				10/23/08 16:11
Thorium 230	11.5	pCi/L	0.20	102	70	130			
<b>Sample ID: R08100014-001H</b>	Sample Matrix Spike				Run: SUB-C110006				10/24/08 08:42
Thorium 230	44.3	pCi/L	0.20	91	70	130			
<b>Sample ID: R08100014-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C110006				10/24/08 08:42
Thorium 230	49.4	pCi/L	0.20	101	70	130	11	39.7	
<b>Sample ID: MB-RA-TH-ISO-0661</b>	Method Blank				Run: SUB-C110006				10/24/08 08:42
Thorium 230	0.2	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_20083		
<b>Sample ID: C08100116-002AMS</b>	Sample Matrix Spike				Run: SUB-C109829				10/16/08 10:00
Lead 210	1150	pCi/Filter		97	70	130			
<b>Sample ID: C08100116-002AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C109829				10/16/08 10:00
Lead 210	1520	pCi/Filter		129	70	130	28	30	
<b>Sample ID: MB-R109829</b>	Method Blank				Run: SUB-C109829				10/16/08 10:00
Lead 210	-0.3	pCi/L							U
<b>Sample ID: LCS-R109829</b>	Laboratory Control Sample				Run: SUB-C109829				10/16/08 10:00
Lead 210	110	pCi/L		97	70	130			
<b>Method: E909.0M</b>							Batch: C_R109942		
<b>Sample ID: C08100106-005AMS</b>	Sample Matrix Spike				Run: SUB-C109942				10/20/08 10:13
Lead 210	99	pCi/L		84	70	130			
<b>Sample ID: C08100301-006ADUP</b>	Sample Duplicate				Run: SUB-C109942				10/20/08 10:13
Lead 210	1.8	pCi/L					5.4	30	U
<b>Sample ID: MB-R109942</b>	Method Blank				Run: SUB-C109942				10/20/08 10:13
Lead 210	ND	pCi/L							U
<b>Sample ID: LCS-R109942</b>	Laboratory Control Sample				Run: SUB-C109942				10/20/08 10:13
Lead 210	52	pCi/L		90	70	130			
<b>Method: RMO-3008</b>							Batch: C_20083		
<b>Sample ID: LCS-20083</b>	Laboratory Control Sample				Run: SUB-C109765				10/23/08 08:48
Polonium 210	79	pCi/L	1.0	94	70	130			
<b>Sample ID: MB-20083</b>	Method Blank				Run: SUB-C109765				10/23/08 11:46
Polonium 210	-0.5	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100014

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b>							Batch: C_PO210-0152		
<b>Sample ID: R08100014-001K</b> Polonium 210	Sample Matrix Spike 82	pCi/L	1.0	94	70	130			10/09/08 09:08
<b>Sample ID: R08100014-001K</b> Polonium 210	Sample Matrix Spike Duplicate 79	pCi/L	1.0	92	70	130	3.3	51.1	10/09/08 09:08
<b>Sample ID: C08090823-001FDUP</b> Polonium 210	Sample Duplicate -0.039	pCi/L	1.0				0	742.4	10/09/08 09:08 U
<b>Sample ID: LCS-PO210-0152</b> Polonium 210	Laboratory Control Sample 35	pCi/L	1.0	101	70	130			10/09/08 09:08
<b>Sample ID: MB-PO210-0152</b> Polonium 210	Method Blank -0.07	pCi/L							10/09/08 09:08 U
<b>Method: RMO-3008</b>							Batch: C_R109765		
<b>Sample ID: C08091163-008AMS</b> Polonium 210	Sample Matrix Spike 0.00057	uCi/kg	6.3E-06	90	70	130			10/23/08 08:48
<b>Sample ID: C08091163-008AMSD</b> Polonium 210	Sample Matrix Spike Duplicate 0.00058	uCi/kg	6.3E-06	92	70	130	2	51.9	10/23/08 08:48
<b>Sample ID: LCS-20052</b> Polonium 210	Laboratory Control Sample 7.6E-05	uCi/kg	1.0E-06	92	70	130			10/23/08 08:48
<b>Sample ID: MB-20052</b> Polonium 210	Method Blank ND	uCi/kg	1E-06						10/23/08 08:48 U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



# Chain of Custody and Analytical Request Record

Page \_\_\_\_ of \_\_\_\_

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>Scott Environmental</b>		Project Name, PWS, Permit, Etc.: <b>Dewey/Burdock Ponds</b>		Sample Origin:	EPA/State Compliance:
Report Mail Address: <b>RE 50 EC</b>		Contact Name: <b>Allen Scott</b> Phone/Fax: <b>673-4009</b>		State: <input type="checkbox"/> Yes <input type="checkbox"/> No	Sampler: (Please Print)
Invoice Address:		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Number of Containers Sample Type: AWSVB O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by:	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.): <b>GW 6088</b>		Collection Date: <b>9-30-08</b>	Collection Time: <b>8:35</b>	MATRIX: <b>W</b>	Comments:
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Date/Time: <b>10-1-08 9:39</b>		Signature: <b>Allen Scott</b>	Received by (print): <b>Steve Traland</b> Date/Time: <b>10-1-08 9:40</b> Signature: <b>Steve Traland</b>
Sample Disposal: <b>Return to Client</b>		Lab Disposal:		Received by Laboratory: <b>Steve Traland</b> Date/Time: <b>10-1-08 9:40</b> Signature: <b>Steve Traland</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



ENERGY LABORATORIES, INC. \* 2821 Plant St \* Rapid City, SD 57702  
Toll Free 888.672.1225 \* 605.342.1225 \* FAX 605.342.1397 \* rapid\_city@energylab.com

## ANALYTICAL SUMMARY REPORT

December 29, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08100295

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 14 samples for RESPEC Inc on 10/22/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08100295-001	DewBurd BLK01	10/20/08 12:00	10/22/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved



## ANALYTICAL SUMMARY REPORT

R08100295-002 DewBurd GW680	10/20/08 12:10 10/22/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08100295-003 DewBurd GW680	10/20/08 12:10 10/22/08	Aqueous	Same As Above
R08100295-004 DewBurd GW698	10/20/08 13:52 10/22/08	Aqueous	Same As Above
R08100295-005 DewBurd GW688	10/20/08 12:15 10/22/08	Aqueous	Same As Above
R08100295-006 DewBurd GW622	10/20/08 15:42 10/22/08	Aqueous	Same As Above
R08100295-007 DewBurd GW3026	10/20/08 13:15 10/22/08	Aqueous	Same As Above
R08100295-008 DewBurd GW689	10/20/08 14:46 10/22/08	Aqueous	Same As Above
R08100295-009 DewBurd GW681	10/20/08 15:00 10/22/08	Aqueous	Same As Above
R08100295-010 DewBurd GW615	10/20/08 16:20 10/22/08	Aqueous	Same As Above
R08100295-011 DewBurd GW697	10/21/08 9:45 10/22/08	Aqueous	Same As Above
R08100295-012 DewBurd GW695	10/21/08 9:10 10/22/08	Aqueous	Same As Above
R08100295-013 DewBurd GW694	10/21/08 8:25 10/22/08	Aqueous	Same As Above
R08100295-014 DewBurd GW696	10/21/08 8:45 10/22/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson  
Rapid City - Project Manager



**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08100295

**Date:** 29-Dec-08

## CASE NARRATIVE

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

All samples were analyzed in accordance with prescribed methodology, except where noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

During the course of analyzing your sample(s) the following exceptions were noted.

- Any exceptions noted are listed in the Analytical Report

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY IDENTIFIERS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005  
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002  
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942  
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006  
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945  
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

For additional information, including certifications, and analytical services visit our web page [www.energylab.com](http://www.energylab.com).

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com).

Comments imported for SUBBED Workorder: C08101052

### ANALYTICAL COMMENTS

The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of 5 pCi/L if there is sufficient sample to process 1.0 L, and this is reported on a sample specific basis.

End of comments imported for SUBBED Workorder: C08101052





# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-001  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:00  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 15:41/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 15:41/mb
Bicarbonate as HCO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 15:41/mb
Calcium	ND	mg/L		0.5		2	E200.7	11/05/08 17:04/eli-c
Chloride	ND	mg/L		1		1	E300.0	10/22/08 20:47/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	10/22/08 20:47/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	11/05/08 17:04/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 17:51/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/22/08 20:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/22/08 20:47/jmh
Potassium	ND	mg/L		0.5		2	E200.7	11/05/08 17:04/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	11/05/08 17:04/eli-c
Sulfate	ND	mg/L		1		1	E300.0	10/22/08 20:47/jmh
Silica	0.5	mg/L		0.2		2	E200.7	11/05/08 17:04/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	10/28/08 17:04/tb
Oxidation-Reduction Potential	400	mV				1	A2580 B	10/27/08 19:00/jmh
pH	5.63	s.u.		0.01		1	A4500-H B	10/28/08 13:28/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	24	mg/L		5		1	A2540 C	10/24/08 15:44/mb
- SAR calculations may not be appropriate for near blank results.								
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/05/08 05:25/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/05/08 05:25/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 05:25/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 17:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 05:25/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 05:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 05:25/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 17:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 05:25/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	11/05/08 05:25/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 05:25/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 05:25/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 05:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:34/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 13:29/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-001  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:00  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 05:25/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/05/08 05:25/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 05:25/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 05:25/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 15:24/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:31/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	-0.05	pCi/L	U			1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	0.4	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	0.7	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	-2	pCi/L	U			1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	2.6	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	4.7	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.7	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.18	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.7	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.39	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	11/11/08 11:22/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 11:22/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08100295-001  
Client Sample ID: DewBurd BLK01

Report Date: 12/29/08  
Collection Date: 10/20/08 12:00  
Date Received: 10/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.5	pCi/L	U	0.2		1	E903.0	11/11/08 11:22/eli-c
Thorium 230	-0.2	pCi/L				1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	184	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	69.2	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 02:41/eli-c
Arsenic	0.003	mg/L	L	0.002		1	E200.8	10/30/08 02:41/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 02:41/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 02:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 20:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 02:41/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 02:41/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 02:41/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	11/05/08 20:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 02:41/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	11/05/08 20:25/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:30/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 02:41/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 02:41/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 02:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 02:41/eli-c
Strontium	ND	mg/L		0.1		2	E200.7	11/05/08 20:25/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 02:41/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/30/08 02:41/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 02:41/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	252	mg/L		5		1	A2320 B	10/27/08 15:48/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/27/08 15:48/mb
Bicarbonate as HCO3	307	mg/L		5		1	A2320 B	10/27/08 15:48/mb
Calcium	384	mg/L		0.5		2	E200.7	11/05/08 17:28/eli-c
Chloride	14	mg/L		1		1	E300.0	10/22/08 21:20/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	10/22/08 21:20/jmh
Magnesium	122	mg/L		0.5		2	E200.7	11/05/08 17:28/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/23/08 17:52/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/22/08 21:20/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/22/08 21:20/jmh
Potassium	18.7	mg/L		0.5		2	E200.7	11/05/08 17:28/eli-c
Sodium	143	mg/L	D	2		2	E200.7	11/05/08 17:28/eli-c
Sulfate	1350	mg/L	D	3		50	E300.0	10/22/08 21:03/jmh
Silica	8.5	mg/L		0.2		2	E200.7	11/05/08 17:28/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2670	umhos/cm		5.0		1	A2510 B	10/28/08 17:05/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.69	s.u.		0.01		1	A4500-H B	10/29/08 00:00/tb
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	2400	mg/L		5		1	A2540 C	10/24/08 15:44/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/05/08 05:32/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 05:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 05:32/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	11/05/08 17:28/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 05:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 05:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 05:32/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	11/05/08 17:28/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 05:32/eli-c
Manganese	0.41	mg/L		0.01		1	E200.8	11/05/08 05:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 05:32/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 05:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 05:32/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 13:36/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 05:32/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08100295-002  
Client Sample ID: DewBurd GW680

Report Date: 12/29/08  
Collection Date: 10/20/08 12:10  
Date Received: 10/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0179	mg/L		0.0003		1	E200.8	11/05/08 05:32/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 05:32/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 05:32/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 15:28/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:38/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	3700	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha precision (±)	58.4	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha MDC	6.8	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta	1170	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta precision (±)	16.7	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta MDC	9.5	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Lead 210	7.9	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.8	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.69	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	1230	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	6.8	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	4400	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	6.6	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.2	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	1.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.68	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	9.0	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 precision (±)	1	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 11:22/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.2	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	66700	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	365	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 02:48/eli-c
Arsenic	0.008	mg/L	L	0.002		1	E200.8	10/30/08 02:48/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 02:48/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 02:48/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	11/05/08 20:33/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 02:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 02:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 02:48/eli-c
Iron	0.29	mg/L		0.03		2	E200.7	11/05/08 20:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 02:48/eli-c
Manganese	0.46	mg/L		0.01		2	E200.7	11/05/08 20:33/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:32/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 02:48/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 02:48/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 02:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 02:48/eli-c
Strontium	7.4	mg/L		0.1		2	E200.7	11/05/08 20:33/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 02:48/eli-c
Uranium	0.0209	mg/L		0.0003		1	E200.8	10/30/08 02:48/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 02:48/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.49	%				1	A1030 E	12/10/08 00:00/jmh
Anions	33.5	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	35.9	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	2200	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.08					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-003  
**Client Sample ID:** DewBurd GW680

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	338	mg/L		5		1	A2320 B	10/27/08 15:50/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 15:50/mb
Bicarbonate as HCO <sub>3</sub>	412	mg/L		5		1	A2320 B	10/27/08 15:50/mb
Calcium	382	mg/L		0.5		2	E200.7	11/05/08 17:36/eli-c
Chloride	14	mg/L		1		1	E300.0	10/22/08 21:53/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	10/22/08 21:53/jmh
Magnesium	123	mg/L		0.5		2	E200.7	11/05/08 17:36/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 17:53/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/22/08 21:53/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/22/08 21:53/jmh
Potassium	18.8	mg/L		0.5		2	E200.7	11/05/08 17:36/eli-c
Sodium	141	mg/L	D	2		2	E200.7	11/05/08 17:36/eli-c
Sulfate	1380	mg/L	D	3		50	E300.0	10/22/08 21:36/jmh
Silica	8.4	mg/L		0.2		2	E200.7	11/05/08 17:36/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2660	umhos/cm		5.0		1	A2510 B	10/28/08 17:17/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.60	s.u.		0.01		1	A4500-H B	10/28/08 13:35/tb
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	10/24/08 15:45/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/05/08 05:38/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/05/08 05:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 05:38/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	11/05/08 17:36/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 05:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 05:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 05:38/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	11/05/08 17:36/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 05:38/eli-c
Manganese	0.41	mg/L		0.01		1	E200.8	11/05/08 05:38/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 05:38/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 05:38/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 05:38/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 13:43/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 05:38/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-003  
**Client Sample ID:** DewBurd GW680

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0176	mg/L		0.0003		1	E200.8	11/05/08 05:38/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 05:38/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 05:38/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0003	mg/L		0.0003		1	E200.8	11/06/08 15:32/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4200	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	63.0	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	7.0	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	1190	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	16.8	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	9.5	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	18.2	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.9	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	1190	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	6.2	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	4400	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	4.1	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	1.4	pCi/L		1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	6.9	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 11:22/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-003  
**Client Sample ID:** DewBurd GW680

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	74300	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	385	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 02:55/eli-c
Arsenic	0.007	mg/L	L	0.002		1	E200.8	10/30/08 02:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 02:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 02:55/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	11/05/08 20:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 02:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 02:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 02:55/eli-c
Iron	0.29	mg/L		0.03		2	E200.7	11/05/08 20:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 02:55/eli-c
Manganese	0.44	mg/L		0.01		2	E200.7	11/05/08 20:37/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:34/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 02:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 02:55/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 02:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 02:55/eli-c
Strontium	7.2	mg/L		0.1		2	E200.7	11/05/08 20:37/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 02:55/eli-c
Uranium	0.0210	mg/L		0.0003		1	E200.8	10/30/08 02:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 02:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.230	%				1	A1030 E	12/10/08 00:00/jmh
Anions	36.0	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	35.8	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	2290	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.910					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-004  
**Client Sample ID:** DewBurd GW698

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:52  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	114	mg/L		5		1	A2320 B	10/27/08 15:52/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/27/08 15:52/mb
Bicarbonate as HCO3	139	mg/L		5		1	A2320 B	10/27/08 15:52/mb
Calcium	366	mg/L		0.5		2	E200.7	11/05/08 17:40/eli-c
Chloride	10	mg/L		1		1	E300.0	10/22/08 23:31/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	10/22/08 23:31/jmh
Magnesium	128	mg/L		0.5		2	E200.7	11/05/08 17:40/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/23/08 17:55/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/22/08 23:31/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/22/08 23:31/jmh
Potassium	15.1	mg/L		0.5		2	E200.7	11/05/08 17:40/eli-c
Sodium	84	mg/L	D	2		2	E200.7	11/05/08 17:40/eli-c
Sulfate	1380	mg/L	D	3		50	E300.0	10/22/08 22:42/jmh
Silica	10.5	mg/L		0.2		2	E200.7	11/05/08 17:40/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2480	umhos/cm		5.0		1	A2510 B	10/28/08 17:18/tb
Oxidation-Reduction Potential	64	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.34	s.u.		0.01		1	A4500-H B	10/28/08 13:38/tb
Sodium Adsorption Ratio (SAR)	0.96	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	10/27/08 10:44/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/05/08 05:45/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/05/08 05:45/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 05:45/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 17:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 05:45/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 05:45/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 05:45/eli-c
Iron	2.67	mg/L		0.03		2	E200.7	11/05/08 17:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 05:45/eli-c
Manganese	2.37	mg/L		0.01		1	E200.8	11/05/08 05:45/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 05:45/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 05:45/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 05:45/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 13:49/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 05:45/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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### LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-004  
**Client Sample ID:** DewBurd GW698

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:52  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.103	mg/L		0.0003		1	E200.8	11/05/08 05:45/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 05:45/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 05:45/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0036	mg/L		0.0003		1	E200.8	11/06/08 15:37/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1330	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	34.2	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	6.5	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	399	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	10.7	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	6.8	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.8	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.42	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	347	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	3.5	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	1700	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	100	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	4.7	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.68	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	7.4	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	11/11/08 11:22/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 11:22/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-004  
**Client Sample ID:** DewBurd GW698

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:52  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	38200	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	278	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 03:02/eli-c
Arsenic	0.006	mg/L	L	0.002		1	E200.8	10/30/08 03:02/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 03:02/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 03:02/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 20:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 03:02/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 03:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 03:02/eli-c
Iron	4.86	mg/L		0.03		2	E200.7	11/05/08 20:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 03:02/eli-c
Manganese	2.47	mg/L		0.01		2	E200.7	11/05/08 20:41/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:37/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 03:02/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 03:02/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 03:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 03:02/eli-c
Strontium	4.9	mg/L		0.1		2	E200.7	11/05/08 20:41/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 03:02/eli-c
Uranium	0.132	mg/L		0.0003		1	E200.8	10/30/08 03:02/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 03:02/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.91	%				1	A1030 E	12/10/08 00:00/jmh
Anions	31.2	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	33.1	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	2080	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.10					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-005  
**Client Sample ID:** DewBurd GW688

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:15  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	162	mg/L		5		1	A2320 B	10/27/08 15:54/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/27/08 15:54/mb
Bicarbonate as HCO3	197	mg/L		5		1	A2320 B	10/27/08 15:54/mb
Calcium	49.0	mg/L		0.5		2	E200.7	11/05/08 17:44/eli-c
Chloride	12	mg/L		1		1	E300.0	10/23/08 00:04/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	10/23/08 00:04/jmh
Magnesium	20.1	mg/L		0.5		2	E200.7	11/05/08 17:44/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/23/08 17:56/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 00:04/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 00:04/jmh
Potassium	12.0	mg/L		0.5		2	E200.7	11/05/08 17:44/eli-c
Sodium	193	mg/L	D	2		2	E200.7	11/05/08 17:44/eli-c
Sulfate	450	mg/L	D	3		50	E300.0	10/22/08 23:48/jmh
Silica	8.4	mg/L		0.2		2	E200.7	11/05/08 17:44/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1260	umhos/cm		5.0		1	A2510 B	10/28/08 17:19/tb
Oxidation-Reduction Potential	170	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.15	s.u.		0.01		1	A4500-H B	10/28/08 13:40/tb
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	10/24/08 15:46/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/05/08 05:52/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/05/08 05:52/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 05:52/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 17:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 05:52/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 05:52/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 05:52/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	11/05/08 17:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 05:52/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	11/05/08 05:52/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 05:52/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 05:52/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 05:52/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 13:56/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 05:52/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08100295-005  
Client Sample ID: DewBurd GW688

Report Date: 12/29/08  
Collection Date: 10/20/08 12:15  
Date Received: 10/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/05/08 05:52/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 05:52/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 05:52/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 15:41/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	10.2	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha precision (±)	2.5	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha MDC	2.8	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta	14.9	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta MDC	3.6	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Lead 210	1.1	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.7	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	1.6	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	310	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	53	pCi/L				1	E901.1	10/27/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.14	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-005  
**Client Sample ID:** DewBurd GW688

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 12:15  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	184	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	69.2	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 03:09/eli-c
Arsenic	0.004	mg/L	L	0.002		1	E200.8	10/30/08 03:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 03:09/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 03:09/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 20:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 03:09/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 03:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 03:09/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	11/05/08 20:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 03:09/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	11/05/08 20:45/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:44/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 03:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 03:09/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 03:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 03:09/eli-c
Strontium	1.3	mg/L		0.1		2	E200.7	11/05/08 20:45/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 03:09/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/30/08 03:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 03:09/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.510	%				1	A1030 E	12/10/08 00:00/jmh
Anions	13.0	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	12.8	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	857	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-006  
**Client Sample ID:** DewBurd GW622

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:42  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	178	mg/L		5		1	A2320 B	10/27/08 15:55/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/27/08 15:55/mb
Bicarbonate as HCO3	217	mg/L		5		1	A2320 B	10/27/08 15:55/mb
Calcium	87.9	mg/L		0.5		2	E200.7	11/05/08 17:49/eli-c
Chloride	10	mg/L		1		1	E300.0	10/23/08 00:37/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	10/23/08 00:37/jmh
Magnesium	29.9	mg/L		0.5		2	E200.7	11/05/08 17:49/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/23/08 17:57/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 00:37/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 00:37/jmh
Potassium	10.2	mg/L		0.5		2	E200.7	11/05/08 17:49/eli-c
Sodium	179	mg/L	D	2		2	E200.7	11/05/08 17:49/eli-c
Sulfate	510	mg/L	D	3		50	E300.0	10/23/08 00:20/jmh
Silica	8.4	mg/L		0.2		2	E200.7	11/05/08 17:49/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	10/28/08 17:20/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.95	s.u.		0.01		1	A4500-H B	10/28/08 13:42/tb
Sodium Adsorption Ratio (SAR)	4.2	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	10/24/08 15:46/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 17:49/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/05/08 06:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 06:39/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 17:49/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 06:39/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 06:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 06:39/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 17:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 06:39/eli-c
Manganese	0.18	mg/L		0.01		1	E200.8	11/05/08 06:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 06:39/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 06:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 06:39/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 14:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 06:39/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-006  
**Client Sample ID:** DewBurd GW622

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:42  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0052	mg/L		0.0003		1	E200.8	11/05/08 06:39/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 06:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 06:39/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0004	mg/L		0.0003		1	E200.8	11/06/08 15:45/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	29.3	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha precision (±)	3.9	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha MDC	3.1	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta	20.0	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta MDC	4.1	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Lead 210	3.2	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	7.4	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	12.3	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.22	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	2.7	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	130	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	40	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-1	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.41	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-006  
**Client Sample ID:** DewBurd GW622

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:42  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1360	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	82.1	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 03:15/eli-c
Arsenic	0.006	mg/L	L	0.002		1	E200.8	10/30/08 03:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 03:15/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 03:15/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 20:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 03:15/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 03:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 03:15/eli-c
Iron	1.21	mg/L		0.03		2	E200.7	11/05/08 20:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 03:15/eli-c
Manganese	0.18	mg/L		0.01		2	E200.7	11/05/08 20:50/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:46/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 03:15/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 03:15/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 03:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 03:15/eli-c
Strontium	1.6	mg/L		0.1		2	E200.7	11/05/08 20:50/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 03:15/eli-c
Uranium	0.0059	mg/L		0.0003		1	E200.8	10/30/08 03:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 03:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.37	%				1	A1030 E	12/10/08 00:00/jmh
Anions	14.5	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	14.9	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	957	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-007  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:15  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	194	mg/L		5		1	A2320 B	10/27/08 15:58/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 15:58/mb
Bicarbonate as HCO <sub>3</sub>	236	mg/L		5		1	A2320 B	10/27/08 15:58/mb
Calcium	331	mg/L		0.5		2	E200.7	11/05/08 17:53/eli-c
Chloride	17	mg/L		1		1	E300.0	10/23/08 01:10/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	10/23/08 01:10/jmh
Magnesium	104	mg/L		0.5		2	E200.7	11/05/08 17:53/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:00/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 01:10/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 01:10/jmh
Potassium	19.0	mg/L		0.5		2	E200.7	11/05/08 17:53/eli-c
Sodium	168	mg/L	D	2		2	E200.7	11/05/08 17:53/eli-c
Sulfate	1360	mg/L	D	3		50	E300.0	10/23/08 00:53/jmh
Silica	9.9	mg/L		0.2		2	E200.7	11/05/08 17:53/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2660	umhos/cm		5.0		1	A2510 B	10/28/08 17:22/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.12	s.u.		0.01		1	A4500-H B	10/28/08 13:44/tb
Sodium Adsorption Ratio (SAR)	2.1	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	1700	mg/L		5		1	A2540 C	10/24/08 15:47/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 17:53/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 06:46/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 06:46/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	11/05/08 17:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 06:46/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 06:46/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 06:46/eli-c
Iron	3.36	mg/L		0.03		2	E200.7	11/05/08 17:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 06:46/eli-c
Manganese	0.92	mg/L		0.01		1	E200.8	11/05/08 06:46/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 06:46/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 06:46/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 06:46/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 14:36/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 06:46/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-007  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:15  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0045	mg/L		0.0003		1	E200.8	11/05/08 06:46/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 06:46/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 06:46/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 15:49/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:55/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	36.0	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	6.8	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	6.6	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	20.2	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	6.0	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	-1	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.20	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	3.5	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	840	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-3	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.33	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.8	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	1	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-007  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 13:15  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	254	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	69.7	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 03:22/eli-c
Arsenic	0.010	mg/L	L	0.002		1	E200.8	10/30/08 03:22/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 03:22/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 03:22/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	11/05/08 20:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 03:22/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 03:22/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 03:22/eli-c
Iron	14.3	mg/L		0.03		2	E200.7	11/05/08 20:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 03:22/eli-c
Manganese	1.01	mg/L		0.01		2	E200.7	11/05/08 20:54/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:48/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 03:22/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 03:22/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 03:22/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 03:22/eli-c
Strontium	5.9	mg/L		0.1		2	E200.7	11/05/08 20:54/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/30/08 03:22/eli-c
Uranium	0.0055	mg/L		0.0003		1	E200.8	10/30/08 03:22/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 03:22/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.620	%				1	A1030 E	12/10/08 00:00/jmh
Anions	32.7	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	33.1	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	2140	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.780					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-008  
**Client Sample ID:** DewBurd GW689

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 14:46  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	152	mg/L		5		1	A2320 B	10/27/08 16:01/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 16:01/mb
Bicarbonate as HCO <sub>3</sub>	185	mg/L		5		1	A2320 B	10/27/08 16:01/mb
Calcium	44.4	mg/L		0.5		2	E200.7	11/05/08 17:57/eli-c
Chloride	5	mg/L		1		1	E300.0	10/23/08 02:48/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/23/08 02:48/jmh
Magnesium	14.9	mg/L		0.5		2	E200.7	11/05/08 17:57/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:04/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 02:48/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 02:48/jmh
Potassium	7.5	mg/L		0.5		2	E200.7	11/05/08 17:57/eli-c
Sodium	174	mg/L	D	2		2	E200.7	11/05/08 17:57/eli-c
Sulfate	392	mg/L	D	3		50	E300.0	10/23/08 01:59/jmh
Silica	9.3	mg/L		0.2		2	E200.7	11/05/08 17:57/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1110	umhos/cm		5.0		1	A2510 B	10/28/08 17:23/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.11	s.u.		0.01		1	A4500-H B	10/28/08 13:46/tb
Sodium Adsorption Ratio (SAR)	5.8	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	730	mg/L		5		1	A2540 C	10/24/08 15:47/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 17:57/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 06:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 06:53/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 17:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 06:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 06:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 06:53/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 17:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 06:53/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	11/05/08 06:53/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 06:53/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 06:53/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 06:53/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 09:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 15:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 06:53/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-008  
**Client Sample ID:** DewBurd GW689

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 14:46  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0031	mg/L		0.0003		1	E200.8	11/05/08 06:53/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 06:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 06:53/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 15:53/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:57/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	40.0	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	3.9	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	2.5	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	12.9	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	1.9	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	2.9	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	-0.3	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.7	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	6.4	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	960	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.2	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-008  
**Client Sample ID:** DewBurd GW689

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 14:46  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.2	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.02	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	2410	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	94.0	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	10/30/08 00:18/eli-c
Arsenic	0.004	mg/L	L	0.003		1	E200.8	10/30/08 00:18/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/30/08 00:18/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	10/30/08 00:18/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 21:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/30/08 00:18/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/30/08 00:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/30/08 00:18/eli-c
Iron	0.61	mg/L		0.03		2	E200.7	11/05/08 21:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/30/08 00:18/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	10/30/08 00:18/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:51/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	10/30/08 00:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/30/08 00:18/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/30/08 00:18/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/30/08 00:18/eli-c
Strontium	0.8	mg/L		0.1		1	E200.8	10/30/08 00:18/eli-c
Thallium	0.002	mg/L		0.001		1	E200.8	10/30/08 00:18/eli-c
Uranium	0.0035	mg/L		0.0003		1	E200.8	10/30/08 00:18/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/30/08 00:18/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.720	%				1	A1030 E	12/10/08 00:00/jmh
Anions	11.4	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	11.2	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	755	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	12/10/08 00:00/jmh

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method used.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-009  
**Client Sample ID:** DewBurd GW681

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:00  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	176	mg/L		5		1	A2320 B	10/27/08 16:02/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/27/08 16:02/mb
Bicarbonate as HCO <sub>3</sub>	215	mg/L		5		1	A2320 B	10/27/08 16:02/mb
Calcium	61.4	mg/L		0.5		2	E200.7	11/05/08 18:01/eli-c
Chloride	17	mg/L		1		1	E300.0	10/23/08 03:21/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	10/23/08 03:21/jmh
Magnesium	23.2	mg/L		0.5		2	E200.7	11/05/08 18:01/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:05/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 03:21/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 03:21/jmh
Potassium	9.5	mg/L		0.5		2	E200.7	11/05/08 18:01/eli-c
Sodium	216	mg/L	D	2		2	E200.7	11/05/08 18:01/eli-c
Sulfate	491	mg/L	D	3		50	E300.0	10/23/08 03:05/jmh
Silica	8.5	mg/L		0.2		2	E200.7	11/05/08 18:01/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1380	umhos/cm		5.0		1	A2510 B	10/28/08 17:24/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.06	s.u.		0.01		1	A4500-H B	10/28/08 13:47/tb
Sodium Adsorption Ratio (SAR)	6.0	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	10/24/08 15:48/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 18:01/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	11/05/08 07:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 07:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 18:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 07:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 07:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 07:00/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 18:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 07:00/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	11/05/08 07:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 07:00/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 07:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 07:00/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 15:17/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 07:00/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-009  
**Client Sample ID:** DewBurd GW681

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:00  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0094	mg/L		0.0003		1	E200.8	11/05/08 07:00/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 07:00/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 07:00/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 16:14/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 14:59/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1440	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha precision (±)	24.5	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta	412	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta precision (±)	6.6	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Gross Beta MDC	4.1	pCi/L				1	E900.0	11/22/08 01:24/eli-c
Lead 210	22.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	5.1	pCi/L		1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	1.8	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	356	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Radium 226 precision (±)	3.5	pCi/L				1	E903.0	11/11/08 00:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	22000	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	570	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	18.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.3	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	1.3	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-009  
**Client Sample ID:** DewBurd GW681

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 15:00  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Thorium 230	-0.2	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.02	pCi/L				1	E907.0	11/07/08 14:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	344000	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	809	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 17:52/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	11/05/08 17:52/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:28/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 17:52/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:28/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 17:52/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:28/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 19:28/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	11/05/08 19:28/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 17:52/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	11/05/08 19:28/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:53/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:28/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:28/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 17:52/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 17:52/eli-c
Strontium	1.2	mg/L		0.1		2	E200.7	11/05/08 19:28/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 17:52/eli-c
Uranium	0.0102	mg/L		0.0003		1	E200.8	11/06/08 16:47/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:28/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.42	%				1	A1030 E	12/10/08 00:00/jmh
Anions	14.2	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	14.6	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	947	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-010  
**Client Sample ID:** DewBurd GW615

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 16:20  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	136	mg/L		5		1	A2320 B	10/29/08 11:16/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/29/08 11:16/mb
Bicarbonate as HCO3	166	mg/L		5		1	A2320 B	10/29/08 11:16/mb
Calcium	71.0	mg/L		0.5		2	E200.7	11/05/08 18:05/eli-c
Chloride	5	mg/L		1		1	E300.0	10/23/08 03:54/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/23/08 03:54/jmh
Magnesium	20.7	mg/L		0.5		2	E200.7	11/05/08 18:05/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/23/08 18:06/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 03:54/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 03:54/jmh
Potassium	8.7	mg/L		0.5		2	E200.7	11/05/08 18:05/eli-c
Sodium	133	mg/L	D	2		2	E200.7	11/05/08 18:05/eli-c
Sulfate	414	mg/L	D	3		50	E300.0	10/23/08 03:37/jmh
Silica	8.7	mg/L		0.2		2	E200.7	11/05/08 18:05/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1100	umhos/cm		5.0		1	A2510 B	10/28/08 17:25/tb
Oxidation-Reduction Potential	250	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	10/28/08 13:49/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	720	mg/L		5		1	A2540 C	10/24/08 15:48/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 18:05/eli-c
Arsenic	0.012	mg/L		0.001		1	E200.8	11/05/08 07:07/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/05/08 07:07/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 18:05/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 07:07/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/05/08 07:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 07:07/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	11/05/08 18:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 07:07/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	11/05/08 07:07/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 07:07/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/05/08 07:07/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/05/08 07:07/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 15:23/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 07:07/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08100295-010  
Client Sample ID: DewBurd GW615

Report Date: 12/29/08  
Collection Date: 10/20/08 16:20  
Date Received: 10/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0023	mg/L		0.0003		1	E200.8	11/05/08 07:07/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/05/08 07:07/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/05/08 07:07/eli-c
METALS - SUSPENDED								
Uranium	0.0032	mg/L		0.0003		1	E200.8	11/06/08 16:18/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 15:02/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	20.9	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha precision (±)	2.9	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Alpha MDC	2.4	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta	12.0	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Gross Beta MDC	3.2	pCi/L				1	E900.0	11/22/08 01:24/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.25	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	2.7	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 08:50/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	11/20/08 08:50/eli-c
Gross Gamma	1100	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	10/27/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.22	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.1	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-010  
**Client Sample ID:** DewBurd GW615

**Report Date:** 12/29/08  
**Collection Date:** 10/20/08 16:20  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.2	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1890	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	87.8	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 17:59/eli-c
Arsenic	0.024	mg/L		0.001		1	E200.8	11/05/08 17:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:32/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 17:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 17:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:32/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 19:32/eli-c
Iron	1.34	mg/L		0.03		2	E200.7	11/05/08 19:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 17:59/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	11/05/08 19:32/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 09:56/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:32/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:32/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 17:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 17:59/eli-c
Strontium	1.4	mg/L		0.1		2	E200.7	11/05/08 19:32/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 17:59/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	11/06/08 17:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:32/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.01	%				1	A1030 E	12/10/08 00:00/jmh
Anions	11.5	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	11.3	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	758	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-011  
**Client Sample ID:** DewBurd GW697

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:45  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	166	mg/L		5		1	A2320 B	10/29/08 11:18/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/29/08 11:18/mb
Bicarbonate as HCO <sub>3</sub>	202	mg/L		5		1	A2320 B	10/29/08 11:18/mb
Calcium	52.9	mg/L		0.5		2	E200.7	11/05/08 18:56/eli-c
Chloride	8	mg/L		1		1	E300.0	10/23/08 04:27/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/23/08 04:27/jmh
Magnesium	17.3	mg/L		0.5		2	E200.7	11/05/08 18:56/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:07/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 04:27/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 04:27/jmh
Potassium	8.4	mg/L		0.5		2	E200.7	11/05/08 18:56/eli-c
Sodium	210	mg/L	D	2		2	E200.7	11/05/08 18:56/eli-c
Sulfate	560	mg/L	D	3		50	E300.0	10/23/08 04:10/jmh
Silica	9.3	mg/L		0.2		2	E200.7	11/05/08 18:56/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1280	umhos/cm		5.0		1	A2510 B	10/28/08 17:28/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.15	s.u.		0.01		1	A4500-H B	10/28/08 13:52/tb
Sodium Adsorption Ratio (SAR)	6.4	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	10/24/08 15:49/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 18:56/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/05/08 15:57/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 18:56/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 18:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 15:57/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 18:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 15:57/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	11/05/08 18:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 15:57/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	11/05/08 18:56/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 15:57/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 18:56/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 18:56/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 15:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 15:57/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-011  
**Client Sample ID:** DewBurd GW697

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:45  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 17:12/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	11/05/08 18:56/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 18:56/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0006	mg/L		0.0003		1	E200.8	11/06/08 16:22/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 15:04/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	7.3	pCi/L				1	E900.0	11/24/08 07:45/eli-c
Gross Alpha precision (±)	2.4	pCi/L				1	E900.0	11/24/08 07:45/eli-c
Gross Alpha MDC	2.9	pCi/L				1	E900.0	11/24/08 07:45/eli-c
Gross Beta	3.6	pCi/L	U			1	E900.0	11/24/08 07:45/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	11/24/08 07:45/eli-c
Gross Beta MDC	3.6	pCi/L				1	E900.0	11/24/08 07:45/eli-c
Lead 210	-2	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	0.6	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 13:36/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	11/20/08 13:36/eli-c
Gross Gamma	1700	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	240	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-2	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.27	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	0.05	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-011  
**Client Sample ID:** DewBurd GW697

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:45  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	319	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	60.7	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 18:06/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 18:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:49/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 18:06/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:49/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 18:06/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:49/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 19:49/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	11/05/08 19:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 18:06/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	11/05/08 19:49/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 12:41/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:49/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:49/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 18:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 18:06/eli-c
Strontium	1.1	mg/L		0.1		2	E200.7	11/05/08 19:49/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 18:06/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 17:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:49/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-6.31	%				1	A1030 E	12/10/08 00:00/jmh
Anions	15.2	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	13.4	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	983	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	12/10/08 00:00/jmh

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-012  
**Client Sample ID:** DewBurd GW695

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	172	mg/L		5		1	A2320 B	10/29/08 11:22/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/29/08 11:22/mb
Bicarbonate as HCO <sub>3</sub>	210	mg/L		5		1	A2320 B	10/29/08 11:22/mb
Calcium	51.4	mg/L		0.5		2	E200.7	11/05/08 19:08/eli-c
Chloride	13	mg/L		1		1	E300.0	10/23/08 06:05/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	10/23/08 06:05/jmh
Magnesium	18.5	mg/L		0.5		2	E200.7	11/05/08 19:08/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:09/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 06:05/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 06:05/jmh
Potassium	8.5	mg/L		0.5		2	E200.7	11/05/08 19:08/eli-c
Sodium	246	mg/L	D	2		2	E200.7	11/05/08 19:08/eli-c
Sulfate	478	mg/L	D	3		50	E300.0	10/23/08 05:16/jmh
Silica	8.8	mg/L		0.2		2	E200.7	11/05/08 19:08/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1440	umhos/cm		5.0		1	A2510 B	10/28/08 17:30/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.07	s.u.		0.01		1	A4500-H B	10/28/08 13:54/tb
Sodium Adsorption Ratio (SAR)	7.5	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	10/24/08 15:49/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 19:08/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/05/08 16:04/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:08/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 16:04/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 16:04/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 19:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 16:04/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	11/05/08 19:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 16:04/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:08/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 16:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 16:04/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-012  
**Client Sample ID:** DewBurd GW695

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0030	mg/L		0.0003		1	E200.8	11/06/08 17:20/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	11/05/08 19:08/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	11/05/08 19:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 16:26/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 15:11/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	27.8	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha precision (±)	3.9	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha MDC	3.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta	11.6	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta MDC	4.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Lead 210	-0.4	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.7	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.25	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	4.0	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	11/20/08 13:36/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 13:36/eli-c
Gross Gamma	1100	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	250	pCi/L				1	E901.1	10/27/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.22	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	11/11/08 13:02/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 13:02/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 13:02/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-012  
**Client Sample ID:** DewBurd GW695

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 09:10  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1860	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	79.1	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 18:13/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/05/08 18:13/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:53/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 18:13/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 18:13/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:53/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 19:53/eli-c
Iron	0.16	mg/L		0.03		2	E200.7	11/05/08 19:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 18:13/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	11/05/08 19:53/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 12:48/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:53/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:53/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 18:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 18:13/eli-c
Strontium	0.9	mg/L		0.1		2	E200.7	11/05/08 19:53/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 18:13/eli-c
Uranium	0.0030	mg/L		0.0003		1	E200.8	11/06/08 17:25/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	11/05/08 19:53/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.33	%				1	A1030 E	12/10/08 00:00/jmh
Anions	13.8	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	15.0	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	942	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.15					1	A1030 E	12/10/08 00:00/jmh

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-013  
**Client Sample ID:** DewBurd GW694

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 08:25  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	202	mg/L		5		1	A2320 B	10/29/08 11:24/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/29/08 11:24/mb
Bicarbonate as HCO <sub>3</sub>	246	mg/L		5		1	A2320 B	10/29/08 11:24/mb
Calcium	98.8	mg/L		0.5		2	E200.7	11/05/08 19:16/eli-c
Chloride	9	mg/L		1		1	E300.0	10/23/08 06:38/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	10/23/08 06:38/jmh
Magnesium	36.5	mg/L		0.5		2	E200.7	11/05/08 19:16/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/23/08 18:10/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 06:38/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 06:38/jmh
Potassium	12.9	mg/L		0.5		2	E200.7	11/05/08 19:16/eli-c
Sodium	177	mg/L	D	2		2	E200.7	11/05/08 19:16/eli-c
Sulfate	519	mg/L	D	3		50	E300.0	10/23/08 06:22/jmh
Silica	9.3	mg/L		0.2		2	E200.7	11/05/08 19:16/eli-c
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1450	umhos/cm		5.0		1	A2510 B	10/28/08 17:31/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	10/27/08 19:00/jmh
pH	7.96	s.u.		0.01		1	A4500-H B	10/28/08 13:56/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	10/24/08 15:50/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 19:16/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 16:11/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 16:11/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:16/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 16:11/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 19:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 16:11/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	11/05/08 19:16/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 16:11/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:16/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:16/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 16:11/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 16:11/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-013  
**Client Sample ID:** DewBurd GW694

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 08:25  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0006	mg/L		0.0003		1	E200.8	11/06/08 17:29/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	11/05/08 19:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:16/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 16:31/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 15:13/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	9.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha MDC	3.3	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta	11.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta MDC	4.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	1.4	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 13:36/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 13:36/eli-c
Gross Gamma	1200	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	260	pCi/L				1	E901.1	10/27/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-2	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 12:40/eli-c
Polonium 210 precision (±)	0.17	pCi/L				1	RMO-3008	11/13/08 12:40/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	11/11/08 14:35/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 14:35/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 14:35/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-013  
**Client Sample ID:** DewBurd GW694

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 08:25  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	281	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	60.8	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 18:47/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/05/08 18:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:57/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 18:47/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 18:47/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:57/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 19:57/eli-c
Iron	0.17	mg/L		0.03		2	E200.7	11/05/08 19:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 18:47/eli-c
Manganese	0.16	mg/L		0.01		2	E200.7	11/05/08 19:57/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 12:50/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:57/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:57/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 18:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 18:47/eli-c
Strontium	2.8	mg/L		0.1		2	E200.7	11/05/08 19:57/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 18:47/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	11/06/08 17:33/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:57/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.88	%				1	A1030 E	12/10/08 00:00/jmh
Anions	15.1	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	16.0	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	999	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-014  
**Client Sample ID:** DewBurd GW696

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 08:45  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	180	mg/L		5		1	A2320 B	10/29/08 11:27/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/29/08 11:27/mb
Bicarbonate as HCO3	219	mg/L		5		1	A2320 B	10/29/08 11:27/mb
Calcium	30.3	mg/L		0.5		2	E200.7	11/05/08 19:20/eli-c
Chloride	13	mg/L		1		1	E300.0	10/23/08 07:11/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	10/23/08 07:11/jmh
Magnesium	10.6	mg/L		0.5		2	E200.7	11/05/08 19:20/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	10/23/08 18:11/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/23/08 07:11/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/23/08 07:11/jmh
Potassium	8.9	mg/L		0.5		2	E200.7	11/05/08 19:20/eli-c
Sodium	282	mg/L	D	2		2	E200.7	11/05/08 19:20/eli-c
Sulfate	493	mg/L	D	3		50	E300.0	10/23/08 06:54/jmh
Silica	9.8	mg/L		0.2		2	E200.7	11/05/08 19:20/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1490	umhos/cm		5.0		1	A2510 B	10/28/08 17:32/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	10/27/08 19:00/jmh
pH	8.26	s.u.		0.01		1	A4500-H B	10/28/08 13:58/tb
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	12/10/08 17:07/ADM
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	10/24/08 15:50/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	11/05/08 19:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/05/08 16:18/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 19:20/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 19:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 16:18/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 19:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/05/08 16:18/eli-c
Iron	ND	mg/L		0.03		2	E200.7	11/05/08 19:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 16:18/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	11/05/08 19:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/05/08 16:18/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 19:20/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 19:20/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/31/08 10:18/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 16:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/05/08 16:18/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

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LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08100295-014  
Client Sample ID: DewBurd GW696

Report Date: 12/29/08  
Collection Date: 10/21/08 08:45  
Date Received: 10/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 17:37/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	11/05/08 19:20/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 19:20/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 16:43/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/30/08 15:15/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/08 10:28/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	9.8	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Alpha MDC	3.3	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta	9.1	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Gross Beta MDC	3.6	pCi/L				1	E900.0	11/24/08 07:45/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	11/06/08 09:13/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	11/06/08 09:13/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	11/19/08 09:23/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	11/19/08 09:23/eli-c
Radium 226	0.8	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/11/08 02:30/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	11/20/08 13:36/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/20/08 13:36/eli-c
Gross Gamma	1100	pCi/L				1	E901.1	10/27/08 11:00/eli-c
Gross Gamma precision (±)	210	pCi/L				1	E901.1	10/27/08 11:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.7	pCi/L	U			1	E909.0M	11/11/08 10:15/eli-c
Lead 210 precision (±)	4.0	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Lead 210 MDC	6.8	pCi/L				1	E909.0M	11/11/08 10:15/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	11/13/08 15:31/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	11/13/08 15:31/eli-c
Radium 226	-0.3	pCi/L	U			1	E903.0	11/11/08 14:35/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/08 14:35/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	11/11/08 14:35/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08100295-014  
**Client Sample ID:** DewBurd GW696

**Report Date:** 12/29/08  
**Collection Date:** 10/21/08 08:45  
**Date Received:** 10/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	-0.3	pCi/L	U	0.2		1	E907.0	11/07/08 14:30/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	11/07/08 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	260	pCi/L		100		1	D5072-92	10/24/08 12:24/eli-c
Radon 222 precision (±)	60.4	pCi/L				1	D5072-92	10/24/08 12:24/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	11/05/08 18:53/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/05/08 18:53/eli-c
Barium	ND	mg/L		0.1		2	E200.7	11/05/08 20:01/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/05/08 18:53/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/05/08 20:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/05/08 18:53/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	11/05/08 20:01/eli-c
Copper	ND	mg/L		0.01		2	E200.7	11/05/08 20:01/eli-c
Iron	0.13	mg/L		0.03		2	E200.7	11/05/08 20:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/05/08 18:53/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	11/05/08 20:01/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/27/08 12:53/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	11/05/08 20:01/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	11/05/08 20:01/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/05/08 18:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/05/08 18:53/eli-c
Strontium	0.8	mg/L		0.1		2	E200.7	11/05/08 20:01/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/05/08 18:53/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/06/08 18:06/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	11/05/08 20:01/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.18	%				1	A1030 E	12/10/08 00:00/jmh
Anions	14.3	meq/L				1	A1030 E	12/10/08 00:00/jmh
Cations	14.9	meq/L				1	A1030 E	12/10/08 00:00/jmh
Solids, Total Dissolved Calculated	973	mg/L				1	A1030 E	12/10/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	12/10/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B			Batch: 081027A-ALK-SEL-W						
Sample ID: LCS1_081027A	Laboratory Control Sample					Run: PH_COND1-R_081027B			10/27/08 14:01
Alkalinity, Total as CaCO <sub>3</sub>	976	mg/L	5.0	98	90	110			
Sample ID: MBLK1_081027A	Method Blank					Run: PH_COND1-R_081027B			10/27/08 14:04
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08100295-001AMS	Sample Matrix Spike					Run: PH_COND1-R_081027B			10/27/08 15:42
Alkalinity, Total as CaCO <sub>3</sub>	116	mg/L	5.0	109	80	120			
Sample ID: R08100295-001AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_081027B			10/27/08 15:44
Alkalinity, Total as CaCO <sub>3</sub>	118	mg/L	5.0	111	80	120	1.7	10	
Method: A2320 B			Batch: 081029A-ALK-SEL-W						
Sample ID: LCS1_081029A	Laboratory Control Sample					Run: PH_COND1-R_081029A			10/29/08 11:04
Alkalinity, Total as CaCO <sub>3</sub>	936	mg/L	5.0	94	90	110			
Sample ID: MBLK1_081029A	Method Blank					Run: PH_COND1-R_081029A			10/29/08 11:09
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08100308-003AMS	Sample Matrix Spike					Run: PH_COND1-R_081029A			10/29/08 11:49
Alkalinity, Total as CaCO <sub>3</sub>	276	mg/L	5.0	109	80	120			
Sample ID: R08100308-003AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_081029A			10/29/08 11:52
Alkalinity, Total as CaCO <sub>3</sub>	276	mg/L	5.0	109	80	120	0	10	
Method: A2510 B			Batch: 081028_1_COND-PROBE-W						
Sample ID: LCS_COND-1_081028	Laboratory Control Sample					Run: PH_COND2-R_081028B			10/28/08 16:56
Conductivity @ 25 C	1440	umhos/cm	5.0	102	90	110			
Sample ID: LCS1-1_081028	Laboratory Control Sample					Run: PH_COND2-R_081028B			10/28/08 16:58
Conductivity @ 25 C	154	umhos/cm	5.0	103	90	110			
Sample ID: LCS2-1_081028	Laboratory Control Sample					Run: PH_COND2-R_081028B			10/28/08 16:59
Conductivity @ 25 C	4990	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_081028	Method Blank					Run: PH_COND2-R_081028B			10/28/08 17:03
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08100295-010ADUP	Sample Duplicate					Run: PH_COND2-R_081028B			10/28/08 17:27
Conductivity @ 25 C	1110	umhos/cm	5.0				0.9	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 C</b>							Batch: 081024A-SLDS-TDS-W		
<b>Sample ID: LCS1_081024A</b>	Laboratory Control Sample				Run: BAL-4-R_081027A				10/24/08 15:25
Solids, Total Dissolved TDS @ 180 C	190	mg/L	5.0	93	90	110			
<b>Sample ID: MBLK1_081024A</b>	Method Blank				Run: BAL-4-R_081027A				10/24/08 15:26
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
<b>Sample ID: R08100290-007AMS</b>	Sample Matrix Spike				Run: BAL-4-R_081027A				10/24/08 15:42
Solids, Total Dissolved TDS @ 180 C	2800	mg/L	5.0	113	80	120			
<b>Sample ID: R08100290-007AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_081027A				10/24/08 15:42
Solids, Total Dissolved TDS @ 180 C	2700	mg/L	5.0	83	80	120	2.2	10	
<b>Sample ID: R08100295-006AMS</b>	Sample Matrix Spike				Run: BAL-4-R_081027A				10/24/08 15:46
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	95	80	120			
<b>Sample ID: R08100295-006AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_081027A				10/24/08 15:46
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	99	80	120	0.7	10	
<b>Sample ID: R08100297-002AMS</b>	Sample Matrix Spike				Run: BAL-4-R_081027A				10/24/08 15:51
Solids, Total Dissolved TDS @ 180 C	970	mg/L	5.0	96	80	120			
<b>Sample ID: R08100297-002AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_081027A				10/24/08 15:52
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	125	80	120	5.8	10	S
<b>Method: A2580 B</b>							Batch: 081027-ORP-ISE-W		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: PH_COND1-R_081027A				10/27/08 19:00
Oxidation-Reduction Potential	470	mV		98	95	105			
<b>Sample ID: R08100295-010F</b>	Sample Duplicate				Run: PH_COND1-R_081027A				10/27/08 19:00
Oxidation-Reduction Potential	260	mV					2.4	10	
<b>Sample ID: R08100295-014F</b>	Sample Duplicate				Run: PH_COND1-R_081027A				10/27/08 19:00
Oxidation-Reduction Potential	200	mV					1.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SE3114-081030B		
<b>Sample ID: MBLK</b> Selenium-IV	Method Blank ND	mg/L	0.0003			Run: SUB-C110108			10/30/08 14:25
<b>Sample ID: 288-162-4</b> Selenium-IV	Laboratory Control Sample 0.055	mg/L	0.0010	109	90	110			10/30/08 14:27
<b>Sample ID: R08100295-001E</b> Selenium-IV	Sample Matrix Spike 0.051	mg/L	0.0010	101	85	115			10/30/08 14:34
<b>Sample ID: R08100295-001E</b> Selenium-IV	Sample Matrix Spike Duplicate 0.051	mg/L	0.0010	102	85	115	0.7	10	10/30/08 14:36
<b>Sample ID: R08100295-011E</b> Selenium-IV	Sample Matrix Spike 0.050	mg/L	0.0010	100	85	115			10/30/08 15:06
<b>Sample ID: R08100295-011E</b> Selenium-IV	Sample Matrix Spike Duplicate 0.051	mg/L	0.0010	101	85	115	1	10	10/30/08 15:08
<b>Method: A3114 B</b>							Batch: C_SE3114-081031A		
<b>Sample ID: MBLK</b> Selenium	Method Blank ND	mg/L	0.0003			Run: SUB-C110150			10/31/08 09:27
<b>Sample ID: 288-162-4</b> Selenium	Laboratory Control Sample 0.047	mg/L	0.0010	94	90	110			10/31/08 09:29
<b>Sample ID: R08100295-001E</b> Selenium	Sample Matrix Spike 0.051	mg/L	0.0010	102	85	115			10/31/08 09:36
<b>Sample ID: R08100295-001E</b> Selenium	Sample Matrix Spike Duplicate 0.052	mg/L	0.0010	104	85	115	1.8	15	10/31/08 09:38
<b>Sample ID: R08100295-011E</b> Selenium	Sample Matrix Spike 0.047	mg/L	0.0010	94	85	115			10/31/08 10:08
<b>Sample ID: R08100295-011E</b> Selenium	Sample Matrix Spike Duplicate 0.049	mg/L	0.0010	97	85	115	3.2	15	10/31/08 10:11
<b>Method: A4500-H B</b>							Batch: 081028_1_PH-W		
<b>Sample ID: LCS_pH-1_081028</b> pH	Laboratory Control Sample 6.87	s.u.	0.010	100	98.55	101.45			10/28/08 13:13
<b>Sample ID: R08100295-009ADUP</b> pH	Sample Duplicate 8.07	s.u.	0.010			Run: PH_COND2-R_081028A	0.1	1.25	10/28/08 13:48

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>							Batch: A2008-10-23_2_NH3_01		
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01			Run: TECHAA2-R_081023A		10/23/08 15:23	
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.26	mg/L	0.10	105	90	110		10/23/08 15:24	
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.27	mg/L	0.10	107	90	110		10/23/08 15:25	
<b>Sample ID: R08100291-003CMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.24	mg/L	0.10	96	80	120		10/23/08 17:47	
<b>Sample ID: R08100291-003CMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.23	mg/L	0.10	94	80	120	2.5	10/23/08 17:49	10
<b>Sample ID: R08100295-007BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.67	mg/L	0.10	92	80	120		10/23/08 18:02	
<b>Sample ID: R08100295-007BMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.67	mg/L	0.10	91	80	120	0.1	10/23/08 18:03	10
<b>Method: D5072-92</b>							Batch: C_R109879		
<b>Sample ID: R08100295-014G</b> Radon 222	Sample Duplicate 260	pCi/L	100			Run: SUB-C109879	0	10/24/08 12:24	30
<b>Sample ID: MB-R109879</b> Radon 222	Method Blank 7	pCi/L				Run: SUB-C109879		10/24/08 12:24	U
<b>Sample ID: LCS-R109879</b> Radon 222	Laboratory Control Sample 300	pCi/L	100	99	70	130		10/24/08 12:24	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_20305		
<b>Sample ID: MB-20305</b>	Method Blank				Run: SUB-C110446		11/05/08 20:17		
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Manganese	ND	mg/L	0.0003						
Strontium	ND	mg/L	0.0004						
<b>Sample ID: LCS3-20305</b>	Laboratory Control Sample				Run: SUB-C110446		11/05/08 20:21		
Boron	0.503	mg/L	0.10	99	85	115			
Iron	2.74	mg/L	0.030	109	85	115			
Manganese	2.52	mg/L	0.010	101	85	115			
Strontium	0.525	mg/L	0.10	105	85	115			
<b>Sample ID: R08100295-008D</b>	Sample Matrix Spike				Run: SUB-C110446		11/05/08 21:14		
Boron	0.557	mg/L	0.10	98	70	130			
Iron	3.27	mg/L	0.030	106	70	130			
Manganese	2.54	mg/L	0.010	100	70	130			
Strontium	1.43	mg/L	0.10	99	70	130			
<b>Sample ID: R08100295-008D</b>	Sample Matrix Spike Duplicate				Run: SUB-C110446		11/05/08 21:18		
Boron	0.543	mg/L	0.10	95	70	130	2.6	20	
Iron	3.26	mg/L	0.030	106	70	130	0.5	20	
Manganese	2.50	mg/L	0.010	98	70	130	1.7	20	
Strontium	1.39	mg/L	0.10	91	70	130	3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R110446		
<b>Sample ID: MB-081105A</b>	Method Blank		Run: SUB-C110446				11/05/08 11:44		
Silicon	ND	mg/L	0.02						
Aluminum	ND	mg/L	0.004						
Barium	ND	mg/L	0.006						
Boron	0.03	mg/L	0.008						
Calcium	ND	mg/L	0.1						
Chromium	ND	mg/L	0.002						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.005						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0003						
Molybdenum	0.003	mg/L	0.003						
Nickel	ND	mg/L	0.004						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Vanadium	0.005	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Silica	ND	mg/L	0.04						
<b>Sample ID: LFB-081105A</b>	Laboratory Fortified Blank		Run: SUB-C110446				11/05/08 11:48		
Silicon	0.36	mg/L	0.021	89	85	125			
Aluminum	0.87	mg/L	0.10	87	85	125			
Barium	0.93	mg/L	0.10	93	85	125			
Boron	0.97	mg/L	0.10	94	85	125			
Calcium	49	mg/L	0.50	99	85	125			
Chromium	0.93	mg/L	0.050	93	85	125			
Copper	0.94	mg/L	0.010	94	85	125			
Iron	0.96	mg/L	0.030	96	85	125			
Magnesium	50	mg/L	0.50	100	85	125			
Manganese	0.94	mg/L	0.010	94	85	125			
Molybdenum	0.93	mg/L	0.10	92	85	125			
Nickel	0.93	mg/L	0.050	93	85	125			
Potassium	44	mg/L	0.50	87	85	125			
Sodium	47	mg/L	0.77	94	85	125			
Strontium	0.92	mg/L	0.10	92	85	125			
Vanadium	0.97	mg/L	0.10	96	85	125			
Zinc	0.92	mg/L	0.010	92	85	125			
Silica	0.76	mg/L	0.044	89	85	125			
<b>Sample ID: R08100295-001C</b>	Sample Matrix Spike		Run: SUB-C110446				11/05/08 17:08		
Aluminum	2.04	mg/L	0.10	102	70	130			
Barium	1.95	mg/L	0.10	98	70	130			
Boron	1.98	mg/L	0.10	99	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R110446		
Sample ID: R08100295-001C	Sample Matrix Spike		Run: SUB-C110446				11/05/08 17:08		
Chromium	1.95	mg/L	0.050	98	70	130			
Copper	1.94	mg/L	0.010	97	70	130			
Iron	1.96	mg/L	0.030	98	70	130			
Manganese	1.94	mg/L	0.010	97	70	130			
Molybdenum	2.14	mg/L	0.10	76	70	130			
Nickel	1.94	mg/L	0.050	97	70	130			
Silicon	0.845	mg/L	0.10	77	70	130			
Strontium	1.94	mg/L	0.10	97	70	130			
Vanadium	1.92	mg/L	0.10	96	70	130			
Zinc	1.95	mg/L	0.010	97	70	130			
Calcium	99.9	mg/L	1.0	100	70	130			
Magnesium	97.9	mg/L	1.0	98	70	130			
Potassium	92.1	mg/L	1.0	92	70	130			
Sodium	97.4	mg/L	1.5	97	70	130			
Silica	1.81	mg/L	0.21	76	70	130			
Sample ID: R08100295-001C	Sample Matrix Spike Duplicate		Run: SUB-C110446				11/05/08 17:12		
Aluminum	2.02	mg/L	0.10	100	70	130	1.3	20	
Barium	1.93	mg/L	0.10	96	70	130	1.3	20	
Boron	1.99	mg/L	0.10	99	70	130	0.1	20	
Chromium	1.94	mg/L	0.050	97	70	130	0.6	20	
Copper	1.94	mg/L	0.010	97	70	130	0.2	20	
Iron	1.96	mg/L	0.030	98	70	130	0.1	20	
Manganese	1.94	mg/L	0.010	97	70	130	0.3	20	
Molybdenum	2.05	mg/L	0.10	72	70	130	3.9	20	
Nickel	1.93	mg/L	0.050	96	70	130	0.7	20	
Silicon	0.808	mg/L	0.10	72	70	130	4.4	20	
Strontium	1.96	mg/L	0.10	98	70	130	0.9	20	
Vanadium	1.92	mg/L	0.10	96	70	130	0.1	20	
Zinc	1.95	mg/L	0.010	98	70	130	0.2	20	
Calcium	97.7	mg/L	1.0	98	70	130	2.2	20	
Magnesium	96.9	mg/L	1.0	97	70	130	1.1	20	
Potassium	92.2	mg/L	1.0	92	70	130	0.2	20	
Sodium	96.7	mg/L	1.5	97	70	130	0.7	20	
Silica	1.73	mg/L	0.21	72	70	130	4.4	20	
Sample ID: R08100295-011C	Sample Matrix Spike		Run: SUB-C110446				11/05/08 19:00		
Aluminum	1.82	mg/L	0.10	91	70	130			
Barium	1.95	mg/L	0.10	97	70	130			
Boron	2.11	mg/L	0.10	101	70	130			
Chromium	1.97	mg/L	0.050	98	70	130			
Copper	1.98	mg/L	0.010	99	70	130			
Iron	2.06	mg/L	0.030	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R110446		
<b>Sample ID: R08100295-011C</b>	Sample Matrix Spike		Run: SUB-C110446				11/05/08 19:00		
Manganese	2.00	mg/L	0.010	97	70	130			
Molybdenum	1.93	mg/L	0.10	97	70	130			
Nickel	1.97	mg/L	0.050	99	70	130			
Silicon	4.91	mg/L	0.10		70	130			A
Strontium	3.18	mg/L	0.10	102	70	130			
Vanadium	2.06	mg/L	0.10	103	70	130			
Zinc	1.98	mg/L	0.010	99	70	130			
Calcium	154	mg/L	1.0	101	70	130			
Magnesium	120	mg/L	1.0	103	70	130			
Potassium	98.3	mg/L	1.0	90	70	130			
Sodium	309	mg/L	1.5	99	70	130			
Silica	10.5	mg/L	0.21		70	130			A
<b>Sample ID: R08100295-011C</b>	Sample Matrix Spike Duplicate		Run: SUB-C110446				11/05/08 19:04		
Aluminum	1.89	mg/L	0.10	95	70	130	3.6	20	
Barium	1.97	mg/L	0.10	98	70	130	0.7	20	
Boron	2.14	mg/L	0.10	103	70	130	1.7	20	
Chromium	2.00	mg/L	0.050	100	70	130	1.4	20	
Copper	2.01	mg/L	0.010	100	70	130	1.1	20	
Iron	2.12	mg/L	0.030	104	70	130	2.7	20	
Manganese	2.02	mg/L	0.010	98	70	130	0.8	20	
Molybdenum	1.98	mg/L	0.10	99	70	130	2.4	20	
Nickel	1.98	mg/L	0.050	99	70	130	0.5	20	
Silicon	5.00	mg/L	0.10		70	130	1.9	20	A
Strontium	3.15	mg/L	0.10	101	70	130	0.8	20	
Vanadium	2.11	mg/L	0.10	105	70	130	2.2	20	
Zinc	2.02	mg/L	0.010	100	70	130	1.7	20	
Calcium	155	mg/L	1.0	102	70	130	0.7	20	
Magnesium	120	mg/L	1.0	103	70	130	0.2	20	
Potassium	97.5	mg/L	1.0	89	70	130	0.9	20	
Sodium	311	mg/L	1.5	101	70	130	0.8	20	
Silica	10.7	mg/L	0.21		70	130	1.9	20	A

### Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_20305		
Sample ID: MB-20305	Method Blank		Run: SUB-C110072				10/30/08 00:05		
Antimony	ND	mg/L	0.0002						
Arsenic	0.003	mg/L	6E-05						
Barium	0.0002	mg/L	4E-05						
Beryllium	ND	mg/L	0.0002						
Cadmium	2E-05	mg/L	2E-05						
Chromium	0.0008	mg/L	6E-05						
Copper	0.002	mg/L	3E-05						
Lead	0.0003	mg/L	5E-05						
Manganese	0.0002	mg/L	2E-05						
Molybdenum	ND	mg/L	4E-05						
Nickel	0.0002	mg/L	3E-05						
Selenium	ND	mg/L	0.0005						
Silver	ND	mg/L	2E-05						
Strontium	0.0002	mg/L	5E-06						
Thallium	0.0007	mg/L	4E-05						
Uranium	5E-05	mg/L	5E-05						
Zinc	0.04	mg/L	0.0005						
Sample ID: LCS3-20305	Laboratory Control Sample		Run: SUB-C110072				10/30/08 00:12		
Antimony	0.580	mg/L	0.050	116	85	115			
Arsenic	0.509	mg/L	0.0010	101	85	115			
Barium	0.534	mg/L	0.10	107	85	115			
Beryllium	0.245	mg/L	0.010	98	85	115			
Cadmium	0.274	mg/L	0.010	110	85	115			
Chromium	0.516	mg/L	0.050	103	85	115			
Copper	0.529	mg/L	0.010	106	85	115			
Lead	0.560	mg/L	0.050	112	85	115			
Manganese	2.39	mg/L	0.010	96	85	115			
Molybdenum	0.495	mg/L	0.10	99	85	115			
Nickel	0.496	mg/L	0.050	99	85	115			
Selenium	0.531	mg/L	0.0010	106	85	115			
Silver	0.0513	mg/L	0.010	103	85	115			
Strontium	0.475	mg/L	0.10	95	85	115			
Thallium	0.518	mg/L	0.10	103	85	115			
Uranium	0.556	mg/L	0.00030	111	85	115			
Zinc	0.520	mg/L	0.010	96	85	115			
Sample ID: R08100295-008D	Sample Matrix Spike		Run: SUB-C110072				10/30/08 00:25		
Antimony	0.590	mg/L	0.050	118	70	130			
Arsenic	0.510	mg/L	0.0010	101	70	130			
Barium	0.554	mg/L	0.10	108	70	130			
Beryllium	0.234	mg/L	0.010	93	70	130			
Cadmium	0.268	mg/L	0.010	107	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_20305		
Sample ID: R08100295-008D	Sample Matrix Spike		Run: SUB-C110072				10/30/08 00:25		
Chromium	0.518	mg/L	0.050	103	70	130			
Copper	0.517	mg/L	0.010	103	70	130			
Lead	0.566	mg/L	0.050	113	70	130			
Manganese	2.42	mg/L	0.010	95	70	130			
Molybdenum	0.519	mg/L	0.10	103	70	130			
Nickel	0.490	mg/L	0.050	98	70	130			
Selenium	0.514	mg/L	0.0010	103	70	130			
Silver	0.0509	mg/L	0.010	102	70	130			
Strontium	1.37	mg/L	0.10	108	70	130			
Thallium	0.519	mg/L	0.10	103	70	130			
Uranium	0.577	mg/L	0.00030	115	70	130			
Zinc	0.491	mg/L	0.010	97	70	130			
Sample ID: R08100295-008D	Sample Matrix Spike Duplicate		Run: SUB-C110072				10/30/08 00:59		
Antimony	0.562	mg/L	0.050	112	70	130	4.8	20	
Arsenic	0.505	mg/L	0.0010	100	70	130	1	20	
Barium	0.554	mg/L	0.10	108	70	130	0.1	20	
Beryllium	0.229	mg/L	0.010	92	70	130	1.9	20	
Cadmium	0.264	mg/L	0.010	106	70	130	1.6	20	
Chromium	0.516	mg/L	0.050	103	70	130	0.3	20	
Copper	0.510	mg/L	0.010	102	70	130	1.3	20	
Lead	0.555	mg/L	0.050	111	70	130	1.9	20	
Manganese	2.39	mg/L	0.010	94	70	130	1.3	20	
Molybdenum	0.501	mg/L	0.10	99	70	130	3.6	20	
Nickel	0.483	mg/L	0.050	97	70	130	1.4	20	
Selenium	0.507	mg/L	0.0010	101	70	130	1.3	20	
Silver	0.0503	mg/L	0.010	100	70	130	1.2	20	
Strontium	1.34	mg/L	0.10	103	70	130	1.6	20	
Thallium	0.514	mg/L	0.10	103	70	130	0.9	20	
Uranium	0.559	mg/L	0.00030	111	70	130	3.2	20	
Zinc	0.486	mg/L	0.010	96	70	130	1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>									Batch: C_20394
<b>Sample ID: MB-20394</b>	Method Blank					Run: SUB-C110508			11/06/08 14:59
Uranium	0.0003	mg/L	1E-05						
<b>Sample ID: LCS1-20394</b>	Laboratory Control Sample					Run: SUB-C110508			11/06/08 15:20
Uranium	0.101	mg/L	0.00030	100	80	120			
<b>Sample ID: R08100295-013I</b>	Post Digestion Spike					Run: SUB-C110508			11/06/08 16:35
Uranium	0.0135	mg/L	0.00030	107	70	130			
<b>Sample ID: R08100295-013I</b>	Post Digestion Spike Duplicate					Run: SUB-C110508			11/06/08 16:39
Uranium	0.0134	mg/L	0.00030	107	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R110382		
Sample ID: LRB	Method Blank					Run: SUB-C110382		11/04/08 14:15	
Aluminum	0.0006	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	0.00010	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	5E-05	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	9E-05	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	4E-05	mg/L	3E-05						
Zinc	0.001	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank					Run: SUB-C110382		11/04/08 14:22	
Aluminum	0.0474	mg/L	0.0010	94	85	115			
Arsenic	0.0494	mg/L	0.0010	99	85	115			
Barium	0.0488	mg/L	0.0010	97	85	115			
Cadmium	0.0485	mg/L	0.0010	97	85	115			
Chromium	0.0479	mg/L	0.0010	96	85	115			
Copper	0.0485	mg/L	0.0010	97	85	115			
Lead	0.0484	mg/L	0.0010	97	85	115			
Manganese	0.0481	mg/L	0.0010	96	85	115			
Mercury	0.00483	mg/L	0.0010	97	85	115			
Molybdenum	0.0479	mg/L	0.0010	96	85	115			
Nickel	0.0482	mg/L	0.0010	96	85	115			
Thorium 232	0.0484	mg/L	0.0010	97	85	115			
Uranium	0.0484	mg/L	0.00030	97	85	115			
Vanadium	0.0480	mg/L	0.0010	96	85	115			
Zinc	0.0509	mg/L	0.0010	99	85	115			
Sample ID: R08100295-005C	Post Digestion Spike					Run: SUB-C110382		11/05/08 05:59	
Aluminum	0.0497	mg/L	0.10	75	70	130			
Arsenic	0.0441	mg/L	0.0010	86	70	130			
Barium	0.0515	mg/L	0.10	85	70	130			
Cadmium	0.0405	mg/L	0.010	81	70	130			
Chromium	0.0414	mg/L	0.050	82	70	130			
Copper	0.0417	mg/L	0.010	81	70	130			
Lead	0.0420	mg/L	0.050	84	70	130			
Manganese	0.0991	mg/L	0.010	84	70	130			
Mercury	0.00431	mg/L	0.0010	86	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R110382		
Sample ID: R08100295-005C	Post Digestion Spike		Run: SUB-C110382				11/05/08 05:59		
Molybdenum	0.0446	mg/L	0.10	88	70	130			
Nickel	0.0420	mg/L	0.050	82	70	130			
Thorium 232	0.0434	mg/L	0.0010	87	70	130			
Uranium	0.0433	mg/L	0.00030	86	70	130			
Vanadium	0.0423	mg/L	0.10	84	70	130			
Zinc	0.0460	mg/L	0.010	87	70	130			
Sample ID: R08100295-005C	Post Digestion Spike Duplicate		Run: SUB-C110382				11/05/08 06:05		
Aluminum	0.0544	mg/L	0.10	84	70	130	0	20	
Arsenic	0.0434	mg/L	0.0010	84	70	130	1.6	20	
Barium	0.0511	mg/L	0.10	84	70	130	0	20	
Cadmium	0.0406	mg/L	0.010	81	70	130	0.1	20	
Chromium	0.0417	mg/L	0.050	83	70	130	0	20	
Copper	0.0412	mg/L	0.010	81	70	130	1.2	20	
Lead	0.0421	mg/L	0.050	84	70	130	0	20	
Manganese	0.0986	mg/L	0.010	83	70	130	0.5	20	
Mercury	0.00437	mg/L	0.0010	87	70	130	1.3	20	
Molybdenum	0.0445	mg/L	0.10	88	70	130	0	20	
Nickel	0.0413	mg/L	0.050	81	70	130	0	20	
Thorium 232	0.0437	mg/L	0.0010	87	70	130	0.8	20	
Uranium	0.0437	mg/L	0.00030	87	70	130	0.9	20	
Vanadium	0.0425	mg/L	0.10	85	70	130	0	20	
Zinc	0.0456	mg/L	0.010	87	70	130	0.9	20	
Sample ID: R08100295-010C	Post Digestion Spike		Run: SUB-C110382				11/05/08 07:13		
Aluminum	0.0469	mg/L	0.10	89	70	130			
Arsenic	0.0590	mg/L	0.0010	94	70	130			
Barium	0.0550	mg/L	0.10	89	70	130			
Cadmium	0.0446	mg/L	0.010	89	70	130			
Chromium	0.0454	mg/L	0.050	90	70	130			
Copper	0.0464	mg/L	0.010	91	70	130			
Lead	0.0461	mg/L	0.050	92	70	130			
Manganese	0.113	mg/L	0.010	100	70	130			
Mercury	0.00466	mg/L	0.0010	93	70	130			
Molybdenum	0.0500	mg/L	0.10	97	70	130			
Nickel	0.0471	mg/L	0.050	91	70	130			
Thorium 232	0.0473	mg/L	0.0010	95	70	130			
Uranium	0.0495	mg/L	0.00030	95	70	130			
Vanadium	0.0462	mg/L	0.10	92	70	130			
Zinc	0.0473	mg/L	0.010	91	70	130			
Sample ID: R08100295-010C	Post Digestion Spike Duplicate		Run: SUB-C110382				11/05/08 07:20		
Aluminum	0.0478	mg/L	0.10	91	70	130	0	20	
Arsenic	0.0610	mg/L	0.0010	98	70	130	3.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. \* 2821 Plant St \* Rapid City, SD 57702  
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## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R110382		
Sample ID: R08100295-010C	Post Digestion Spike Duplicate			Run: SUB-C110382				11/05/08 07:20	
Barium	0.0577	mg/L	0.10	95	70	130	0	20	
Cadmium	0.0457	mg/L	0.010	91	70	130	2.5	20	
Chromium	0.0466	mg/L	0.050	93	70	130	0	20	
Copper	0.0473	mg/L	0.010	93	70	130	1.9	20	
Lead	0.0477	mg/L	0.050	95	70	130	0	20	
Manganese	0.115	mg/L	0.010	103	70	130	1.4	20	
Mercury	0.00492	mg/L	0.0010	98	70	130	5.4	20	
Molybdenum	0.0512	mg/L	0.10	100	70	130	0	20	
Nickel	0.0479	mg/L	0.050	93	70	130	0	20	
Thorium 232	0.0492	mg/L	0.0010	98	70	130	3.9	20	
Uranium	0.0515	mg/L	0.00030	98	70	130	3.9	20	
Vanadium	0.0474	mg/L	0.10	95	70	130	0	20	
Zinc	0.0484	mg/L	0.010	93	70	130	2.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R110432		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C110432				11/05/08 13:09		
Antimony	0.0002	mg/L	7E-05						
Arsenic	0.0002	mg/L	6E-05						
Beryllium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	3E-05						
Thallium	ND	mg/L	1E-05						
Thorium 232	ND	mg/L	4E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C110432				11/05/08 13:16		
Antimony	0.0519	mg/L	0.0010	103	85	115			
Arsenic	0.0532	mg/L	0.0010	106	85	115			
Beryllium	0.0519	mg/L	0.0010	104	85	115			
Cadmium	0.0528	mg/L	0.0010	106	85	115			
Copper	0.0532	mg/L	0.0010	106	85	115			
Lead	0.0529	mg/L	0.0010	106	85	115			
Mercury	0.00543	mg/L	0.0010	109	85	115			
Selenium	0.0531	mg/L	0.0010	106	85	115			
Silver	0.0207	mg/L	0.0010	104	85	115			
Thallium	0.0526	mg/L	0.0010	105	85	115			
Thorium 232	0.0565	mg/L	0.0010	113	85	115			
<b>Sample ID: R08100295-010C</b>	Post Digestion Spike		Run: SUB-C110432				11/05/08 15:44		
Antimony	0.0590	mg/L	0.050	118	70	130			
Arsenic	0.0690	mg/L	0.0010	112	70	130			
Beryllium	0.0477	mg/L	0.010	95	70	130			
Cadmium	0.0515	mg/L	0.010	103	70	130			
Copper	0.0487	mg/L	0.010	95	70	130			
Lead	0.0529	mg/L	0.050	106	70	130			
Mercury	0.00542	mg/L	0.0010	108	70	130			
Selenium	0.0525	mg/L	0.0010	105	70	130			
Silver	0.0164	mg/L	0.010	82	70	130			
Thallium	0.0529	mg/L	0.10	106	70	130			
Thorium 232	0.0577	mg/L	0.0010	115	70	130			
<b>Sample ID: R08100295-010C</b>	Post Digestion Spike Duplicate		Run: SUB-C110432				11/05/08 15:50		
Antimony	0.0592	mg/L	0.050	118	70	130	0.5	20	
Arsenic	0.0675	mg/L	0.0010	109	70	130	2.2	20	
Beryllium	0.0481	mg/L	0.010	96	70	130	0.9	20	
Cadmium	0.0512	mg/L	0.010	102	70	130	0.5	20	
Copper	0.0481	mg/L	0.010	94	70	130	1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R110432		
Sample ID: R08100295-010C	Post Digestion Spike Duplicate		Run: SUB-C110432				11/05/08 15:50		
Lead	0.0528	mg/L	0.050	106	70	130	0.1	20	
Mercury	0.00553	mg/L	0.0010	111	70	130	2	20	
Selenium	0.0513	mg/L	0.0010	103	70	130	2.3	20	
Silver	0.0159	mg/L	0.010	80	70	130	2.6	20	
Thallium	0.0530	mg/L	0.10	106	70	130	0	20	
Thorium 232	0.0576	mg/L	0.0010	115	70	130	0.2	20	
Sample ID: C08101060-002AMS4	Post Digestion Spike		Run: SUB-C110432				11/05/08 20:42		
Antimony	0.0573	mg/L	0.050	113	70	130			
Arsenic	0.0623	mg/L	0.0010	101	70	130			
Beryllium	0.0439	mg/L	0.010	88	70	130			
Cadmium	0.0459	mg/L	0.010	92	70	130			
Copper	0.0583	mg/L	0.010	93	70	130			
Lead	0.0507	mg/L	0.050	101	70	130			
Mercury	0.00518	mg/L	0.0010	104	70	130			
Selenium	0.0542	mg/L	0.0010	92	70	130			
Silver	0.0149	mg/L	0.010	75	70	130			
Thallium	0.0507	mg/L	0.10	101	70	130			
Thorium 232	0.0507	mg/L	0.0010	101	70	130			
Sample ID: C08101060-002AMS4	Post Digestion Spike Duplicate		Run: SUB-C110432				11/05/08 20:49		
Antimony	0.0567	mg/L	0.050	112	70	130	1	20	
Arsenic	0.0638	mg/L	0.0010	104	70	130	2.3	20	
Beryllium	0.0447	mg/L	0.010	89	70	130	1.9	20	
Cadmium	0.0455	mg/L	0.010	91	70	130	0.8	20	
Copper	0.0587	mg/L	0.010	94	70	130	0.7	20	
Lead	0.0513	mg/L	0.050	102	70	130	1.2	20	
Mercury	0.00526	mg/L	0.0010	105	70	130	1.5	20	
Selenium	0.0553	mg/L	0.0010	95	70	130	2.1	20	
Silver	0.0148	mg/L	0.010	74	70	130	0.8	20	
Thallium	0.0512	mg/L	0.10	102	70	130	0	20	
Thorium 232	0.0513	mg/L	0.0010	103	70	130	1.3	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R110508		
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C110508			11/06/08 13:31
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C110508			11/06/08 13:35
Uranium	0.0540	mg/L	0.00030	108	85	115			
<b>Sample ID: R08100295-014C</b>	Post Digestion Spike					Run: SUB-C110508			11/06/08 17:41
Uranium	0.0550	mg/L	0.00030	110	70	130			
<b>Sample ID: R08100295-014C</b>	Post Digestion Spike Duplicate					Run: SUB-C110508			11/06/08 18:02
Uranium	0.0550	mg/L	0.00030	110	70	130	0	20	
<b>Sample ID: R08100295-014D</b>	Post Digestion Spike					Run: SUB-C110508			11/06/08 18:10
Uranium	0.0571	mg/L	0.00030	114	70	130			
<b>Sample ID: R08100295-014D</b>	Post Digestion Spike Duplicate					Run: SUB-C110508			11/06/08 18:14
Uranium	0.0570	mg/L	0.00030	114	70	130	0.1	20	
<b>Method: E245.1</b>							Batch: B_35439		
<b>Sample ID: MB-35439</b>	Method Blank					Run: SUB-B119895			10/27/08 08:48
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-35439</b>	Laboratory Fortified Blank					Run: SUB-B119895			10/27/08 08:50
Mercury	0.0020	mg/L	0.0010	99	85	115			
<b>Sample ID: B08102025-010BMS</b>	Sample Matrix Spike					Run: SUB-B119895			10/27/08 09:18
Mercury	0.0019	mg/L	0.0010	93	70	130			
<b>Sample ID: B08102025-010BMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B119895			10/27/08 09:20
Mercury	0.0020	mg/L	0.0010	98	70	130	5.3	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>									Batch: B_35465
<b>Sample ID: MB-35465</b>	Method Blank					Run: SUB-B119895			10/27/08 12:13
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-35465</b>	Laboratory Fortified Blank					Run: SUB-B119895			10/27/08 12:15
Mercury	0.0018	mg/L	0.0010	91	85	115			
<b>Sample ID: B08101997-001BMS</b>	Sample Matrix Spike					Run: SUB-B119895			10/27/08 12:22
Mercury	0.0019	mg/L	0.00020	94	70	130			
<b>Sample ID: B08101997-001BMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B119895			10/27/08 12:24
Mercury	0.0019	mg/L	0.00020	93	70	130	0.5	30	
<b>Sample ID: B08102034-011JMS</b>	Sample Matrix Spike					Run: SUB-B119895			10/27/08 12:43
Mercury	0.0019	mg/L	0.0010	93	70	130			
<b>Sample ID: B08102034-011JMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-B119895			10/27/08 12:46
Mercury	0.0019	mg/L	0.0010	94	70	130	1.1	30	
<b>Method: E245.1</b>									Analytical Run: SUB-B119895
<b>Sample ID: QCS</b>	Initial Calibration Verification Standard								10/27/08 06:52
Mercury	0.0022	mg/L	0.0010	109	90	110			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R38130		
<b>Sample ID: LFB0810225958-3</b>	Laboratory Fortified Blank			Run: DIONEX_081022A			10/22/08 18:52		
Chloride	4.76	mg/L	0.50	95	90	110			
Fluoride	1.94	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.50	mg/L	0.10	100	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
<b>Sample ID: LFB0810225958-4</b>	Laboratory Fortified Blank			Run: DIONEX_081022A			10/22/08 19:08		
Chloride	4.87	mg/L	0.50	97	90	110			
Fluoride	1.97	mg/L	0.10	99	90	110			
Nitrogen, Nitrate as N	2.43	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	2.55	mg/L	0.10	102	90	110			
Sulfate	14.3	mg/L	1.0	95	90	110			
<b>Sample ID: R08100263-001BMS</b>	Sample Matrix Spike			Run: DIONEX_081022A			10/22/08 20:14		
Chloride	5.76	mg/L	0.50	93	80	120			
Fluoride	3.12	mg/L	0.10	88	80	120			
Nitrogen, Nitrate as N	2.43	mg/L	0.10	97	80	120			
Nitrogen, Nitrite as N	2.54	mg/L	0.10	102	80	120			
Sulfate	81.9	mg/L	1.0		80	120			A
<b>Sample ID: R08100263-001BMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_081022A			10/22/08 20:31		
Chloride	5.81	mg/L	0.50	94	80	120	0.9	10	
Fluoride	3.17	mg/L	0.10	90	80	120	1.6	10	
Nitrogen, Nitrate as N	2.45	mg/L	0.10	98	80	120	0.8	10	
Nitrogen, Nitrite as N	2.56	mg/L	0.10	102	80	120	0.8	10	
Sulfate	82.1	mg/L	1.0		80	120	0.3	10	A
<b>Sample ID: R08100295-004AMS</b>	Sample Matrix Spike			Run: DIONEX_081022A			10/22/08 22:58		
Chloride	255	mg/L	5.4	93	80	120			
Fluoride	99.5	mg/L	0.56	95	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	98	80	120			
Nitrogen, Nitrite as N	128	mg/L	2.9	102	80	120			
Sulfate	1960	mg/L	3.4	78	80	120			S
<b>Sample ID: R08100295-004AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_081022A			10/22/08 23:15		
Chloride	246	mg/L	5.4	89	80	120	3.5	10	
Fluoride	96.8	mg/L	0.56	92	80	120	2.7	10	
Nitrogen, Nitrate as N	118	mg/L	1.3	94	80	120	3.7	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	99	80	120	3.6	10	
Sulfate	1940	mg/L	3.4	75	80	120	0.9	10	S
<b>Sample ID: R08100295-008AMS</b>	Sample Matrix Spike			Run: DIONEX_081022A			10/23/08 02:15		
Chloride	251	mg/L	5.4	93	80	120			
Fluoride	100	mg/L	0.56	96	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 12/29/08

Project: Edgemont

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R38130		
Sample ID: R08100295-008AMS	Sample Matrix Spike		Run: DIONEX_081022A				10/23/08 02:15		
Nitrogen, Nitrate as N	122	mg/L	1.3	97	80	120			
Nitrogen, Nitrite as N	127	mg/L	2.9	102	80	120			
Sulfate	1020	mg/L	3.4	84	80	120			
Sample ID: R08100295-008AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_081022A				10/23/08 02:32		
Chloride	242	mg/L	5.4	89	80	120	3.5	10	
Fluoride	97.4	mg/L	0.56	93	80	120	3	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	94	80	120	3.4	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120	3.4	10	
Sulfate	996	mg/L	3.4	80	80	120	2.4	10	
Sample ID: R08100295-012AMS	Sample Matrix Spike		Run: DIONEX_081022A				10/23/08 05:32		
Chloride	256	mg/L	5.4	93	80	120			
Fluoride	99.9	mg/L	0.56	95	80	120			
Nitrogen, Nitrate as N	121	mg/L	1.3	97	80	120			
Nitrogen, Nitrite as N	127	mg/L	2.9	102	80	120			
Sulfate	1150	mg/L	3.4	89	80	120			
Sample ID: R08100295-012AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_081022A				10/23/08 05:49		
Chloride	248	mg/L	5.4	90	80	120	3.1	10	
Fluoride	97.2	mg/L	0.56	93	80	120	2.8	10	
Nitrogen, Nitrate as N	117	mg/L	1.3	94	80	120	2.8	10	
Nitrogen, Nitrite as N	123	mg/L	2.9	99	80	120	3	10	
Sulfate	1110	mg/L	3.4	84	80	120	3.3	10	
Sample ID: R08100303-002AMS	Sample Matrix Spike		Run: DIONEX_081022A				10/23/08 08:49		
Chloride	5.94	mg/L	0.50	93	80	120			
Fluoride	2.89	mg/L	0.10	90	80	120			
Nitrogen, Nitrate as N	3.44	mg/L	0.10	91	80	120			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	80	120			
Sulfate	17.8	mg/L	1.0	83	80	120			
Sample ID: R08100303-002AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_081022A				10/23/08 09:06		
Chloride	6.23	mg/L	0.50	98	80	120	4.8	10	
Fluoride	2.84	mg/L	0.10	87	80	120	1.7	10	
Nitrogen, Nitrate as N	3.46	mg/L	0.10	92	80	120	0.6	10	
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	80	120	0	10	
Sulfate	18.1	mg/L	1.0	85	80	120	1.6	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0561		
<b>Sample ID: MB-GrAB-0561</b>	Method Blank				Run: SUB-C111388			11/22/08 01:24	
Gross Alpha	0.2	pCi/L							U
Gross Beta	-3	pCi/L							U
<b>Sample ID: UNAT-GrAB-0561</b>	Laboratory Control Sample				Run: SUB-C111388			11/22/08 01:24	
Gross Alpha	140	pCi/L		102	70	130			
<b>Sample ID: C08101085-003CMS</b>	Sample Matrix Spike				Run: SUB-C111388			11/24/08 07:45	
Gross Alpha	110	pCi/L		75	70	130			
<b>Sample ID: C08101085-003CMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C111388			11/24/08 07:45	
Gross Alpha	99	pCi/L		67	70	130	9.8	19.6	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
<b>Sample ID: Cs137-GrAB-0561</b>	Laboratory Control Sample				Run: SUB-C111388			11/22/08 01:24	
Gross Beta	94	pCi/L		104	70	130			
<b>Sample ID: R08100295-002H</b>	Sample Duplicate				Run: SUB-C111388			11/22/08 01:24	
Gross Alpha	4100	pCi/L					9.2	13.1	
Gross Beta	1200	pCi/L					5.4	12.8	
<b>Sample ID: C08101085-003CMS</b>	Sample Matrix Spike				Run: SUB-C111388			11/24/08 07:45	
Gross Beta	77	pCi/L		80	70	130			
<b>Sample ID: C08101085-003CMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C111388			11/24/08 07:45	
Gross Beta	76	pCi/L		79	70	130	0.9	17.2	
<b>Method: E901.1</b>							Batch: C_R109907		
<b>Sample ID: R08100295-012H</b>	Sample Duplicate				Run: SUB-C109907			10/27/08 11:00	
Bismuth 214	81	pCi/L	20				50	30	R
Lead 214	64	pCi/L	20				19	30	
Potassium 40	870	pCi/L	20				5.6	30	
Gross Gamma	1000	pCi/L	20				11	30	
- Bismuth Duplicate is outside of the acceptance range for this analysis.									
<b>Sample ID: MB-R109907</b>	Method Blank				Run: SUB-C109907			10/27/08 11:00	
Bismuth 214	ND	pCi/L							U
Gross Gamma	ND	pCi/L							U
<b>Sample ID: LCS-R109907</b>	Laboratory Control Sample				Run: SUB-C109907			10/27/08 11:00	
Cesium 137	39000	pCi/L	20	104	70	130			
Cobalt 60	34000	pCi/L	20	99	70	130			
Potassium 40	6400	pCi/L	20	96	70	130			

### Qualifiers:

RL - Analyte reporting limit.

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_20394		
Sample ID: R08100295-0071	Sample Duplicate					Run: SUB-C110763		11/11/08 13:02	
Radium 226	-0.66	pCi/L			70	130	24	135.8	U
Sample ID: R08100295-0091	Sample Matrix Spike					Run: SUB-C110763		11/11/08 13:02	
Radium 226	24	pCi/L		120	70	130			
Sample ID: LCS-20394	Laboratory Control Sample					Run: SUB-C110763		11/11/08 14:35	
Radium 226	17.5	pCi/Filter		124	70	130			
Sample ID: MB-20394	Method Blank					Run: SUB-C110763		11/11/08 14:35	
Radium 226	-2	pCi/Filter							U
Method: E903.0							Batch: C_RA226-3216		
Sample ID: C08101041-001EMS	Sample Matrix Spike					Run: SUB-C110691		11/11/08 02:30	
Radium 226	15	pCi/L		80	70	130			
Sample ID: C08101041-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C110691		11/11/08 02:30	
Radium 226	15	pCi/L		84	70	130	3.3	24.9	
Sample ID: MB-RA226-3216	Method Blank					Run: SUB-C110691		11/11/08 04:06	
Radium 226	-0.02	pCi/L							U
Sample ID: LCS-RA226-3216	Laboratory Control Sample					Run: SUB-C110691		11/11/08 04:06	
Radium 226	6.4	pCi/L		81	70	130			
Method: E907.0							Batch: C_20394		
Sample ID: C08101024-001AMS	Sample Matrix Spike					Run: SUB-C111453		11/07/08 14:30	
Thorium 230	49.8	pCi/Filter	0.20	102	70	130			
Sample ID: C08101024-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C111453		11/07/08 14:30	
Thorium 230	39.5	pCi/Filter	0.20	80	70	130	23	30	
Sample ID: LCS-20394	Laboratory Control Sample					Run: SUB-C111453		11/07/08 14:30	
Thorium 230	27.2	pCi/L	0.20	112	70	130			
Sample ID: MB-20394	Method Blank					Run: SUB-C111453		11/07/08 14:30	
Thorium 230	0.2	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/29/08  
Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_RA-TH-ISO-0683		
<b>Sample ID: LCS-RA-TH-ISO-0683</b>	Laboratory Control Sample				Run: SUB-C111494				11/20/08 08:50
Thorium 230	4.25	pCi/L	0.20	70	70	130			
<b>Sample ID: R08100295-014H</b>	Sample Matrix Spike				Run: SUB-C111494				11/20/08 13:36
Thorium 230	17.8	pCi/L	0.20	74	70	130			
<b>Sample ID: R08100295-014H</b>	Sample Matrix Spike Duplicate				Run: SUB-C111494				11/20/08 13:36
Thorium 230	21.5	pCi/L	0.20	89	70	130	19	40	
<b>Sample ID: MB-RA-TH-ISO-0683</b>	Method Blank				Run: SUB-C111494				11/20/08 13:36
Thorium 230	0.1	pCi/L							U
<b>Method: E909.0M</b>							Batch: C_20394		
<b>Sample ID: C08101067-001FMS</b>	Sample Matrix Spike				Run: SUB-C111413				11/11/08 10:15
Lead 210	1100	pCi/L		93	70	130			
<b>Sample ID: C08101067-001FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C111413				11/11/08 10:15
Lead 210	1000	pCi/L		89	70	130	4.8	30	
<b>Sample ID: MB-R111413</b>	Method Blank				Run: SUB-C111413				11/11/08 10:15
Lead 210	-3	pCi/L							U
<b>Sample ID: LCS-R111413</b>	Laboratory Control Sample				Run: SUB-C111413				11/11/08 10:15
Lead 210	110	pCi/L		97	70	130			
<b>Method: E909.0M</b>							Batch: C_R111073		
<b>Sample ID: R08100295-006H</b>	Sample Matrix Spike				Run: SUB-C111073				11/06/08 09:13
Lead 210	150	pCi/L		128	70	130			
<b>Sample ID: C08101336-001FDUP</b>	Sample Duplicate				Run: SUB-C111073				11/06/08 09:13
Lead 210	-0.40	pCi/L					130	30	UR
- The Sample and the Duplicate are both below the MDC; the RPD is acceptable.									
<b>Sample ID: MB-R111073</b>	Method Blank				Run: SUB-C111073				11/06/08 09:13
Lead 210	-2	pCi/L							U
<b>Sample ID: LCS-R111073</b>	Laboratory Control Sample				Run: SUB-C111073				11/06/08 09:13
Lead 210	65	pCi/L		115	70	130			

### Qualifiers:

RL - Analyte reporting limit.  
R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/29/08

Work Order: R08100295

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b>							Batch: C_20394		
<b>Sample ID: C08101067-001FMS</b>	Sample Matrix Spike					Run: SUB-C111251			11/13/08 15:31
Polonium 210	37	pCi/L	1.0	84	70	130			
<b>Sample ID: C08101067-001FMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C111251			11/13/08 15:31
Polonium 210	39	pCi/L	1.0	90	70	130	5.3	53	
<b>Sample ID: LCS-20394</b>	Laboratory Control Sample					Run: SUB-C111251			11/13/08 15:31
Polonium 210	80	pCi/L	1.0	94	70	130			
<b>Sample ID: MB-20394</b>	Method Blank					Run: SUB-C111251			11/13/08 15:31
Polonium 210	0.1	pCi/L							U
<b>Method: RMO-3008</b>							Batch: C_PO210-0158		
<b>Sample ID: R08100295-014K</b>	Sample Matrix Spike					Run: SUB-C111313			11/19/08 09:23
Polonium 210	44	pCi/L	1.0	101	70	130			
<b>Sample ID: R08100295-014K</b>	Sample Matrix Spike Duplicate					Run: SUB-C111313			11/19/08 12:25
Polonium 210	37	pCi/L	1.0	86	70	130	16	57	
<b>Sample ID: LCS-PO210-0158</b>	Laboratory Control Sample					Run: SUB-C111313			11/19/08 12:25
Polonium 210	19	pCi/L	1.0	109	70	130			
<b>Sample ID: MB-PO210-0158</b>	Method Blank					Run: SUB-C111313			11/13/08 17:55
Polonium 210	-0.07	pCi/L							U

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

## Chain of Custody and Analytical Request Record

Page        of       

**PLEASE PRINT- Provide as much information as possible.**

Company Name: <b>Scott Env.</b>		Project Name, PWS, Permit, Etc. <b>Power Tech DB</b>		Sample Origin		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address:		Contact Name: <b>Allen Scott</b> Phone/Fax: <b>605-673-4429</b>		State:		Sampler: (Please Print) <b>Allen Scott</b>	
Invoice Address: <b>Res Per</b>		Invoice Contact & Phone:		Purchase Order:		Quote/Bottle Order:	
Special Report/Formats - EI must be notified prior to sample submittal for the following:				<div> <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data)         </div> <div> <input type="checkbox"/> GSA <input type="checkbox"/> Format:         </div> <div> <input type="checkbox"/> POTW/MMWTP <input type="checkbox"/> LEVEL IV         </div> <div> <input type="checkbox"/> State: <input type="checkbox"/> NELAC         </div> <div> <input type="checkbox"/> Other:         </div>			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date		Collection Time		MATRIX	
086W 0401		10-20-08		12:00		Waste	
086W 080		10-20-08		12:10		"	
086W 080		10-20-08		12:10		"	
086W 088		10-20-08		1:52		"	
086W 088		10-20-08		12:15		"	
086W 088		10-20-08		3:42		"	
086W 302		10-20-08		1:15		"	
086W 089		10-20-08		2:46		"	
086W 081		10-20-08		3:00		"	
086W 015		10-20-08		4:20		"	
Custody Record		Held/Quarantined by (print):		Date/Time:		Signature:	
MUST be signed		Date/Time: <b>10-20-08 10:24</b>		Signature:		Received by (print):	
Sample Disposal: Return to Client:		Lab Disposal:		Inspected by Laboratory:		Date/Time:	
				Date/Time: <b>10/20/08 10:24</b>		Signature:	
ANALYSIS REQUESTED Sample Type: AWSVB0 Air Water Soils/Solids Vegetation Bioassay Other				SEE ATTACHED Normal Turnaround (TAT)			
RUSH sample submittal for charges and scheduling - See Instruction Page				Comments:			
Contact EI prior to RUSH sample submittal for charges and scheduling - See Instruction Page				On Ice: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Shipped by: <b>Allen Scott</b>				Cooler Dry:			
Temperature: <b>42.0 C</b>				Custody Seal: Y N			
Initial: Y N				Signature: Y N			
Method:				Date/Time:			
Laboratory Use Only				Date/Time:			

**In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.**

**This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.**

Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links



# Chain of Custody and Analytical Request Record

Page \_\_\_\_ of \_\_\_\_

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>Scott Env.</b>		Project Name, PWS, Permit, Etc. <b>Power Tech DB</b>		Sample Origin State:	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>DeSper</b>		Contact Name: <b>Allen Smith</b>		Email: <b>605-673-4529</b>	Sampler: (Please Print) <b>Allen Smith</b>
Invoice Address: <b>DeSper</b>		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order:
Special Report/Formats - EI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: <input type="checkbox"/> NELAC		Number of Containers Sample Type: AWSVB0 Air Water Soils/Solids Vegetation Bioassay Other		ANALYSIS REQUESTED <b>As per date</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	SEE ATTACHED Normal Turnaround (TAT)
1 DBGW 697		10-24-08	9:45	Water	RUSH Contact EI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: Purham west Purham east 1. scrubline NW 7. school house SE 38
2 DBGW 695		10-24-08	9:10	"	
3 DBGW 694		10-24-08	8:25	"	
4 DBGW 696		10-24-08	8:45	"	
5					
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Relinquished by (print): <b>Allen Smith</b>	Date/Time: <b>10-23-08 10:24</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Linda Carson</b>
Sample Disposal: Return to Client		Lab Disposal:	Date/Time:	Signature:	Date/Time: <b>10/23/08 10:25</b>

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

January 29, 2009

Cory Foreman  
RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701-

Workorder No.: R08110211

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 14 samples for RESPEC Inc on 11/19/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08110211-001	DewBurd BLK01	11/18/08 8:45	11/19/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved



## ANALYTICAL SUMMARY REPORT

R08110211-002 DewBurd GW696	11/18/08 8:45	11/19/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08110211-003 DewBurd GW694	11/18/08 9:00	11/19/08	Aqueous	Same As Above
R08110211-004 DewBurd GW688	11/18/08 10:00	11/19/08	Aqueous	Same As Above
R08110211-005 DewBurd GW680	11/18/08 10:25	11/19/08	Aqueous	Same As Above
R08110211-006 DewBurd GW694	11/18/08 9:05	11/19/08	Aqueous	Same As Above
R08110211-007 DewBurd GW3026	11/18/08 11:19	11/19/08	Aqueous	Same As Above
R08110211-008 DewBurd GW698	11/18/08 12:00	11/19/08	Aqueous	Same As Above
R08110211-009 DewBurd GW695	11/18/08 13:25	11/19/08	Aqueous	Same As Above
R08110211-010 DewBurd GW697	11/18/08 13:35	11/19/08	Aqueous	Same As Above
R08110211-011 DewBurd GW689	11/18/08 14:02	11/19/08	Aqueous	Same As Above
R08110211-012 DewBurd GW681	11/18/08 13:55	11/19/08	Aqueous	Same As Above
R08110211-013 DewBurd GW615	11/18/08 15:00	11/19/08	Aqueous	Same As Above
R08110211-014 DewBurd GW622	11/18/08 14:30	11/19/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda Larson  
Rapid City - Project Manager