


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Withdrawn: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

## APPENDIX 2.7-H

### Groundwater Quality Analytical Results

## Groundwater Quality Analytical Results Index

Hydro ID	Sample Date	Lab Sample ID	Page	Notes
2	09/07	R07090384-002	48	
	11/07	R07110146-003	160	
	02/08	R08020130-001	402	
	05/08	R08050427-003	998	
4	02/08	R08020130-002	405	
5	09/07	R07090384-005	57	Labeled Hydro ID 635 on lab report
	11/07	R07110303-001	228	Labeled Hydro ID 635 on lab report
	02/08	R08020082-001	379	Labeled Hydro ID 635 on lab report
	04/08	R08040364-007	778	Labeled Hydro ID 635 on lab report
7	10/06	R06100076-004	24	
	09/07	R07100002-009	130	
	11/07	R07110146-002	157	
	02/08	R08020220-002	438	
	05/08	R08050419-002	963	
8	09/07	R07090384-003	51	
	11/07	R07110303-005	240	
	11/07	R07110303-006	243	
	02/08	R08020052-001	316	
	05/08	R08050419-003	966	
13	10/06	R06100076-005	27	
	09/07	R07090385-005	90	
	11/07	R07110146-007	172	
	02/08	R08020220-004	444	
	05/08	R08050251-002	872	
16	10/06	R06100076-006	30	
	09/07	R07090385-002	81	
	11/07	R07110146-010	181	
	03/08	R08030315-004	527	
	06/08	R08070005-001	1146	
18	10/06	R06100076-001	15	
	09/07	R07090384-001	45	
	11/07	R07110146-004	163	
	11/07	R07110146-005	166	
	02/08	R08020130-003	408	
	05/08	R08050427-001	992	
41	10/06	R06100076-003	21	
42	10/06	R06100076-002	18	
	09/07	R07100002-003	112	
	11/07	R07110146-006	169	
	02/08	R08020052-004	328	
	05/08	R08050427-002	995	

Hydro ID	Sample Date	Lab Sample ID	Page	Notes
49	07/08	R08070035-003	1178	
615	04/08	R08040028-001	604	
	04/08	R08040028-002	607	
	04/08	R08040250-004	667	
	05/08	R08050406-005	941	
	06/08	R08060452-002	1117	
	07/08	R08070244-002	1290	
	08/08	R08080332-004	1416	
	09/08	R08090314-005	1468	
	10/08	R08100295-010	1591	
	11/08	R08110211-013	1670	
	12/08	R08120255-013	1742	
	01/09	R09010301-004	1810	
	02/09	R09020293-009	1939	
619	09/07	R07090385-001	78	
	11/07	R07110146-008	175	
	03/08	R08030253-002	489	
	06/08	R08060335-001	1041	
622	04/08	R08040028-003	610	
	04/08	R08040250-003	663	
	05/08	R08050406-004	938	
	06/08	R08060452-001	1114	
	07/08	R08070244-001	1287	
	08/08	R08080332-003	1413	
	09/08	R08090314-004	1465	
	10/08	R08100295-006	1579	
	11/08	R08110211-014	1673	
	12/08	R08120255-008	1727	
	01/09	R09010301-002	1804	
	01/09	R09010301-003	1807	
	02/09	R09020293-008	1935	
628	09/07	R07100002-001	106	
	11/07	R07110184-001	200	
	02/08	R08020220-005	447	
	05/08	R08050419-004	969	
631	09/07	R07090384-004	54	
	11/07	R07110184-004	209	
	02/08	R08020220-003	441	
	05/08	R08050251-001	869	

## Groundwater Quality Analytical Results Index

Hydro ID	Sample Date	Lab Sample ID	Page	Notes
650	09/07	R07100002-010	133	
	11/07	R07110146-009	178	
	03/08	R08030253-001	486	
	05/08	R08050427-004	1001	
675	09/07	R07100002-002	109	
	11/07	R07110303-007	246	
	02/08	R08020052-002	322	
	04/08	R08040364-004	767	
	04/08	R08040364-005	771	
676	09/07	R07100002-005	118	
	11/07	R07110303-002	231	
	02/08	R08020052-007	343	
	04/08	R08040364-001	756	
677	09/07	R07100002-004	115	
	11/07	R07110303-004	237	
	02/08	R08020052-003	325	
	04/08	R08040364-003	763	
678	09/07	R07100002-007	124	
	11/07	R07110303-003	234	
	02/08	R08020052-005	331	
	02/08	R08020052-006	337	
	04/08	R08040364-002	759	
679	09/07	R07100002-006	121	
	11/07	R07110184-003	206	
	02/08	R08020006-001	296	
	05/08	R08050229-002	848	
680	01/08	R08010296-001	269	
	03/08	R08040002-002	571	
	04/08	R08040250-007	679	
	05/08	R08050199-001	823	
	05/08	R08050321-002	899	
	06/08	R08060210-001	1016	
	07/08	R08070115-002	1222	
	08/08	R08080332-002	1410	
	09/08	R08090314-001	1456	
	09/08	R08090314-002	1459	
	10/08	R08100295-002	1567	
	10/08	R08100295-003	1570	
	11/08	R08110211-005	1646	
	12/08	R08120255-007	1724	
	01/09	R09010301-011	1831	
	02/09	R09020293-007	1932	



Hydro ID	Sample Date	Lab Sample ID	Page	Notes
681	01/08	R08010296-002	272	
	03/08	R08030315-008	539	
	04/08	R08040250-006	675	
	05/08	R08050143-001	801	
	05/08	R08050229-001	845	
	06/08	R08060452-003	1120	
	07/08	R08070035-005	1184	
	07/08	R08070244-009	1311	
	08/08	R08080301-004	1380	
	09/08	R08090356-002	1495	
	10/08	R08100295-009	1588	
	11/08	R08110211-012	1667	
	12/08	R08120255-002	1709	
	01/09	R09010301-007	1819	
	02/09	R09020293-011	1947	
682	07/08	R08070115-003	1225	
684	07/08	R08070115-004	1228	
685	07/08	R08070035-007	1190	
686	07/08	R08070115-007	1237	
687	07/08	R08070035-004	1181	
688	04/08	R08040058-001	634	
	04/08	R08040287-002	709	
	06/08	R08060210-002	1019	
	06/08	R08070005-002	1149	
	07/08	R08070115-006	1234	
	07/08	R08070471-001	1351	
	08/08	R08080332-001	1407	
	09/08	R08100014-001	1542	
	10/08	R08100295-005	1576	
	11/08	R08110211-004	1643	
	12/08	R08120281-001	1777	
	01/09	R09010301-012	1834	
	02/09	R09020293-006	1928	

Hydro ID	Sample Date	Lab Sample ID	Page	Notes
689	03/08	R08030315-007	536	
	04/08	R08040250-005	671	
	05/08	R08050406-006	944	
	06/08	R08060452-004	1123	
	07/08	R08070035-006	1187	
	07/08	R08070244-008	1308	
	08/08	R08080301-005	1383	
	09/08	R08090356-001	1492	
	10/08	R08100295-008	1585	
	11/08	R08110211-011	1664	
	12/08	R08120255-003	1712	
	01/09	R09010301-008	1822	
	02/09	R09020293-010	1943	
690	07/08	R08070115-005	1231	
691	07/08	R08070035-002	1175	
692	07/08	R08070115-001	1219	
693	07/08	R08070035-001	1172	
694	03/08	R08040002-001	565	Labeled Hydro ID 696 on lab report
	04/08	R08040287-007	728	Labeled Hydro ID 696 on lab report
	05/08	R08050321-001	896	Labeled Hydro ID 696 on lab report
	06/08	R08060427-002	1068	Labeled Hydro ID 696 on lab report
	07/08	R08070244-004	1296	Labeled Hydro ID 696 on lab report
	08/08	R08080332-006	1422	Labeled Hydro ID 696 on lab report
	09/08	R08090356-006	1507	Labeled Hydro ID 696 on lab report
	10/08	R08100295-014	1603	Labeled Hydro ID 696 on lab report
	11/08	R08110211-002	1637	Labeled Hydro ID 696 on lab report
	12/08	R08120255-012	1739	Labeled Hydro ID 696 on lab report
	01/09	R09010301-013	1837	Labeled Hydro ID 696 on lab report
	02/09	R09020293-015	1962	Labeled Hydro ID 696 on lab report
695	03/08	R08040002-003	577	
	04/08	R08040287-001	705	
	05/08	R08050321-003	902	
	06/08	R08060427-004	1074	
	07/08	R08070244-003	1293	
	08/08	R08080332-005	1419	
	09/08	R08090356-008	1513	Labeled Hydro ID 3026 on lab report
	10/08	R08100295-012	1597	
	11/08	R08110211-009	1658	
	12/08	R08120255-010	1733	
	01/09	R09010301-005	1813	
	02/09	R09020293-013	1954	

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Hydro ID	Sample Date	Lab Sample ID	Page	Notes
696	03/08	R08030315-001	518	Labeled Hydro ID 694 on lab report
	04/08	R08040250-001	655	Labeled Hydro ID 694 on lab report
	04/08	R08040250-002	659	Labeled Hydro ID 694 on lab report
	05/08	R08050321-004	905	Labeled Hydro ID 694 on lab report
	06/08	R08060427-003	1071	Labeled Hydro ID 694 on lab report
	07/08	R08070244-005	1299	Labeled Hydro ID 694 on lab report
	08/08	R08080332-007	1425	Labeled Hydro ID 694 on lab report
	09/08	R08090356-005	1504	Labeled Hydro ID 694 on lab report
	10/08	R08100295-013	1600	Labeled Hydro ID 694 on lab report
	11/08	R08110211-003	1640	Labeled Hydro ID 694 on lab report
	11/08	R08110211-006	1649	Labeled Hydro ID 694 on lab report
	12/08	R08120255-011	1736	Labeled Hydro ID 694 on lab report
	01/09	R09010301-014	1840	Labeled Hydro ID 694 on lab report
	02/09	R09020293-014	1958	Labeled Hydro ID 694 on lab report
697	03/08	R08030315-006	533	
	04/08	R08040287-005	721	
	05/08	R08050321-005	908	
	06/08	R08060427-005	1077	
	07/08	R08070244-006	1302	
	07/08	R08070244-007	1305	
	08/08	R08080332-008	1428	
	09/08	R08090356-004	1501	Labeled Hydro ID 699 on lab report
	10/08	R08100295-011	1594	
	11/08	R08110211-010	1661	
	12/08	R08120255-009	1730	
	01/09	R09010301-006	1816	
	02/09	R09020293-012	1950	
698	03/08	R08030315-002	521	
	03/08	R08030315-003	524	
	04/08	R08040287-004	717	
	05/08	R08050406-001	929	
	05/08	R08050406-002	932	
	06/08	R08060427-001	1065	
	07/08	R08070244-010	1314	
	08/08	R08080301-003	1377	
	09/08	R08090314-003	1462	
	10/08	R08100295-004	1573	
	11/08	R08110211-008	1655	
	12/08	R08120255-005	1718	
	12/08	R08120255-006	1721	
	01/09	R09010301-009	1825	
	02/09	R09020293-004	1920	
	02/09	R09020293-005	1924	
703	01/09	R09010302-001	1888	
704	09/08	R08090356-003	1498	
	02/09	R09020293-002	1912	

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Hydro ID	Sample Date	Lab Sample ID	Page	Notes
705	01/10	R10010180-001	1991	Labeled DB-09-21-01 on lab report
	02/10	R10020266-001	2024	Labeled DB-09-21-01 on lab report
	03/10	R10030205-001	2059	Labeled DB-09-21-01 on lab report
	03/10	R10030205-002	2063	Labeled DB-09-21-01 on lab report
	04/10	R10040303-001	2097	Labeled DB-09-21-01 on lab report
	05/10	R10050253-001	2117	Labeled DB-09-21-01 on lab report
	06/10	R10060444-001	2149	Labeled DB-09-21-01 on lab report
	07/10	R10070459-001	2181	Labeled DB-09-21-01 on lab report
	08/10	R10080398-001	2216	Labeled DB-09-21-01 on lab report
	09/10	R10090519-001	2245	Labeled DB-09-21-01 on lab report
	10/10	R10100355-001	2275	Labeled DB-09-21-01 on lab report
	11/10	R10110179-001	2311	Labeled DB-09-21-01 on lab report
	12/10	R10120179-001	2346	Labeled DB-09-21-01 on lab report
706	01/10	R10010180-002	1995	Labeled DB-09-21-02 on lab report
	02/10	R10020266-002	2027	Labeled DB-09-21-02 on lab report
	03/10	R10030205-003	2067	Labeled DB-09-21-02 on lab report
	04/10	R10040303-002	2100	Labeled DB-09-21-02 on lab report
	05/10	R10050253-002	2121	Labeled DB-09-21-02 on lab report
	06/10	R10060444-002	2152	Labeled DB-09-21-02 on lab report
	07/10	R10070459-002	2184	Labeled DB-09-21-02 on lab report
	07/10	R10070459-003	2187	Labeled DB-09-21-02 on lab report
	08/10	R10080398-002	2219	Labeled DB-09-21-02 on lab report
	09/10	R10090519-002	2248	Labeled DB-09-21-02 on lab report
	10/10	R10100355-002	2278	Labeled DB-09-21-02 on lab report
	11/10	R10110179-002	2314	Labeled DB-09-21-02 on lab report
	11/10	R10110179-003	2317	Labeled DB-09-21-02 on lab report
	12/10	R10120179-002	2349	Labeled DB-09-21-02 on lab report
3026	03/08	R08030315-009	542	
	04/08	R08040287-003	713	
	05/08	R08050406-003	935	
	06/08	R08060427-006	1080	
	07/08	R08070220-001	1264	
	08/08	R08080301-001	1371	
	08/08	R08080301-002	1374	
	09/08	R08090356-007	1510	Labeled Hydro ID 695 on lab report
	10/08	R08100295-007	1582	
	11/08	R08110211-007	1652	
	12/08	R08120255-004	1715	
	01/09	R09010301-010	1828	
	02/09	R09020293-003	1916	
4002	09/07	R07090385-003	84	
	09/07	R07090385-004	87	
	11/07	R07110184-002	203	
	02/08	R08020130-004	411	
	05/08	R08050251-003	875	

Hydro ID	Sample Date	Lab Sample ID	Page	Notes
7002	09/07	R07100002-008	127	
	11/07	R07110146-001	154	
	02/08	R08020220-001	435	
	05/08	R08050419-001	960	
BK02	11/07	R07110303-008	249	
BLK01	02/08	R08020052-008	346	
	03/08	R08030315-005	530	
	04/08	R08040028-004	613	
	04/08	R08040287-006	725	
	04/08	R08040364-006	775	
	06/08	R08060427-007	1083	
	07/08	R08070244-011	1317	
	08/08	R08080332-009	1431	
	09/08	R08090356-009	1516	
	10/08	R08100295-001	1564	
	11/08	R08110211-001	1634	
	12/08	R08120255-001	1706	
	01/09	R09010301-001	1801	
	02/09	R09020293-001	1909	



*[Signature]*  
10/31/06

## ANALYTICAL SUMMARY REPORT

October 30, 2006

Richard Blubaugh  
Powertech Uranium  
6200 S Troy Circle  
Suite 150  
Centennial, CO 80111

Workorder No.: R06100076

Project Name: Fall River County Water Sampling

Energy Laboratories Inc. received the following 6 samples from Powertech Uranium on 10/4/2006 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R06100076-001	#1 Anderson	10/03/06 10:07	10/04/06	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Total Hydrocarbons, Total Petroleum Anions by Ion Chromatography Cations by ICP Nitrogen, Ammonia pH Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Dissolved Gross Beta, Dissolved Gross Gamma, Dissolved Radium 226 Radium 228 Radon 222 Solids, Total Dissolved
R06100076-002	#2 Putnam	10/03/06 10:18	10/04/06	Aqueous	Same As Above
R06100076-003	#3 Unknown	10/03/06 10:49	10/04/06	Aqueous	Same As Above
R06100076-004	#4 Kenobbie	10/03/06 11:12	10/04/06	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Total Hydrocarbons, Total Petroleum Anions by Ion Chromatography Cations by ICP Nitrogen, Ammonia pH Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Dissolved Gross Beta, Dissolved Gross Gamma, Dissolved Radium 226 Radium 228 Solids, Total Dissolved



R06100076-005 #5 Spence	10/03/06 11:36 10/04/06	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Total Hydrocarbons, Total Petroleum Anions by Ion Chromatography Cations by ICP Nitrogen, Ammonia pH Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Dissolved Gross Beta, Dissolved Gross Gamma, Dissolved Radium 226 Radium 228 Radon 222 Solids, Total Dissolved
R06100076-006 #6 Daniels	10/03/06 12:00 10/04/06	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or [Rapid\\_City@energylab.com](mailto:Rapid_City@energylab.com).

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

Kurt Slentz

Project Manager



## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by Powertech Uranium on 10/4/2006. These samples were assigned ELI Workorder Number R06100076.

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: C06100328

Bismuth-214 and Lead-214 activities in samples R06100076-002, R06100076-003, and R06100076-006 are elevated compared to the Radium-226 activity. This mismatch of Bismuth-214 and Lead-214 results (by gamma spectrometry – EPA 901.1) compared to the Radium-226 results (by precipitation – EPA 903.0) are attributable to the elevated Radon-222 levels contained within the sample. The gamma spectrometry was performed relatively close to the date of sampling (the reference date). Radon measurements are performed as close as possible to the sampling date due to the short half-life of the isotope and holding time. To expedite the analytical process and timeliness, gamma spectrometry is performed first (and returned to the container upon completion) so there is enough sample remaining to perform the subsequent measurements (Ra-226, Ra-228, alpha/beta, etc.). If the reverse was done, it is likely that the gamma measurement would not have enough sample volume to meet the required detection limit.





Date: 30-Oct-06

CLIENT: Powertech Uranium  
Project: Fall River County Water Sampling  
Sample Delivery Group: R06100076

## CASE NARRATIVE

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### 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: C06100328

Bismuth-214 and Lead-214 activities in samples R06100076-002, R06100076-003, and R06100076-006 are elevated compared to the Radium-226 activity. This mismatch of Bismuth-214 and Lead-214 results (by gamma spectrometry – EPA 901.1) compared to the Radium-226 results (by precipitation – EPA 903.0) are attributable to the elevated Radon-222 levels contained within the sample. The gamma spectrometry was performed relatively close to the date of sampling (the reference date). Radon measurements are performed as close as possible to the sampling date due to the short half-life of the isotope and holding time. To expedite the analytical process and timeliness, gamma spectrometry is performed first (and returned to the container upon completion) so there is enough sample remaining to perform the subsequent measurements (Ra-226, Ra-228, alpha/beta, etc.). If the reverse was done, it is likely that the gamma measurement would not have enough sample volume to meet the required detection limit.



**Energy Laboratories Inc.**

**Date:** 27-Oct-06

**CLIENT:** Powertech Uranium  
**Project:** Fall River County Water Sampling  
**Lab Order:** R06100076

**Work Order Sample Summary**

Lab Sample ID	Client Sample ID	Collection Date	Date Received
R06100076-001	#1 Anderson	10/3/2006 10:07:00 AM	10/4/2006
R06100076-002	#2 Putnam	10/3/2006 10:18:00 AM	10/4/2006
R06100076-003	#3 Unknown	10/3/2006 10:49:00 AM	10/4/2006
R06100076-004	#4 Kenobbie	10/3/2006 11:12:00 AM	10/4/2006
R06100076-005	#5 Spence	10/3/2006 11:36:00 AM	10/4/2006
R06100076-006	#6 Daniels	10/3/2006 12:00:00 PM	10/4/2006



## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-001  
Client Sample ID: #1 Anderson

Report Date: 10/27/06  
Collection Date: 10/03/06 10:07  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW18

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>PHYSICAL PARAMETERS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	180	mg/L		5		1	A2320 B	10/06/06 11:45/JMH
Bicarbonate as HCO <sub>3</sub>	220	mg/L		5		1	A2320 B	10/06/06 11:45/JMH
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/06/06 11:45/JMH
Conductivity @ 25 C	1430	umhos/cm		5		1	A2510 B	10/07/06 14:25/AH
pH	8.11	s.u.		0.01		1	A4500-H B	10/07/06 14:17/AH
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	10/05/06 14:18/AH
<b>INORGANIC PARAMETERS</b>								
Calcium	34	mg/L		1		1	E200.7	10/19/06 14:14/SN
Chloride	14	mg/L		0.50		1	E300.0	10/05/06 19:13/JMH
Fluoride	0.38	mg/L		0.10		1	E300.0	10/05/06 19:13/JMH
Magnesium	12	mg/L		1		1	E200.7	10/19/06 14:14/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 19:13/JMH
Potassium	7	mg/L		1		1	E200.7	10/19/06 14:14/SN
Sodium	260	mg/L		1		1	E200.7	10/19/06 14:14/SN
Sulfate	481	mg/L	D	7.2		10	E300.0	10/06/06 21:29/JMH
Silicon as SiO <sub>2</sub>	7	mg/L		2		1	E200.7	10/19/06 14:14/SN
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/05/06 16:40/JMH
<b>RADIONUCLIDES - DISSOLVED</b>								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	37	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	1.0	pCi/L				1	E900.0	10/20/06 10:00/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** Powertech Uranium  
**Project:** Fall River County Water Sampling  
**Lab ID:** R06100076-001  
**Client Sample ID:** #1 Anderson

**Report Date:** 10/27/06  
**Collection Date:** 10/03/06 10:07  
**Date Received:** 10/04/06  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Beta	14	pCi/L		2.0		1	E900.0	10/25/06 05:29/eli-c
Gross Beta precision (±)	1.6	pCi/L				1	E900.0	10/25/06 05:29/eli-c
Lead 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	2.3	pCi/L		1.0		1	RA-05	10/17/06 16:18/eli-c
Radium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228 precision (±)	1.2	pCi/L				1	RA-05	10/17/06 16:18/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	5.8	pCi/L		0.2		1	E903.0	10/23/06 11:25/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	10/23/06 11:25/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	762	pCi/L		100		1	D5072-92	10/06/06 17:49/eli-c
Radon 222 precision (±)	69.3	pCi/L				1	D5072-92	10/06/06 17:49/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001		1	E245.1	10/17/06 12:00/eli-c
<b>DISSOLVED METALS ANALYSES</b>								
Aluminum	ND	mg/L		0.10		1	E200.8	10/16/06 23:09/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
Barium	ND	mg/L		0.10		1	E200.8	10/16/06 23:09/eli-c
Boron	ND	mg/L		0.10		1	E200.7	10/20/06 15:42/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	10/16/06 23:09/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/17/06 22:10/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/20/06 15:42/eli-c
Lead	ND	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
Molybdenum	ND	mg/L		0.005		1	E200.8	10/16/06 23:09/eli-c
Nickel	0.03	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
Selenium	ND	mg/L		0.005		1	E200.8	10/16/06 23:09/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-001  
Client Sample ID: #1 Anderson

Report Date: 10/27/06  
Collection Date: 10/03/06 10:07  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DISSOLVED METALS ANALYSES								
Silver	ND	mg/L		0.005		1	E200.8	10/16/06 23:09/eli-c
Uranium	0.007	mg/L		0.001		1	E200.8	10/16/06 23:09/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/16/06 23:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/16/06 23:09/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:18/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-002  
Client Sample ID: #2 Putnam

Report Date: 10/27/06  
Collection Date: 10/03/06 10:18  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW42

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>PHYSICAL PARAMETERS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	180	mg/L		5		1	A2320 B	10/06/06 11:52/JMH
Bicarbonate as HCO <sub>3</sub>	220	mg/L		5		1	A2320 B	10/06/06 11:52/JMH
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/06/06 11:52/JMH
Conductivity @ 25 C	1410	umhos/cm		5		1	A2510 B	10/07/06 14:26/AH
pH	8.01	s.u.		0.01		1	A4500-H B	10/07/06 14:17/AH
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	10/05/06 14:19/AH
<b>INORGANIC PARAMETERS</b>								
Calcium	35	mg/L		1		1	E200.7	10/19/06 14:18/SN
Chloride	14	mg/L		0.50		1	E300.0	10/05/06 19:59/JMH
Fluoride	0.39	mg/L		0.10		1	E300.0	10/05/06 19:59/JMH
Magnesium	12	mg/L		1		1	E200.7	10/19/06 14:18/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 19:59/JMH
Potassium	7	mg/L		1		1	E200.7	10/19/06 14:18/SN
Sodium	250	mg/L		1		1	E200.7	10/19/06 14:18/SN
Sulfate	473	mg/L	D	7.2		10	E300.0	10/06/06 22:15/JMH
Silicon as SiO <sub>2</sub>	7	mg/L		2		1	E200.7	10/19/06 14:18/SN
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/05/06 16:43/JMH
<b>RADIONUCLIDES - DISSOLVED</b>								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	1600	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214 precision (±)	64	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	560	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	10/20/06 10:00/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

**Client:** Powertech Uranium  
**Project:** Fall River County Water Sampling  
**Lab ID:** R06100076-002  
**Client Sample ID:** #2 Putnam

**Report Date:** 10/27/06  
**Collection Date:** 10/03/06 10:18  
**Date Received:** 10/04/06  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Beta	110	pCi/L		2.0		1	E900.0	10/25/06 05:29/eli-c
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	10/25/06 05:29/eli-c
Lead 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214	1800	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214 precision (±)	70	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		1.0		1	RA-05	10/17/06 16:18/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	87.6	pCi/L		0.2		1	E903.0	10/23/06 11:25/eli-c
Radium 226 precision (±)	3.1	pCi/L				1	E903.0	10/23/06 11:25/eli-c
Radium 226	1600	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226 precision (±)	64	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Gross Gamma	3400	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	10/11/06 14:50/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	197000	pCi/L		100		1	D5072-92	10/06/06 17:49/eli-c
Radon 222 precision (±)	581	pCi/L				1	D5072-92	10/06/06 17:49/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001		1	E245.1	10/17/06 12:02/eli-c
<b>DISSOLVED METALS ANALYSES</b>								
Aluminum	ND	mg/L		0.10		1	E200.8	10/16/06 23:16/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c
Barium	ND	mg/L		0.10		1	E200.8	10/16/06 23:16/eli-c
Boron	ND	mg/L		0.10		1	E200.7	10/20/06 16:05/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	10/16/06 23:16/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/17/06 23:10/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/20/06 16:05/eli-c
Lead	ND	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-002  
Client Sample ID: #2 Putnam

Report Date: 10/27/06  
Collection Date: 10/03/06 10:18  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
DISSOLVED METALS ANALYSES								
Molybdenum	ND	mg/L		0.005		1	E200.8	10/16/06 23:16/eli-c
Nickel	0.02	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c
Selenium	ND	mg/L		0.005		1	E200.8	10/16/06 23:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/16/06 23:16/eli-c
Uranium	0.04	mg/L		0.001		1	E200.8	10/16/06 23:16/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/16/06 23:16/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/16/06 23:16/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-003  
Client Sample ID: #3 Unknown

Report Date: 10/27/06  
Collection Date: 10/03/06 10:49  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW41

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
PHYSICAL PARAMETERS								
Alkalinity, Total as CaCO3	180	mg/L		5		1	A2320 B	10/06/06 11:58/JMH
Bicarbonate as HCO3	220	mg/L		5		1	A2320 B	10/06/06 11:58/JMH
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/06/06 11:58/JMH
Conductivity @ 25 C	1380	umhos/cm		5		1	A2510 B	10/07/06 14:27/AH
pH	7.92	s.u.		0.01		1	A4500-H B	10/07/06 14:18/AH
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	10/05/06 14:20/AH
INORGANIC PARAMETERS								
Calcium	41	mg/L		1		1	E200.7	10/19/06 14:21/SN
Chloride	14	mg/L		0.50		1	E300.0	10/05/06 20:14/JMH
Fluoride	0.37	mg/L		0.10		1	E300.0	10/05/06 20:14/JMH
Magnesium	16	mg/L		1		1	E200.7	10/19/06 14:21/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 20:14/JMH
Potassium	8	mg/L		1		1	E200.7	10/19/06 14:21/SN
Sodium	230	mg/L		1		1	E200.7	10/19/06 14:21/SN
Sulfate	458	mg/L	D	7.2		10	E300.0	10/06/06 23:01/JMH
Silicon as SiO2	7	mg/L		2		1	E200.7	10/19/06 14:21/SN
NUTRIENT PARAMETERS								
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/05/06 16:44/JMH
RADIONUCLIDES - DISSOLVED								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	210	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214 precision (±)	48	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	88	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	1.4	pCi/L				1	E900.0	10/20/06 10:00/eli-c

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-003  
Client Sample ID: #3 Unknown

Report Date: 10/27/06  
Collection Date: 10/03/06 10:49  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Beta	32	pCi/L		2.0		1	E900.0	10/25/06 05:29/eli-c
Gross Beta precision (±)	1.8	pCi/L				1	E900.0	10/25/06 05:29/eli-c
Lead 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214	190	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214 precision (±)	37	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		1.0		1	RA-05	10/17/06 16:18/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	16.5	pCi/L		0.2		1	E903.0	10/23/06 11:25/eli-c
Radium 226 precision (±)	1.4	pCi/L				1	E903.0	10/23/06 11:25/eli-c
Radium 226	210	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226 precision (±)	48	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Gross Gamma	410	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Gamma precision (±)	85	pCi/L				1	E901.1	10/11/06 14:50/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	9670	pCi/L		100		1	D5072-92	10/06/06 17:49/eli-c
Radon 222 precision (±)	141	pCi/L				1	D5072-92	10/06/06 17:49/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001		1	E245.1	10/17/06 12:04/eli-c
<b>DISSOLVED METALS ANALYSES</b>								
Aluminum	ND	mg/L		0.10		1	E200.8	10/16/06 23:24/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c
Barium	ND	mg/L		0.10		1	E200.8	10/16/06 23:24/eli-c
Boron	ND	mg/L		0.10		1	E200.7	10/20/06 16:09/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	10/16/06 23:24/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/17/06 23:18/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/20/06 16:09/eli-c
Lead	ND	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c
Manganese	0.10	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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### LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-003  
Client Sample ID: #3 Unknown

Report Date: 10/27/06  
Collection Date: 10/03/06 10:49  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
DISSOLVED METALS ANALYSES								
Molybdenum	ND	mg/L		0.005		1	E200.8	10/16/06 23:24/eli-c
Nickel	0.02	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c
Selenium	ND	mg/L		0.005		1	E200.8	10/16/06 23:24/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/16/06 23:24/eli-c
Uranium	0.007	mg/L		0.001		1	E200.8	10/16/06 23:24/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/16/06 23:24/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	10/16/06 23:24/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-004  
Client Sample ID: #4 Kenobbie

Report Date: 10/27/06  
Collection Date: 10/03/06 11:12  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW7

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
PHYSICAL PARAMETERS								
Alkalinity, Total as CaCO3	170	mg/L		5		1	A2320 B	10/06/06 12:01/JMH
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	10/06/06 12:01/JMH
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/06/06 12:01/JMH
Conductivity @ 25 C	1530	umhos/cm		5		1	A2510 B	10/07/06 14:29/AH
pH	8.08	s.u.		0.01		1	A4500-H B	10/07/06 14:19/AH
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	10/05/06 14:21/AH
INORGANIC PARAMETERS								
Calcium	37	mg/L		1		1	E200.7	10/19/06 14:25/SN
Chloride	13	mg/L		0.50		1	E300.0	10/05/06 20:30/JMH
Fluoride	0.37	mg/L		0.10		1	E300.0	10/05/06 20:30/JMH
Magnesium	16	mg/L		1		1	E200.7	10/19/06 14:25/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 20:30/JMH
Potassium	10	mg/L		1		1	E200.7	10/19/06 14:25/SN
Sodium	270	mg/L		1		1	E200.7	10/19/06 14:25/SN
Sulfate	546	mg/L	D	7.2		10	E300.0	10/06/06 23:16/JMH
Silicon as SiO2	7	mg/L		2		1	E200.7	10/19/06 14:25/SN
NUTRIENT PARAMETERS								
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	10/05/06 16:46/JMH
RADIONUCLIDES - DISSOLVED								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	300	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214 precision (±)	18	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	17	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	0.80	pCi/L				1	E900.0	10/20/06 10:00/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-004  
Client Sample ID: #4 Kenobbie

Report Date: 10/27/06  
Collection Date: 10/03/06 11:12  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - DISSOLVED									
Gross Beta	16	pCi/L		2.0		1	E900.0		10/25/06 05:29/eli-c
Gross Beta precision (±)	1.6	pCi/L				1	E900.0		10/25/06 05:29/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Lead 212	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Lead 214	350	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Lead 214 precision (±)	30	pCi/L				1	E901.1		10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		1.0		1	RA-05		10/17/06 16:18/eli-c
Radium 228 precision (±)	ND	pCi/L				1	E901.1		10/11/06 14:50/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Radium 226	2.6	pCi/L		0.2		1	E903.0		10/23/06 11:25/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0		10/23/06 11:25/eli-c
Radium 226	300	pCi/L		20		1	E901.1		10/11/06 14:50/eli-c
Radium 226 precision (±)	18	pCi/L				1	E901.1		10/11/06 14:50/eli-c
TOTAL METALS ANALYSES									
Mercury	ND	mg/L		0.001		1	E245.1		10/17/06 12:07/eli-ca
DISSOLVED METALS ANALYSES									
Aluminum	ND	mg/L		0.10		1	E200.8		10/17/06 01:54/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Barium	ND	mg/L		0.10		1	E200.8		10/17/06 01:54/eli-c
Boron	ND	mg/L		0.10		1	E200.7		10/20/06 16:12/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8		10/17/06 01:54/eli-c
Chromium	ND	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Copper	ND	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Iron	ND	mg/L		0.03		1	E200.7		10/20/06 16:12/eli-c
Lead	ND	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Molybdenum	ND	mg/L		0.005		1	E200.8		10/17/06 01:54/eli-c
Nickel	ND	mg/L		0.01		1	E200.8		10/17/06 01:54/eli-c
Selenium	ND	mg/L		0.005		1	E200.8		10/17/06 01:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8		10/17/06 01:54/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-004  
Client Sample ID: #4 Kenobbie

Report Date: 10/27/06  
Collection Date: 10/03/06 11:12  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DISSOLVED METALS ANALYSES								
Uranium	ND	mg/L		0.001		1	E200.8	10/17/06 01:54/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/17/06 01:54/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/17/06 01:54/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-005  
Client Sample ID: #5 Spence

Report Date: 10/27/06  
Collection Date: 10/03/06 11:36  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW13

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
PHYSICAL PARAMETERS								
Alkalinity, Total as CaCO3	170	mg/L		5		1	A2320 B	10/06/06 12:13/JMH
Bicarbonate as HCO3	200	mg/L		5		1	A2320 B	10/06/06 12:13/JMH
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/06/06 12:13/JMH
Conductivity @ 25 C	1290	umhos/cm		5		1	A2510 B	10/07/06 14:30/AH
pH	7.93	s.u.		0.01		1	A4500-H B	10/07/06 14:44/AH
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	10/05/06 14:22/AH
INORGANIC PARAMETERS								
Calcium	61	mg/L		1		1	E200.7	10/19/06 14:29/SN
Chloride	11	mg/L		0.50		1	E300.0	10/05/06 20:45/JMH
Fluoride	0.43	mg/L		0.10		1	E300.0	10/05/06 20:45/JMH
Magnesium	22	mg/L		1		1	E200.7	10/19/06 14:29/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 20:45/JMH
Potassium	9	mg/L		1		1	E200.7	10/19/06 14:29/SN
Sodium	180	mg/L		1		1	E200.7	10/19/06 14:29/SN
Sulfate	460	mg/L	D	7.2		10	E300.0	10/06/06 23:32/JMH
Silicon as SiO2	7	mg/L		2		1	E200.7	10/19/06 14:29/SN
NUTRIENT PARAMETERS								
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/05/06 16:47/JMH
RADIONUCLIDES - DISSOLVED								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	12	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	0.70	pCi/L				1	E900.0	10/20/06 10:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-005  
Client Sample ID: #5 Spence

Report Date: 10/27/06  
Collection Date: 10/03/06 11:36  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - DISSOLVED								
Gross Beta	17	pCi/L		2.0		1	E900.0	10/25/06 05:29/eli-c
Gross Beta precision (±)	1.7	pCi/L				1	E900.0	10/25/06 05:29/eli-c
Lead 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		1.0		1	RA-05	10/17/06 16:18/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	2.1	pCi/L		0.2		1	E903.0	10/23/06 11:25/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	10/23/06 11:25/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	10/11/06 14:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	335	pCi/L		100		1	D5072-92	10/06/06 17:49/eli-c
Radon 222 precision (±)	63.2	pCi/L				1	D5072-92	10/06/06 17:49/eli-c
TOTAL METALS ANALYSES								
Mercury	ND	mg/L		0.001		1	E245.1	10/17/06 12:09/eli-ca
DISSOLVED METALS ANALYSES								
Aluminum	ND	mg/L		0.10		1	E200.8	10/17/06 02:02/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Barium	ND	mg/L		0.10		1	E200.8	10/17/06 02:02/eli-c
Boron	ND	mg/L		0.10		1	E200.7	10/20/06 16:15/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	10/17/06 02:02/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/20/06 16:15/eli-c
Lead	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Manganese	0.11	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Molybdenum	ND	mg/L		0.005		1	E200.8	10/17/06 02:02/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
Selenium	ND	mg/L		0.005		1	E200.8	10/17/06 02:02/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

**Client:** Powertech Uranium  
**Project:** Fall River County Water Sampling  
**Lab ID:** R06100076-005  
**Client Sample ID:** #5 Spence

**Report Date:** 10/27/06  
**Collection Date:** 10/03/06 11:36  
**Date Received:** 10/04/06  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DISSOLVED METALS ANALYSES								
Silver	ND	mg/L		0.005		1	E200.8	10/17/06 02:02/eli-c
Uranium	ND	mg/L		0.001		1	E200.8	10/17/06 02:02/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/17/06 02:02/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/17/06 02:02/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:19/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-006  
Client Sample ID: #6 Daniels

Report Date: 10/27/06  
Collection Date: 10/03/06 12:00  
Date Received: 10/04/06  
Matrix: AQUEOUS

GW 16

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
PHYSICAL PARAMETERS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	10/06/06 12:24/JMH
Bicarbonate as HCO3	200	mg/L		5		1	A2320 B	10/06/06 12:24/JMH
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/06/06 12:24/JMH
Conductivity @ 25 C	1260	umhos/cm		5		1	A2510 B	10/07/06 14:31/AH
pH	7.44	s.u.		0.01		1	A4500-H B	10/07/06 14:45/AH
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	10/05/06 14:23/AH
INORGANIC PARAMETERS								
Calcium	140	mg/L		1		1	E200.7	10/19/06 14:32/SN
Chloride	6.2	mg/L		0.50		1	E300.0	10/05/06 21:01/JMH
Fluoride	0.37	mg/L		0.10		1	E300.0	10/05/06 21:01/JMH
Magnesium	55	mg/L		1		1	E200.7	10/19/06 14:32/SN
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	10/05/06 21:01/JMH
Potassium	16	mg/L		1		1	E200.7	10/19/06 14:32/SN
Sodium	53	mg/L		1		1	E200.7	10/19/06 14:32/SN
Sulfate	522	mg/L	D	7.2		10	E300.0	10/06/06 23:47/JMH
Silicon as SiO2	7	mg/L		2		1	E200.7	10/19/06 14:32/SN
NUTRIENT PARAMETERS								
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/05/06 16:50/JMH
RADIONUCLIDES - DISSOLVED								
Actinium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Americium 241	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 125	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Iodine 131	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Manganese 54	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 223	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thallium 208	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Barium 133	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214	770	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Bismuth 214 precision (±)	35	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Cesium 134	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cesium 137	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Cobalt 60	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Alpha	110	pCi/L		1.0		1	E900.0	10/20/06 10:00/eli-c
Gross Alpha precision (±)	1.5	pCi/L				1	E900.0	10/20/06 10:00/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.

D - RL increased due to sample matrix interference.



# LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-006  
Client Sample ID: #6 Daniels

Report Date: 10/27/06  
Collection Date: 10/03/06 12:00  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - DISSOLVED								
Gross Beta	50	pCi/L		2.0		1	E900.0	10/25/06 05:29/eli-c
Gross Beta precision (±)	2.0	pCi/L				1	E900.0	10/25/06 05:29/eli-c
Lead 212	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214	810	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Lead 214 precision (±)	35	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Potassium 40	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 224	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 228	ND	pCi/L		1.0		1	RA-05	10/17/06 16:18/eli-c
Thorium 228	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Thorium 234	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Uranium 238	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Zinc 65	ND	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226	33.6	pCi/L		0.2		1	E903.0	10/23/06 11:25/eli-c
Radium 226 precision (±)	2.5	pCi/L				1	E903.0	10/23/06 11:25/eli-c
Radium 226	770	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Radium 226 precision (±)	35	pCi/L				1	E901.1	10/11/06 14:50/eli-c
Gross Gamma	1600	pCi/L		20		1	E901.1	10/11/06 14:50/eli-c
Gross Gamma precision (±)	70	pCi/L				1	E901.1	10/11/06 14:50/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	39000	pCi/L		100		1	D5072-92	10/06/06 17:49/eli-c
Radon 222 precision (±)	252	pCi/L				1	D5072-92	10/06/06 17:49/eli-c
TOTAL METALS ANALYSES								
Mercury	ND	mg/L		0.001		1	E245.1	10/17/06 12:11/eli-ca
DISSOLVED METALS ANALYSES								
Aluminum	ND	mg/L		0.10		1	E200.8	10/17/06 02:09/eli-c
Arsenic	ND	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
Barium	ND	mg/L		0.10		1	E200.8	10/17/06 02:09/eli-c
Boron	0.12	mg/L		0.10		1	E200.7	10/20/06 16:19/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	10/17/06 02:09/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/20/06 16:19/eli-c
Lead	ND	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
Manganese	0.19	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## LABORATORY ANALYTICAL REPORT

Client: Powertech Uranium  
Project: Fall River County Water Sampling  
Lab ID: R06100076-006  
Client Sample ID: #6 Daniels

Report Date: 10/27/06  
Collection Date: 10/03/06 12:00  
Date Received: 10/04/06  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DISSOLVED METALS ANALYSES								
Molybdenum	ND	mg/L		0.005		1	E200.8	10/17/06 02:09/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
Selenium	ND	mg/L		0.005		1	E200.8	10/17/06 02:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/17/06 02:09/eli-c
Uranium	0.002	mg/L		0.001		1	E200.8	10/17/06 02:09/eli-c
Vanadium	ND	mg/L		0.10		1	E200.8	10/17/06 02:09/eli-c
Zinc	0.04	mg/L		0.01		1	E200.8	10/17/06 02:09/eli-c
ORGANIC CHARACTERISTICS								
Non-polar Materials (SGT-HEM)	ND	mg/L		5.0		1	SW1664A	10/19/06 13:20/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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

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## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 061006A-ALK-W		
Sample ID: LCS2_061006A	Laboratory Control Sample				Run: PH_COND1-R_061006A		10/06/06 11:05		
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: MBLK2_061006A	Method Blank				Run: PH_COND1-R_061006A		10/06/06 11:08		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: R06100061-001ADUP	Sample Duplicate				Run: PH_COND1-R_061006A		10/06/06 11:23		
Alkalinity, Total as CaCO <sub>3</sub>	230	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	280	mg/L	5.0						
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0						
Sample ID: R06100076-001AMS	Sample Matrix Spike				Run: PH_COND1-R_061006A		10/06/06 11:48		
Alkalinity, Total as CaCO <sub>3</sub>	280	mg/L	5.0	96	80	120			
Sample ID: R06100076-005ADUP	Sample Duplicate				Run: PH_COND1-R_061006A		10/06/06 12:19		
Alkalinity, Total as CaCO <sub>3</sub>	170	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	200	mg/L	5.0						
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0						
Sample ID: R06100076-006AMS	Sample Matrix Spike				Run: PH_COND1-R_061006A		10/06/06 12:27		
Alkalinity, Total as CaCO <sub>3</sub>	270	mg/L	5.0	108	80	120			
Method: A2510 B							Batch: 061007_1_COND-PROBE-W		
Sample ID: LCS1-1_061007	Laboratory Control Sample				Run: PH_COND2-R_061007A		10/07/06 14:21		
Conductivity @ 25 C	151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_061007	Laboratory Control Sample				Run: PH_COND2-R_061007A		10/07/06 14:22		
Conductivity @ 25 C	5010	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_061007	Laboratory Control Sample				Run: PH_COND2-R_061007A		10/07/06 14:22		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_061007	Method Blank				Run: PH_COND2-R_061007A		10/07/06 14:22		
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R06100075-001ADUP	Sample Duplicate				Run: PH_COND2-R_061007A		10/07/06 14:24		
Conductivity @ 25 C	12200	umhos/cm	5.0				0.8	10	
Sample ID: R06100098-001ADUP	Sample Duplicate				Run: PH_COND2-R_061007A		10/07/06 14:35		
Conductivity @ 25 C	861	umhos/cm	5.0				0.6	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 061005A-SLDS-TDS-W		
Sample ID: LCS1_061005A	Laboratory Control Sample				Run: BAL-4-R_061005A				10/05/06 14:10
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	100	90	110			
Sample ID: MBLK1_061005A	Method Blank				Run: BAL-4-R_061005A				10/05/06 14:10
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R06100086-001AMS	Sample Matrix Spike				Run: BAL-4-R_061005A				10/05/06 15:12
Solids, Total Dissolved TDS @ 180 C	860	mg/L	5.0	93	80	120			
Sample ID: R06100086-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_061005A				10/05/06 14:24
Solids, Total Dissolved TDS @ 180 C	880	mg/L	5.0	102	80	120	2.1	10	
Method: A4500-H B							Batch: 061007_1_PH-W		
Sample ID: LCS_pH-1_061007	Laboratory Control Sample				Run: PH_COND2-R_061007A				10/07/06 14:09
pH	6.85	s.u.	0.010	100	98.55	101.45			
Sample ID: R06100075-001ADUP	Sample Duplicate				Run: PH_COND2-R_061007A				10/07/06 14:14
pH	6.82	s.u.	0.010				0.1	1.25	
Sample ID: R06100098-001ADUP	Sample Duplicate				Run: PH_COND2-R_061007A				10/07/06 14:47
pH	7.23	s.u.	0.010				0.0	1.25	
Method: A4500-NH3 G							Batch: A2006-10-05_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_061005A				10/05/06 15:23
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_061005A				10/05/06 15:24
Nitrogen, Ammonia as N	0.24	mg/L	0.10	95	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_061005A				10/05/06 15:25
Nitrogen, Ammonia as N	0.24	mg/L	0.10	97	90	110			
Sample ID: R06100076-001EMS	Sample Matrix Spike				Run: TECHAA2-R_061005A				10/05/06 16:41
Nitrogen, Ammonia as N	0.47	mg/L	0.10	108	80	120			
Sample ID: R06100076-001EMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_061005A				10/05/06 16:42
Nitrogen, Ammonia as N	0.47	mg/L	0.10	108	80	120	0.2	10	
Sample ID: R06100098-001BMS	Sample Matrix Spike				Run: TECHAA2-R_061005A				10/05/06 16:54
Nitrogen, Ammonia as N	0.25	mg/L	0.10	103	80	120			
Sample ID: R06100098-001BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_061005A				10/05/06 16:55
Nitrogen, Ammonia as N	0.25	mg/L	0.10	104	80	120	1.2	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Powertech Uranium

Project: Fall River County Water Sampling

Report Date: 10/27/06

Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R73669		
Sample ID: C06100331-001BDUP	Sample Duplicate				Run: SUB-C73669			10/06/06 17:49	
Radon 222	ND	pCi/L	100				0.0	30	
Sample ID: MB-R73669	Method Blank				Run: SUB-C73669			10/06/06 17:49	
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R73669	Laboratory Control Sample				Run: SUB-C73669			10/06/06 17:49	
Radon 222	301	pCi/L	100	99	70	130			
Method: E200.7							Batch: R27196		
Sample ID: R06100092-001BMS	Sample Matrix Spike				Run: ICP1-R_061019A			10/19/06 14:39	
Calcium	130	mg/L	1.0	70	75	125			S
Magnesium	84	mg/L	1.0	87	75	125			
Potassium	49	mg/L	1.0	90	75	125			
Silicon	53	mg/L	1.0	92	75	125			
Sodium	73	mg/L	1.0	99	75	125			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R74233		
Sample ID: R06100076-003B	Post Digestion Spike			Run: SUB-C74233			10/16/06 23:31		
Aluminum	0.064	mg/L	0.10	127	70	130			
Arsenic	0.053	mg/L	0.0010	102	70	130			
Barium	0.058	mg/L	0.10	99	70	130			
Cadmium	0.046	mg/L	0.010	93	70	130			
Chromium	0.044	mg/L	0.050	88	70	130			
Lead	0.048	mg/L	0.050	95	70	130			
Manganese	0.15	mg/L	0.010	91	70	130			
Molybdenum	0.056	mg/L	0.10	105	70	130			
Nickel	0.066	mg/L	0.050	95	70	130			
Selenium	0.053	mg/L	0.0010	105	70	130			
Silver	0.014	mg/L	0.010	68	70	130			S
Uranium	0.060	mg/L	0.00030	108	70	130			
Vanadium	0.046	mg/L	0.10	92	70	130			
Zinc	0.050	mg/L	0.010	81	70	130			
- Matrix spike recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: R06100076-003B	Post Digestion Spike Duplicate			Run: SUB-C74233			10/16/06 23:39		
Aluminum	0.048	mg/L	0.10	95	70	130	0.0	20	
Arsenic	0.054	mg/L	0.0010	105	70	130	2.3	20	
Barium	0.060	mg/L	0.10	104	70	130	0.0	20	
Cadmium	0.050	mg/L	0.010	99	70	130	6.4	20	
Chromium	0.047	mg/L	0.050	94	70	130	0.0	20	
Lead	0.050	mg/L	0.050	100	70	130	5.2	20	
Manganese	0.15	mg/L	0.010	90	70	130	0.5	20	
Molybdenum	0.059	mg/L	0.10	110	70	130	0.0	20	
Nickel	0.066	mg/L	0.050	95	70	130	0.2	20	
Selenium	0.053	mg/L	0.0010	105	70	130	0.4	20	
Silver	0.014	mg/L	0.010	71	70	130	4.0	20	
Uranium	0.063	mg/L	0.00030	113	70	130	4.3	20	
Vanadium	0.050	mg/L	0.10	99	70	130	0.0	20	
Zinc	0.052	mg/L	0.010	85	70	130	4.0	20	
- Matrix spike duplicate recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: LRB	Method Blank			Run: SUB-C74233			10/16/06 15:07		
Aluminum	ND	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	0.0002						
Chromium	ND	mg/L	0.0001						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	2E-05						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R74233		
Sample ID: LRB	Method Blank				Run: SUB-C74233		10/16/06 15:07		
Manganese	ND	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	8E-05						
Selenium	ND	mg/L	0.0004						
Silver	0.0002	mg/L	3E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	ND	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C74233		10/16/06 15:15		
Aluminum	0.0572	mg/L	0.0010	114	85	115			
Arsenic	0.0549	mg/L	0.0010	110	85	115			
Barium	0.0587	mg/L	0.0010	117	85	115			S
Cadmium	0.0532	mg/L	0.0010	106	85	115			
Chromium	0.0516	mg/L	0.0010	103	85	115			
Copper	0.0576	mg/L	0.0010	115	85	115			
Lead	0.0538	mg/L	0.0010	108	85	115			
Manganese	0.0513	mg/L	0.0010	103	85	115			
Molybdenum	0.0533	mg/L	0.0010	107	85	115			
Nickel	0.0561	mg/L	0.0010	112	85	115			
Selenium	0.0553	mg/L	0.0010	111	85	115			
Silver	0.0211	mg/L	0.0010	105	85	115			
Uranium	0.0573	mg/L	0.00030	115	85	115			
Vanadium	0.0537	mg/L	0.0010	107	85	115			
Zinc	0.0555	mg/L	0.0010	111	85	115			
Sample ID: C06100669-002AMS4	Post Digestion Spike				Run: SUB-C74233		10/16/06 21:16		
Aluminum	0.054	mg/L	0.10	105	70	130			
Arsenic	0.057	mg/L	0.0010	110	70	130			
Barium	0.079	mg/L	0.10	106	70	130			
Cadmium	0.050	mg/L	0.010	100	70	130			
Chromium	0.054	mg/L	0.050	100	70	130			
Lead	0.055	mg/L	0.050	109	70	130			
Manganese	0.051	mg/L	0.010	100	70	130			
Molybdenum	0.055	mg/L	0.10	108	70	130			
Selenium	0.080	mg/L	0.0010	104	70	130			
Uranium	0.15	mg/L	0.00030	116	70	130			
Vanadium	0.058	mg/L	0.10	106	70	130			
Zinc	0.055	mg/L	0.010	98	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: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R74233		
Sample ID: C06100669-002AMSD4	Post Digestion Spike Duplicate			Run: SUB-C74233			10/16/06 21:24		
Aluminum	0.054	mg/L	0.10	106	70	130	0.0	20	
Arsenic	0.058	mg/L	0.0010	112	70	130	1.7	20	
Barium	0.081	mg/L	0.10	108	70	130	0.0	20	
Cadmium	0.051	mg/L	0.010	102	70	130	2.2	20	
Chromium	0.055	mg/L	0.050	102	70	130	1.7	20	
Lead	0.056	mg/L	0.050	111	70	130	1.9	20	
Manganese	0.052	mg/L	0.010	102	70	130	2.5	20	
Molybdenum	0.056	mg/L	0.10	111	70	130	0.0	20	
Selenium	0.079	mg/L	0.0010	100	70	130	2.4	20	
Uranium	0.15	mg/L	0.00030	120	70	130	1.0	20	
Vanadium	0.059	mg/L	0.10	108	70	130	0.0	20	
Zinc	0.056	mg/L	0.010	99	70	130	1.0	20	
Method: E200.8							Batch: C_R74298		
Sample ID: LRB	Method Blank			Run: SUB-C74298			10/17/06 13:03		
Copper	ND	mg/L	0.0001						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C74298			10/17/06 13:10		
Copper	0.0543	mg/L	0.0010	109	85	115			
Sample ID: R06100076-001B	Post Digestion Spike			Run: SUB-C74298			10/17/06 22:18		
Copper	0.046	mg/L	0.010	92	70	130			
Method: E245.1							Batch: C_12511		
Sample ID: R06100076-006C	Sample Matrix Spike			Run: SUB-C74249			10/17/06 12:17		
Mercury	0.0053	mg/L	0.0010	103	85	115			
Sample ID: R06100076-006C	Sample Matrix Spike Duplicate			Run: SUB-C74249			10/17/06 12:21		
Mercury	0.0052	mg/L	0.0010	103	85	115	0.4	10	
Sample ID: C265-184-3	Laboratory Control Sample			Run: SUB-C74249			10/17/06 12:25		
Mercury	0.0054	mg/L	0.0010	100	90	110			
Sample ID: MBLK-12511	Method Blank			Run: SUB-C74249			10/17/06 12:29		
Mercury	0.0004	mg/L	5E-05						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R26794		
Sample ID: LFB0610051816-3	Laboratory Fortified Blank		Run: DIONEX_061005A				10/05/06 18:42		
Chloride	5.0	mg/L	0.50	99	90	110			
Fluoride	2.0	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.4	mg/L	0.10	96	90	110			
Sample ID: LFB0610051816-4	Laboratory Fortified Blank		Run: DIONEX_061005A				10/05/06 18:57		
Chloride	4.8	mg/L	0.50	95	90	110			
Fluoride	1.9	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N	2.5	mg/L	0.10	99	90	110			
Sample ID: R06100076-001AMS	Sample Matrix Spike		Run: DIONEX_061005A				10/05/06 19:28		
Chloride	17	mg/L	0.50	57	80	120			S
Fluoride	2.2	mg/L	0.10	89	80	120			
Nitrogen, Nitrate as N	2.3	mg/L	0.10	93	80	120			
Sample ID: R06100076-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_061005A				10/05/06 19:43		
Chloride	17	mg/L	0.50	49	80	120	2.4	10	S
Fluoride	2.0	mg/L	0.10	82	80	120	7.2	10	
Nitrogen, Nitrate as N	2.3	mg/L	0.10	93	80	120	0.0	10	
Sample ID: R06100086-001AMS	Sample Matrix Spike		Run: DIONEX_061005A				10/05/06 22:02		
Chloride	190	mg/L	0.50		80	120			A
Fluoride	11	mg/L	0.32	101	80	120			
Nitrogen, Nitrate as N	39	mg/L	0.10	60	80	120			S
Sample ID: R06100086-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_061005A				10/05/06 22:18		
Chloride	190	mg/L	0.50		80	120	0.9	10	A
Fluoride	11	mg/L	0.32	95	80	120	4.7	10	
Nitrogen, Nitrate as N	38	mg/L	0.10	52	80	120	2.4	10	S
Method: E300.0							Batch: R26839		
Sample ID: LFB0610062809-3	Laboratory Fortified Blank		Run: DIONEX_061006A				10/06/06 19:10		
Sulfate	14	mg/L	1.0	94	90	110			
Sample ID: LFB0610062809-4	Laboratory Fortified Blank		Run: DIONEX_061006A				10/06/06 19:25		
Sulfate	14	mg/L	1.0	90	90	110			
Sample ID: R06100076-002AMS	Sample Matrix Spike		Run: DIONEX_061006A				10/06/06 22:30		
Sulfate	580	mg/L	7.2	72	80	120			S
Sample ID: R06100076-002AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_061006A				10/06/06 22:46		
Sulfate	580	mg/L	7.2	69	80	120	0.7	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: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0189		
Sample ID: MB-GrAB-0189	Method Blank				Run: SUB-C74713		10/25/06 05:29		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0189	Laboratory Control Sample				Run: SUB-C74713		10/25/06 05:29		
Gross Alpha	249	pCi/L	3.0	102	70	130			
Sample ID: C06100674-001AMS	Sample Matrix Spike				Run: SUB-C74713		10/25/06 05:29		
Gross Alpha	308	pCi/L	3.0	125	70	130			
Sample ID: C06100674-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C74713		10/25/06 05:29		
Gross Alpha	300	pCi/L	3.0	122	70	130	2.5	12	
Sample ID: C06100674-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C74713		10/26/06 05:15		
Gross Beta	113	pCi/L	2.0	108	70	130	4.3	14.8	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Powertech Uranium  
Project: Fall River County Water Sampling

Report Date: 10/27/06  
Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R74012		
Sample ID: R06100076-001D	Sample Duplicate		Run: SUB-C74012				10/11/06 14:50		
Actinium 228	ND	pCi/L	20				0.0	30	
Americium 241	ND	pCi/L	20				0.0	30	
Bismuth 212	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	
Manganese 54	ND	pCi/L	20				0.0	30	
Radium 223	ND	pCi/L	20				0.0	30	
Radium 226	ND	pCi/L	20				0.0	30	
Thallium 208	ND	pCi/L	20				0.0	30	
Barium 133	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	
Gross Gamma	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	
Potassium 40	ND	pCi/L	20				0.0	30	
Radium 224	ND	pCi/L	20				0.0	30	
Radium 228	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	
Uranium 238	ND	pCi/L	20				0.0	30	
Zinc 65	ND	pCi/L	20				0.0	30	

Method: E903.0							Batch: C_RA226-1738		
Sample ID: C06100329-001AMS	Sample Matrix Spike		Run: SUB-C74644				10/23/06 11:25		
Radium 226	23.3	pCi/L	1.0	110	70	130			
Sample ID: C06100329-001AMSD	Sample Matrix Spike Duplicate		Run: SUB-C74644				10/23/06 11:25		
Radium 226	22.5	pCi/L	1.0	106	70	130	3.4	29.2	
Sample ID: MB-RA226-1738	Method Blank		Run: SUB-C74644				10/23/06 14:48		
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-1738	Laboratory Control Sample		Run: SUB-C74644				10/23/06 14:48		
Radium 226	14	pCi/L	0.20	107	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Powertech Uranium

Report Date: 10/27/06

Project: Fall River County Water Sampling

Work Order: R06100076

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05							Batch: C_RA228-1405		
Sample ID: C06100329-008AMS	Sample Matrix Spike				Run: SUB-C74289		10/17/06 16:18		
Radium 228	14	pCi/L	1.0	101	70	130			
Sample ID: C06100329-008AMSD	Sample Matrix Spike Duplicate				Run: SUB-C74289		10/17/06 16:18		
Radium 228	13	pCi/L	1.0	93	70	130	8.3	31.5	
Method: SW1664A							Batch: C_12505		
Sample ID: C06100701-001EMS	Sample Matrix Spike				Run: SUB-C74487		10/19/06 12:12		
Non-polar Materials (SGT-HEM)	22	mg/L	5.0	81	64	132			
Sample ID: C06100701-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C74487		10/19/06 12:12		
Non-polar Materials (SGT-HEM)	21	mg/L	5.0	74	64	132	6.0	34	
Sample ID: MBLK1_061019A	Method Blank				Run: SUB-C74487		10/19/06 12:12		
Non-polar Materials (SGT-HEM)	ND	mg/L	5.0						
Sample ID: LCS1_061019A	Laboratory Control Sample				Run: SUB-C74487		10/19/06 12:13		
Non-polar Materials (SGT-HEM)	18	mg/L	5.0	88	64	132			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



# CHAIN OF CUSTODY RECORD

PLEASE PRINT OR TYPE ALL  
INFORMATION EXCEPT SIGNATURES

Received Date:	Cust. No.:	Yes/No
Login Date:	Custody Seal:	Yes/No
Shipped by:	Intact:	Yes/No
Shipping Bill #:	Signature Match?:	Yes/No
Sample Temp:	If no - Reason:	

BILINGS, MT		CASPER, WY		GILLETTE, WY		HULDA, MT		RAPID CITY, SD	
100 Box 500, 5000	PO Box 500, 5000	100 Box 500, 5000	PO Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000
100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000	100 Box 500, 5000
P.O. #	Project Name / Address								
Contact Name & Phone Allen Scott 673 40579 Project Name: Powder & Well Sampling Sampler's Signature: <i>Allen Scott</i>									
Lab No.	DATE	TIME	Invoice to:	Report to:	Sample Type: A W S V U	number of containers	Air Water Soils/Solids Vegetation Urine Other	Analysis Requested	Comments, Special Instructions, etc.
For Lab Use Only	2006		PO Box 90 Hot Springs, SD 57749	1020 m. f. Richman Rd Custer, SD 57725					
	10-3	10:07	#1, Anderson = GW18		W				52"
	10-3	10:18	#2, Putnam = GW42		W				53"
	10-3	10:49	#3, Unknown = GW41		W				50"
	10-3	11:12	#4, Kenobbie = GW7		W				48"
	10-3	11:36	#5, Spencer = GW13		W				51"
	10-3	12:00	#6, Daniels = GW16		W				52"
1. Re-requested signature: <i>Allen Scott</i> Date: 10-9-2014 Time: 2:14 PM 2. Re-requested signature: <i>[Signature]</i> Date: 10-9-2014 Time: 2:14 PM Received by (signature): <i>[Signature]</i> Date: 10-9-2014 Time: 2:14 PM									



## ANALYTICAL SUMMARY REPORT

December 10, 2007

Cory Freeman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R07090384

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 5 samples from RESPEC Inc on 9/27/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07090384-001	DewBurd GW18	09/26/07 10:39	09/27/07	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Anions by Ion Chromatography Uranium, Suspended Nitrogen, Ammonia pH Digestion, Total Metals Dissolved Filtration Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Lead 210, Total Polonium 210, Dissolved Polonium 210, Suspended Polonium 210, Total Radium 226, Dissolved Radium 226, Suspended Radium 226, Total Thorium, Isotopic Thorium, Suspended Isotopic Thorium, Isotopic Solids, Total Dissolved
R07090384-002	DewBurd GW02	09/26/07 12:46	09/27/07	Aqueous	Same As Above
R07090384-003	DewBurd GW08	09/26/07 14:33	09/27/07	Aqueous	Same As Above
R07090384-004	DewBurd GW631	09/26/07 16:40	09/27/07	Aqueous	Same As Above
R07090384-005	DewBurd GW635	09/26/07 18:08	09/27/07	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or Rapid\_City@energylab.com.

Report Approved By:





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090384-001  
Client Sample ID: DewBurd GW18

Report Date: 12/10/07  
Collection Date: 09/26/07 10:39  
Date Received: 09/27/07  
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	10/04/07 16:44/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:44/sn
Bicarbonate as HCO3	224	mg/L		5		1	A2320 B	10/04/07 16:44/sn
Calcium	31.8	mg/L		0.5		1	E200.7	10/08/07 20:34/eli-c
Magnesium	11.3	mg/L		0.5		1	E200.7	10/08/07 20:34/eli-c
Potassium	7.2	mg/L		0.5		1	E200.7	10/08/07 20:34/eli-c
Silica	7.5	mg/L		0.5		1	E200.7	10/08/07 20:34/eli-c
Sodium	278	mg/L	D	0.8		1	E200.7	10/08/07 20:34/eli-c
Chloride	13	mg/L		1		1	E300.0	09/28/07 21:44/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/28/07 21:44/jmh
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:26/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 21:44/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 21:44/jmh
Sulfate	513	mg/L	D	7		10	E300.0	10/02/07 01:19/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1430	umhos/cm		5.0		1	A2510 B	10/02/07 18:31/jmh
pH	8.09	s.u.		0.01		1	A4500-H B	10/02/07 18:31/jmh
Solids, Total Dissolved TDS @ 180 C	990	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/05/07 23:42/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/05/07 23:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/05/07 23:42/eli-c
Boron	ND	mg/L		0.1		1	E200.7	10/08/07 20:34/eli-c
Cadmium	ND	mg/L		0.01		1	E200.8	10/05/07 23:42/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/08/07 20:34/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/05/07 23:42/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/08/07 20:34/eli-c
Lead	ND	mg/L		0.05		1	E200.8	10/05/07 23:42/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/05/07 23:42/eli-c
Mercury	ND	mg/L		0.0002		1	E200.8	10/05/07 23:42/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/05/07 23:42/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/05/07 23:42/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/05/07 23:42/eli-c
Silver	ND	mg/L		0.01		1	E200.8	10/05/07 23:42/eli-c
Thorium 232	ND	mg/L		0.001		1	E200.8	10/05/07 23:42/eli-c
Uranium	0.0061	mg/L		0.0003		1	E200.8	10/05/07 23:42/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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

Page 1 of 15



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090384-001  
Client Sample ID: DewBurd GW18

Report Date: 12/10/07  
Collection Date: 09/26/07 10:39  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/05/07 23:42/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/05/07 23:42/eli-c
METALS - SUSPENDED								
Uranium	0.0017	mg/L		0.0003		1	E200.8	11/30/07 13:23/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 15:46/eli-c
Uranium	0.008	mg/L		0.0003		1	E200.8	10/04/07 15:46/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.7	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	1.3	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	6.7	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.20		1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	510	pCi/L		20		1	E901.1	10/04/07 15:30/eli-c
Gross Gamma precision (±)	100	pCi/L				1	E901.1	10/04/07 15:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/13/07 17:07/eli-c
Polonium 210	6.0	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Polonium 210 precision (±)	4.4	pCi/L				1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	4.0	pCi/L		0.2		1	E903.0	12/05/07 12:38/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	12/05/07 12:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/13/07 17:07/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	6.0	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Polonium 210 precision (±)	4.4	pCi/L				1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	4.0	pCi/L		0.2		1	E903.0	10/10/07 16:32/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	10/10/07 16:32/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 13:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07090384-001  
**Client Sample ID:** DewBurd GW18

**Report Date:** 12/10/07  
**Collection Date:** 09/26/07 10:39  
**Date Received:** 09/27/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	0.211	%				1	A1030 E	11/30/07 16:24/eli-c
Anions	14.7	meq/L				1	A1030 E	11/30/07 16:24/eli-c
Cations	14.8	meq/L				1	A1030 E	11/30/07 16:24/eli-c
Solids, Total Dissolved Calculated	965	mg/L				1	A1030 E	11/30/07 16:24/eli-c
TDS Balance (0.80 - 1.20)	1.03	dec. %				1	A1030 E	11/30/07 16:24/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07090384-002  
Client Sample ID: DewBurd GW02

Report Date: 12/10/07  
Collection Date: 09/26/07 12:46  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	214	mg/L		5		1	A2320 B	10/04/07 16:46/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:46/sn
Bicarbonate as HCO3	261	mg/L		5		1	A2320 B	10/04/07 16:46/sn
Calcium	48.5	mg/L		0.5		1	E200.7	10/08/07 20:38/eli-c
Magnesium	15.8	mg/L		0.5		1	E200.7	10/08/07 20:38/eli-c
Potassium	11.5	mg/L		0.5		1	E200.7	10/08/07 20:38/eli-c
Silica	8.0	mg/L		0.5		1	E200.7	10/08/07 20:38/eli-c
Sodium	273	mg/L	D	0.8		1	E200.7	10/08/07 20:38/eli-c
Chloride	10	mg/L		1		1	E300.0	09/28/07 22:00/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	09/28/07 22:00/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:28/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:00/jmh
Sulfate	583	mg/L	D	7		10	E300.0	10/02/07 01:36/jmh

### PHYSICAL PROPERTIES

Conductivity @ 25 C	1570	umhos/cm		5.0		1	A2510 B	10/02/07 18:32/jmh
pH	7.91	s.u.		0.01		1	A4500-H B	10/02/07 18:32/jmh
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	H	5		1	A2540 C	11/26/07 16:03/jmh

H-Initial results were within hold time. Sample rechecked and results are reported.

### METALS - DISSOLVED

Aluminum	ND	mg/L		0.1		1	E200.8	10/05/07 23:50/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/05/07 23:50/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/05/07 23:50/eli-c
Boron	ND	mg/L		0.1		1	E200.7	10/08/07 20:38/eli-c
Cadmium	ND	mg/L		0.01		1	E200.8	10/05/07 23:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/08/07 20:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/05/07 23:50/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/08/07 20:38/eli-c
Lead	ND	mg/L		0.05		1	E200.8	10/05/07 23:50/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/05/07 23:50/eli-c
Mercury	ND	mg/L		0.0002		1	E200.8	10/05/07 23:50/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/05/07 23:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/05/07 23:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/05/07 23:50/eli-c
Silver	ND	mg/L		0.01		1	E200.8	10/05/07 23:50/eli-c
Thorium 232	ND	mg/L		0.001		1	E200.8	10/05/07 23:50/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/05/07 23:50/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090384-002  
Client Sample ID: DewBurd GW02

Report Date: 12/10/07  
Collection Date: 09/26/07 12:46  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/05/07 23:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/05/07 23:50/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0003	mg/L		0.0003		1	E200.8	11/30/07 13:23/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 15:53/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	10/04/07 15:53/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1.4	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	1.0	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	9.3	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.20		1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/04/07 15:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/13/07 17:07/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	2.2	pCi/L		0.2		1	E903.0	12/05/07 12:38/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	12/05/07 12:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/13/07 17:07/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	2.2	pCi/L		0.2		1	E903.0	10/10/07 16:32/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	10/10/07 16:32/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 13:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-2.46	%				1	A1030 E	11/30/07 16:25/eli-c
Anions	16.7	meq/L				1	A1030 E	11/30/07 16:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07090384-002  
**Client Sample ID:** DewBurd GW02

**Report Date:** 12/10/07  
**Collection Date:** 09/26/07 12:46  
**Date Received:** 09/27/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	15.9	meq/L				1	A1030 E	11/30/07 16:25/eli-c
Solids, Total Dissolved Calculated	1070	mg/L				1	A1030 E	11/30/07 16:25/eli-c
TDS Balance (0.80 - 1.20)	1.00	dec. %				1	A1030 E	11/30/07 16:25/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07090384-003  
Client Sample ID: DewBurd GW08

Report Date: 12/10/07  
Collection Date: 09/26/07 14:33  
Date Received: 09/27/07  
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	10/04/07 16:49/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:49/sn
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	10/04/07 16:49/sn
Calcium	48.5	mg/L		0.5		1	E200.7	10/08/07 20:41/eli-c
Magnesium	21.2	mg/L		0.5		1	E200.7	10/08/07 20:41/eli-c
Potassium	14.2	mg/L		0.5		1	E200.7	10/08/07 20:41/eli-c
Silica	6.9	mg/L		0.5		1	E200.7	10/08/07 20:41/eli-c
Sodium	224	mg/L	D	0.8		1	E200.7	10/08/07 20:41/eli-c
Chloride	13	mg/L		1		1	E300.0	09/28/07 22:17/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/28/07 22:17/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:31/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:17/jmh
Sulfate	540	mg/L	D	7		10	E300.0	10/02/07 01:52/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1420	umhos/cm		5.0		1	A2510 B	10/02/07 18:33/jmh
pH	7.93	s.u.		0.01		1	A4500-H B	10/02/07 18:34/jmh
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/05/07 23:58/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/05/07 23:58/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/05/07 23:58/eli-c
Boron	ND	mg/L		0.1		1	E200.7	10/08/07 20:41/eli-c
Cadmium	ND	mg/L		0.01		1	E200.8	10/05/07 23:58/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/08/07 20:41/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/05/07 23:58/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/08/07 20:41/eli-c
Lead	ND	mg/L		0.05		1	E200.8	10/05/07 23:58/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/05/07 23:58/eli-c
Mercury	ND	mg/L		0.0002		1	E200.8	10/05/07 23:58/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/05/07 23:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/05/07 23:58/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/05/07 23:58/eli-c
Silver	ND	mg/L		0.01		1	E200.8	10/05/07 23:58/eli-c
Thorium 232	ND	mg/L		0.001		1	E200.8	10/05/07 23:58/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/05/07 23:58/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07090384-003  
Client Sample ID: DewBurd GW08

Report Date: 12/10/07  
Collection Date: 09/26/07 14:33  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/05/07 23:58/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/05/07 23:58/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/07 13:23/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 16:01/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/04/07 16:01/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5.0	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	1.0	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	15.9	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.20		1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	650	pCi/L		20		1	E901.1	10/04/07 15:30/eli-c
Gross Gamma precision (±)	120	pCi/L				1	E901.1	10/04/07 15:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/13/07 17:07/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	3.5	pCi/L		0.2		1	E903.0	12/05/07 12:38/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	12/05/07 12:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/13/07 17:07/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	3.5	pCi/L		0.2		1	E903.0	10/10/07 16:32/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	10/10/07 16:32/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 13:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.44	%				1	A1030 E	11/30/07 16:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07090384-003  
Client Sample ID: DewBurd GW08

Report Date: 12/10/07  
Collection Date: 09/26/07 14:33  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Anions	15.0	meq/L				1	A1030 E	11/30/07 16:25/eli-c
Cations	14.3	meq/L				1	A1030 E	11/30/07 16:25/eli-c
Solids, Total Dissolved Calculated	962	mg/L				1	A1030 E	11/30/07 16:25/eli-c
TDS Balance (0.80 - 1.20)	1.00	dec. %				1	A1030 E	11/30/07 16:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07090384-004  
Client Sample ID: DewBurd GW631

Report Date: 12/10/07  
Collection Date: 09/26/07 16:40  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	168	mg/L		5			1	A2320 B	10/04/07 16:52/sn
Carbonate as CO3	ND	mg/L		5			1	A2320 B	10/04/07 16:52/sn
Bicarbonate as HCO3	205	mg/L		5			1	A2320 B	10/04/07 16:52/sn
Calcium	268	mg/L		0.5			1	E200.7	10/08/07 20:44/eli-c
Magnesium	82.9	mg/L		0.5			1	E200.7	10/08/07 20:44/eli-c
Potassium	15.9	mg/L		0.5			1	E200.7	10/08/07 20:44/eli-c
Silica	7.2	mg/L		0.5			1	E200.7	10/08/07 20:44/eli-c
Sodium	92.4	mg/L	D	0.8			1	E200.7	10/08/07 20:44/eli-c
Chloride	10	mg/L		1			1	E300.0	09/28/07 22:33/jmh
Fluoride	0.3	mg/L		0.1			1	E300.0	09/28/07 22:33/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1			1	A4500-NH3 G	09/28/07 17:32/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1			1	E300.0	09/28/07 22:33/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1			1	E300.0	09/28/07 22:33/jmh
Sulfate	1240	mg/L	D	10			20	E300.0	10/02/07 02:08/jmh
PHYSICAL PROPERTIES									
Conductivity @ 25 C	2180	umhos/cm		5.0			1	A2510 B	10/02/07 18:35/jmh
pH	7.76	s.u.		0.01			1	A4500-H B	10/02/07 18:36/jmh
Solids, Total Dissolved TDS @ 180 C	1900	mg/L		5			1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1			1	E200.8	10/08/07 22:08/eli-c
Arsenic	0.001	mg/L		0.001			1	E200.8	10/08/07 22:08/eli-c
Barium	ND	mg/L		0.1			1	E200.8	10/08/07 22:08/eli-c
Boron	0.2	mg/L		0.1			1	E200.7	10/08/07 20:44/eli-c
Cadmium	ND	mg/L		0.01			1	E200.8	10/08/07 22:08/eli-c
Chromium	ND	mg/L		0.05			1	E200.7	10/08/07 20:44/eli-c
Copper	ND	mg/L		0.01			1	E200.8	10/08/07 22:08/eli-c
Iron	ND	mg/L		0.03			1	E200.7	10/08/07 20:44/eli-c
Lead	ND	mg/L		0.05			1	E200.8	10/08/07 22:08/eli-c
Manganese	0.28	mg/L		0.01			1	E200.8	10/08/07 22:08/eli-c
Mercury	ND	mg/L		0.0002			1	E200.8	10/08/07 22:08/eli-c
Molybdenum	ND	mg/L		0.1			1	E200.8	10/08/07 22:08/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	10/08/07 22:08/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	10/08/07 22:08/eli-c
Silver	ND	mg/L		0.01			1	E200.8	10/08/07 22:08/eli-c
Thorium 232	ND	mg/L		0.001			1	E200.8	10/08/07 22:08/eli-c
Uranium	0.0027	mg/L		0.0003			1	E200.8	10/08/07 22:08/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090384-004  
Client Sample ID: DewBurd GW631

Report Date: 12/10/07  
Collection Date: 09/26/07 16:40  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/08/07 22:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/08/07 22:08/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/07 13:23/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 16:08/eli-c
Uranium	0.003	mg/L		0.0003		1	E200.8	10/04/07 16:08/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	51.0	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	20.9	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	4.9	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Polonium 210 precision (±)	ND	pCi/L				1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	12.9	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Radium 226 precision (±)	3.7	pCi/L				1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.20		1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	520	pCi/L		20		1	E901.1	10/04/07 15:30/eli-c
Gross Gamma precision (±)	100	pCi/L				1	E901.1	10/04/07 15:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/13/07 17:07/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	2.3	pCi/L		0.2		1	E903.0	12/05/07 12:38/eli-c
Radium 226 precision (±)	1.6	pCi/L				1	E903.0	12/05/07 12:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/13/07 17:07/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	15.2	pCi/L		0.2		1	E903.0	10/10/07 16:32/eli-c
Radium 226 precision (±)	1.6	pCi/L				1	E903.0	10/10/07 16:32/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 13:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07090384-004  
Client Sample ID: DewBurd GW631

Report Date: 12/10/07  
Collection Date: 09/26/07 16:40  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-4.28	%				1	A1030 E	11/30/07 16:29/eli-c
Anions	26.9	meq/L				1	A1030 E	11/30/07 16:29/eli-c
Cations	24.7	meq/L				1	A1030 E	11/30/07 16:29/eli-c
Solids, Total Dissolved Calculated	1690	mg/L				1	A1030 E	11/30/07 16:29/eli-c
TDS Balance (0.80 - 1.20)	1.11	dec. %				1	A1030 E	11/30/07 16:29/eli-c

- This Balance uses sulfate data from 200.7 analysis.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07090384-005  
Client Sample ID: DewBurd GW635

Report Date: 12/10/07  
Collection Date: 09/26/07 18:08  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	124	mg/L		5		1	A2320 B	10/04/07 16:54/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:54/sn
Bicarbonate as HCO3	151	mg/L		5		1	A2320 B	10/04/07 16:54/sn
Calcium	110	mg/L		0.5		1	E200.7	10/08/07 20:48/eli-c
Magnesium	44.3	mg/L		0.5		1	E200.7	10/08/07 20:48/eli-c
Potassium	7.8	mg/L		0.5		1	E200.7	10/08/07 20:48/eli-c
Silica	8.6	mg/L		0.5		1	E200.7	10/08/07 20:48/eli-c
Sodium	470	mg/L	D	8		10	E200.7	10/08/07 17:54/eli-c
Chloride	24	mg/L		1		5	E300.0	10/02/07 02:41/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	09/28/07 22:50/jmh
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:33/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:50/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 22:50/jmh
Sulfate	1500	mg/L	D	40		50	E300.0	10/02/07 02:25/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2890	umhos/cm		5.0		1	A2510 B	10/02/07 18:38/jmh
pH	7.72	s.u.		0.01		1	A4500-H B	10/02/07 18:38/jmh
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/04/07 16:16/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/04/07 16:16/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/04/07 16:16/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	10/08/07 20:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/04/07 16:16/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/08/07 20:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/04/07 16:16/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/08/07 20:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/04/07 16:16/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/04/07 16:16/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 16:16/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/04/07 16:16/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/04/07 16:16/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	10/04/07 16:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/04/07 16:16/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/04/07 16:16/eli-c
Uranium	0.0020	mg/L		0.0003		1	E200.8	10/04/07 16:16/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

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:** R07090384-005  
**Client Sample ID:** DewBurd GW635

**Report Date:** 12/10/07  
**Collection Date:** 09/26/07 18:08  
**Date Received:** 09/27/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/04/07 16:16/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/04/07 16:16/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/08/07 22:16/eli-c
Uranium	0.002	mg/L		0.0003		1	E200.8	10/08/07 22:16/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2.5	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	4.3	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	6.9	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	1.6	pCi/L		0.2		1	E903.0	10/10/07 16:32/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	10/10/07 16:32/eli-c
Thorium 230	ND	pCi/L		0.20		1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	960	pCi/L		20		1	E901.1	10/04/07 15:30/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	10/04/07 15:30/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/13/07 17:07/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Polonium 210 precision (±)	ND	pCi/L				1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	0.8	pCi/L		0.2		1	E903.0	11/13/07 17:07/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	11/13/07 17:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/13/07 17:07/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	2.4	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Radium 226 precision (±)	1.5	pCi/L				1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 13:00/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07090384-005

Client Sample ID: DewBurd GW635

Report Date: 12/10/07

Collection Date: 09/26/07 18:08

Date Received: 09/27/07

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-1.14	%				1	A1030 E	11/30/07 16:29/eli-c
Anions	30.4	meq/L				1	A1030 E	11/30/07 16:29/eli-c
Cations	29.8	meq/L				1	A1030 E	11/30/07 16:29/eli-c
Solids, Total Dissolved Calculated	2040	mg/L				1	A1030 E	11/30/07 16:29/eli-c
TDS Balance (0.80 - 1.20)	1.09	dec. %				1	A1030 E	11/30/07 16:29/eli-c

- This Balance uses sulfate data from 200.7 analysis.

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 071004A-ALK-SEL-W		
Sample ID: MBLK1_071004A	Method Blank					Run: PH_COND1-R_071004A			10/04/07 15:38
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_071004A	Laboratory Control Sample					Run: PH_COND1-R_071004A			10/04/07 15:44
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: R07090368-001BMS	Sample Matrix Spike					Run: PH_COND1-R_071004A			10/04/07 16:27
Alkalinity, Total as CaCO <sub>3</sub>	350	mg/L	5.0	96	80	120			
Sample ID: R07090385-002AMS	Sample Matrix Spike					Run: PH_COND1-R_071004A			10/04/07 17:05
Alkalinity, Total as CaCO <sub>3</sub>	272	mg/L	5.0	108	80	120			
Method: A2510 B							Batch: 071002_1_COND-PROBE-W		
Sample ID: LCS1-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A			10/02/07 18:11
Conductivity @ 25 C	149	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A			10/02/07 18:12
Conductivity @ 25 C	4920	umhos/cm	5.0	98	90	110			
Sample ID: LCS_COND-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A			10/02/07 18:13
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071002	Method Blank					Run: PH_COND2-R_071002A			10/02/07 18:13
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R07090384-004ADUP	Sample Duplicate					Run: PH_COND2-R_071002A			10/02/07 18:36
Conductivity @ 25 C	2190	umhos/cm	5.0				0.5	10	
Method: A2540 C							Batch: 071002A-SLDS-TDS-W		
Sample ID: MBLK1_071002A	Method Blank					Run: BAL-4-R_071002A			10/02/07 13:16
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_071002A	Laboratory Control Sample					Run: BAL-4-R_071002A			10/02/07 13:16
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 071126A-SLDS-TDS-W		
Sample ID: MBLK1_071126A	Method Blank				Run: BAL-4-R_071126B			11/26/07 15:42	
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: LCS1_071126A	Laboratory Control Sample				Run: BAL-4-R_071126B			11/26/07 15:43	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	105	90	110			
Sample ID: R07110245-002BMS	Sample Matrix Spike				Run: BAL-4-R_071126B			11/26/07 15:49	
Solids, Total Dissolved TDS @ 180 C	1900	mg/L	5.0	95	80	120			
Sample ID: R07110245-002BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_071126B			11/26/07 15:50	
Solids, Total Dissolved TDS @ 180 C	1900	mg/L	5.0	110	80	120	1.6	10	
Method: A4500-H B							Batch: 071002_1_PH-W		
Sample ID: LCS_pH-1_071002	Laboratory Control Sample				Run: PH_COND2-R_071002A			10/02/07 18:08	
pH	6.85	s.u.	0.010	100	98.55	101.45			
Sample ID: R07090384-004ADUP	Sample Duplicate				Run: PH_COND2-R_071002A			10/02/07 18:37	
pH	7.75	s.u.	0.010				0.1	1.25	
Method: A4500-NH3 G							Batch: A2007-09-28_2_NH3_01		
Sample ID: MBLK-1	Method Blank				Run: TECHAA2-R_070928A			09/28/07 14:57	
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_070928A			09/28/07 15:00	
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_070928A			09/28/07 15:01	
Nitrogen, Ammonia as N	0.27	mg/L	0.10	107	90	110			
Sample ID: R07090384-001BDUP	Sample Duplicate				Run: TECHAA2-R_070928A			09/28/07 17:27	
Nitrogen, Ammonia as N	0.19	mg/L	0.10				0.5	10	
Sample ID: R07090384-002BMS	Sample Matrix Spike				Run: TECHAA2-R_070928A			09/28/07 17:30	
Nitrogen, Ammonia as N	0.33	mg/L	0.10	115	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R90934		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C90934			10/08/07 14:46		
Silica	2.0	mg/L	0.10	98	85	125			
Boron	1.9	mg/L	0.10	95	85	125			
Chromium	2.0	mg/L	0.050	98	85	125			
Iron	1.9	mg/L	0.030	96	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C90934			10/08/07 14:49		
Calcium	25	mg/L	0.50	102	85	125			
Magnesium	25	mg/L	0.50	100	85	125			
Potassium	28	mg/L	0.50	110	85	125			
Sodium	25	mg/L	0.76	102	85	125			
<b>Sample ID: LRB</b>	Laboratory Reagent Blank			Run: SUB-C90934			10/08/07 14:56		
Silica	ND	mg/L	0.10		0	0			
Boron	0.012	mg/L	0.10		0	0			
Calcium	ND	mg/L	0.50		0	0			
Chromium	ND	mg/L	0.050		0	0			
Iron	ND	mg/L	0.030		0	0			
Magnesium	ND	mg/L	0.50		0	0			
Potassium	0.039	mg/L	0.50		0	0			
Sodium	ND	mg/L	0.76		0	0			
<b>Sample ID: C07100214-001CMS</b>	Sample Matrix Spike			Run: SUB-C90934			10/08/07 17:18		
Boron	9.32	mg/L	0.10	93	70	130			
Calcium	449	mg/L	1.0	84	70	130			
Chromium	9.45	mg/L	0.050	95	70	130			
Iron	9.09	mg/L	0.046	91	70	130			
Magnesium	432	mg/L	0.50	84	70	130			
Potassium	1130	mg/L	0.50	93	70	130			
Silica	16.0	mg/L	0.20	85	70	130			
Sodium	681	mg/L	7.6	86	70	130			
<b>Sample ID: C07100214-001CMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C90934			10/08/07 17:21		
Boron	9.66	mg/L	0.10	97	70	130	3.6	20	
Calcium	459	mg/L	1.0	86	70	130	2.1	20	
Chromium	9.63	mg/L	0.050	96	70	130	1.9	20	
Iron	9.41	mg/L	0.046	94	70	130	3.5	20	
Magnesium	439	mg/L	0.50	86	70	130	1.7	20	
Potassium	1150	mg/L	0.50	95	70	130	1.7	20	
Silica	16.4	mg/L	0.20	90	70	130	2.5	20	
Sodium	698	mg/L	7.6	90	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R90934		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C90934			10/08/07 22:59		
Silica	1.8	mg/L	0.10	91	85	125			
Boron	1.9	mg/L	0.10	94	85	125			
Chromium	1.8	mg/L	0.050	90	85	125			
Iron	1.8	mg/L	0.030	88	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C90934			10/08/07 23:02		
Potassium	27	mg/L	0.50	109	85	125			
<b>Method: E200.8</b>							Batch: C_16355		
<b>Sample ID: MB-16355</b>	Method Blank			Run: SUB-C90947			10/08/07 21:39		
Mercury	ND	mg/L	3E-05						
<b>Sample ID: LCS-16355</b>	Laboratory Control Sample			Run: SUB-C90947			10/08/07 21:53		
Uranium	0.50	mg/L	0.00038	100	85	115			
<b>Sample ID: C07100221-004D MS4</b>	Post Digestion Spike			Run: SUB-C91068			10/11/07 08:36		
Mercury	0.050	mg/L	0.0010	100	70	130			
<b>Sample ID: C07100221-004D MSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C91068			10/11/07 08:42		
Mercury	0.050	mg/L	0.0010	100	70	130	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R90827		
Sample ID: LRB	Method Blank				Run: SUB-C90827		10/04/07 12:35		
Aluminum	ND	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	0.0002	mg/L	0.0002						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	2E-05						
Manganese	3E-05	mg/L	3E-05						
Mercury	7E-05	mg/L	6E-06						
Molybdenum	0.0005	mg/L	7E-05						
Nickel	0.0003	mg/L	8E-05						
Selenium	ND	mg/L	0.0004						
Silver	ND	mg/L	3E-05						
Thorium 232	0.00010	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	ND	mg/L	0.002						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C90827		10/04/07 12:42		
Aluminum	0.0497	mg/L	0.0010	99	85	115			
Arsenic	0.0496	mg/L	0.0010	99	85	115			
Barium	0.0490	mg/L	0.0010	98	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Copper	0.0504	mg/L	0.0010	101	85	115			
Lead	0.0498	mg/L	0.0010	100	85	115			
Manganese	0.0492	mg/L	0.0010	98	85	115			
Mercury	0.00506	mg/L	0.0010	100	85	115			
Molybdenum	0.0504	mg/L	0.0010	100	85	115			
Nickel	0.0506	mg/L	0.0010	101	85	115			
Selenium	0.0495	mg/L	0.0010	99	85	115			
Silver	0.0197	mg/L	0.0010	98	85	115			
Thorium 232	0.0499	mg/L	0.0010	100	85	115			
Uranium	0.0504	mg/L	0.00030	101	85	115			
Vanadium	0.0497	mg/L	0.0010	99	85	115			
Zinc	0.0528	mg/L	0.0021	106	85	115			
Sample ID: C07100156-001EMS4	Post Digestion Spike				Run: SUB-C90827		10/04/07 18:32		
Aluminum	0.245	mg/L	0.10	97	70	130			
Arsenic	0.258	mg/L	0.0010	102	70	130			
Barium	0.357	mg/L	0.10	101	70	130			
Cadmium	0.247	mg/L	0.010	99	70	130			
Copper	0.251	mg/L	0.010	97	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R90827		
<b>Sample ID: C07100156-001EMS4</b>	Post Digestion Spike			Run: SUB-C90827			10/04/07 18:32		
Lead	0.255	mg/L	0.050	102	70	130			
Manganese	0.248	mg/L	0.010	98	70	130			
Mercury	0.0257	mg/L	0.0010	103	70	130			
Molybdenum	0.262	mg/L	0.10	103	70	130			
Nickel	0.247	mg/L	0.050	97	70	130			
Selenium	0.246	mg/L	0.0020	97	70	130			
Silver	0.0828	mg/L	0.010	83	70	130			
Thorium 232	0.252	mg/L	0.0010	100	70	130			
Uranium	0.305	mg/L	0.00030	105	70	130			
Vanadium	0.259	mg/L	0.10	101	70	130			
Zinc	0.275	mg/L	0.010	100	70	130			
<b>Sample ID: C07100156-001EMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C90827			10/04/07 18:39		
Aluminum	0.251	mg/L	0.10	99	70	130	2.2	20	
Arsenic	0.257	mg/L	0.0010	101	70	130	0.1	20	
Barium	0.356	mg/L	0.10	101	70	130	0.2	20	
Cadmium	0.247	mg/L	0.010	99	70	130	0.1	20	
Copper	0.252	mg/L	0.010	98	70	130	0.2	20	
Lead	0.257	mg/L	0.050	103	70	130	0.7	20	
Manganese	0.250	mg/L	0.010	98	70	130	0.5	20	
Mercury	0.0258	mg/L	0.0010	103	70	130	0.8	20	
Molybdenum	0.261	mg/L	0.10	103	70	130	0.5	20	
Nickel	0.240	mg/L	0.050	95	70	130	2.7	20	
Selenium	0.249	mg/L	0.0020	98	70	130	1.3	20	
Silver	0.0893	mg/L	0.010	89	70	130	7.6	20	
Thorium 232	0.261	mg/L	0.0010	104	70	130	3.7	20	
Uranium	0.308	mg/L	0.00030	107	70	130	1.0	20	
Vanadium	0.259	mg/L	0.10	101	70	130	0.1	20	
Zinc	0.274	mg/L	0.010	100	70	130	0.5	20	
<b>Sample ID: C07100175-002EMS4</b>	Post Digestion Spike			Run: SUB-C90827			10/04/07 20:17		
Thorium 232	0.0494	mg/L	0.0010	99	70	130			
Aluminum	0.0420	mg/L	0.10	84	70	130			
Arsenic	0.0538	mg/L	0.0010	103	70	130			
Barium	0.272	mg/L	0.10		70	130			A
Cadmium	0.0498	mg/L	0.0010	100	70	130			
Copper	0.0585	mg/L	0.010	96	70	130			
Lead	0.0575	mg/L	0.0010	99	70	130			
Manganese	0.0472	mg/L	0.010	92	70	130			
Mercury	0.00492	mg/L	0.0010	98	70	130			
Molybdenum	0.0518	mg/L	0.10	100	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R90827		
Sample ID: C07100175-002EMS4	Post Digestion Spike			Run: SUB-C90827			10/04/07 20:17		
Nickel	0.0556	mg/L	0.050	97	70	130			
Selenium	0.0546	mg/L	0.0010	107	70	130			
Silver	0.0135	mg/L	0.010	68	70	130			S
Uranium	0.0619	mg/L	0.00030	101	70	130			
Vanadium	0.0529	mg/L	0.10	99	70	130			
Zinc	0.181	mg/L	0.010	100	70	130			
- Matrix spike recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: C07100175-002EMSD4	Post Digestion Spike Duplicate			Run: SUB-C90827			10/04/07 20:24		
Thorium 232	0.0517	mg/L	0.0010	103	70	130	4.5	20	
Aluminum	0.0420	mg/L	0.10	84	70	130	0.0	20	
Arsenic	0.0545	mg/L	0.0010	105	70	130	1.2	20	
Barium	0.272	mg/L	0.10		70	130	0.1	20	A
Cadmium	0.0497	mg/L	0.0010	99	70	130	0.2	20	
Copper	0.0591	mg/L	0.010	97	70	130	1.0	20	
Lead	0.0580	mg/L	0.0010	100	70	130	0.8	20	
Manganese	0.0482	mg/L	0.010	95	70	130	2.1	20	
Mercury	0.00507	mg/L	0.0010	101	70	130	2.9	20	
Molybdenum	0.0520	mg/L	0.10	100	70	130	0.0	20	
Nickel	0.0565	mg/L	0.050	99	70	130	1.6	20	
Selenium	0.0549	mg/L	0.0010	107	70	130	0.7	20	
Silver	0.0176	mg/L	0.010	88	70	130	26	20	R
Uranium	0.0634	mg/L	0.00030	104	70	130	2.5	20	
Vanadium	0.0539	mg/L	0.10	101	70	130	0.0	20	
Zinc	0.182	mg/L	0.010	102	70	130	0.5	20	
- Matrix spike duplicate recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C90827			10/05/07 01:53		
Arsenic	0.0494	mg/L	0.0010	99	85	115			
Barium	0.0496	mg/L	0.0010	99	85	115			
Cadmium	0.0486	mg/L	0.0010	97	85	115			
Copper	0.0495	mg/L	0.0010	99	85	115			
Lead	0.0495	mg/L	0.0010	99	85	115			
Manganese	0.0477	mg/L	0.0010	95	85	115			
Molybdenum	0.0497	mg/L	0.0010	99	85	115			
Nickel	0.0486	mg/L	0.0010	97	85	115			
Selenium	0.0500	mg/L	0.0010	100	85	115			
Thorium 232	0.0482	mg/L	0.0010	96	85	115			
Uranium	0.0495	mg/L	0.00030	99	85	115			
Vanadium	0.0477	mg/L	0.0010	95	85	115			
Zinc	0.0512	mg/L	0.0021	102	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

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

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/10/07  
Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R90827		
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C90827			10/05/07 01:53		
Method: E200.8							Batch: C_R90894		
Sample ID: LRB	Method Blank			Run: SUB-C90894			10/05/07 22:50		
Aluminum	0.001	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	0.0002						
Copper	0.0002	mg/L	0.0001						
Lead	ND	mg/L	2E-05						
Manganese	9E-05	mg/L	3E-05						
Mercury	3E-05	mg/L	6E-06						
Molybdenum	8E-05	mg/L	7E-05						
Nickel	9E-05	mg/L	8E-05						
Selenium	ND	mg/L	0.0004						
Silver	4E-05	mg/L	3E-05						
Thorium 232	7E-05	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	0.002	mg/L	0.002						
Sample ID: LFB							Run: SUB-C90894		
Laboratory Fortified Blank							10/05/07 22:57		
Aluminum	0.0495	mg/L	0.0010	97	85	115			
Arsenic	0.0501	mg/L	0.0010	100	85	115			
Barium	0.0472	mg/L	0.0010	95	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Copper	0.0507	mg/L	0.0010	101	85	115			
Lead	0.0498	mg/L	0.0010	100	85	115			
Manganese	0.0495	mg/L	0.0010	99	85	115			
Mercury	0.00501	mg/L	0.0010	100	85	115			
Molybdenum	0.0513	mg/L	0.0010	102	85	115			
Nickel	0.0508	mg/L	0.0010	101	85	115			
Selenium	0.0500	mg/L	0.0010	100	85	115			
Silver	0.0202	mg/L	0.0010	101	85	115			
Thorium 232	0.0490	mg/L	0.0010	98	85	115			
Uranium	0.0491	mg/L	0.00030	98	85	115			
Vanadium	0.0498	mg/L	0.0010	100	85	115			
Zinc	0.0523	mg/L	0.0021	100	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R90947		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C90947				10/08/07 12:54		
Aluminum	0.001	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	0.0002						
Copper	ND	mg/L	0.0001						
Lead	4E-05	mg/L	2E-05						
Manganese	ND	mg/L	3E-05						
Mercury	4E-05	mg/L	6E-06						
Molybdenum	0.0004	mg/L	7E-05						
Nickel	0.0002	mg/L	8E-05						
Selenium	ND	mg/L	0.0004						
Silver	ND	mg/L	3E-05						
Thorium 232	0.0001	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	ND	mg/L	0.002						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C90947				10/08/07 13:02		
Aluminum	0.0543	mg/L	0.0010	106	85	115			
Arsenic	0.0513	mg/L	0.0010	103	85	115			
Barium	0.0517	mg/L	0.0010	103	85	115			
Cadmium	0.0517	mg/L	0.0010	103	85	115			
Copper	0.0525	mg/L	0.0010	105	85	115			
Lead	0.0521	mg/L	0.0010	104	85	115			
Manganese	0.0528	mg/L	0.0010	106	85	115			
Mercury	0.00513	mg/L	0.0010	102	85	115			
Molybdenum	0.0516	mg/L	0.0010	103	85	115			
Nickel	0.0531	mg/L	0.0010	106	85	115			
Selenium	0.0511	mg/L	0.0010	102	85	115			
Silver	0.0200	mg/L	0.0010	100	85	115			
Thorium 232	0.0514	mg/L	0.0010	102	85	115			
Uranium	0.0513	mg/L	0.00030	103	85	115			
Vanadium	0.0523	mg/L	0.0010	105	85	115			
Zinc	0.0507	mg/L	0.0021	101	85	115			
<b>Sample ID: C07091372-007EMS4</b>	Post Digestion Spike		Run: SUB-C90947				10/09/07 05:48		
Aluminum	0.561	mg/L	0.10	109	70	130			
Arsenic	0.513	mg/L	0.0016	103	70	130			
Barium	0.524	mg/L	0.10	101	70	130			
Cadmium	0.499	mg/L	0.010	100	70	130			
Copper	0.526	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R90947		
Sample ID: C07091372-007EMS4	Post Digestion Spike			Run: SUB-C90947			10/09/07 05:48		
Lead	0.518	mg/L	0.050	103	70	130			
Manganese	1.34	mg/L	0.010	103	70	130			
Mercury	0.0525	mg/L	0.0010	105	70	130			
Molybdenum	0.531	mg/L	0.10	105	70	130			
Nickel	0.747	mg/L	0.050	99	70	130			
Selenium	0.885	mg/L	0.0040	106	70	130			
Thorium 232	0.532	mg/L	0.0010	106	70	130			
Uranium	0.923	mg/L	0.00035	114	70	130			
Vanadium	0.507	mg/L	0.10	101	70	130			
Sample ID: C07091372-007EMSD4	Post Digestion Spike Duplicate			Run: SUB-C90947			10/09/07 05:55		
Aluminum	0.552	mg/L	0.10	108	70	130	1.5	20	
Arsenic	0.504	mg/L	0.0016	101	70	130	1.7	20	
Barium	0.519	mg/L	0.10	100	70	130	1.0	20	
Cadmium	0.496	mg/L	0.010	99	70	130	0.6	20	
Copper	0.530	mg/L	0.010	99	70	130	0.7	20	
Lead	0.508	mg/L	0.050	101	70	130	2.0	20	
Manganese	1.33	mg/L	0.010	101	70	130	0.7	20	
Mercury	0.0528	mg/L	0.0010	106	70	130	0.5	20	
Molybdenum	0.535	mg/L	0.10	106	70	130	0.7	20	
Nickel	0.750	mg/L	0.050	99	70	130	0.4	20	
Selenium	0.875	mg/L	0.0040	104	70	130	1.2	20	
Thorium 232	0.533	mg/L	0.0010	107	70	130	0.3	20	
Uranium	0.915	mg/L	0.00035	112	70	130	0.9	20	
Vanadium	0.501	mg/L	0.10	100	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: 12/10/07  
Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R31616		
<b>Sample ID: LFB0709285802-3</b>	Laboratory Fortified Blank				Run: DIONEX_070928A		09/28/07 21:11		
Chloride	4.70	mg/L	0.50	94	90	110			
Fluoride	2.01	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.39	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
<b>Sample ID: LFB0709285802-4</b>	Laboratory Fortified Blank				Run: DIONEX_070928A		09/28/07 21:27		
Nitrogen, Nitrate as N	2.68	mg/L	0.10	107	90	110			
<b>Sample ID: R07100002-001AMS</b>	Sample Matrix Spike				Run: DIONEX_070928A		09/29/07 20:57		
Chloride	97.4	mg/L	0.50		80	120			A
Fluoride	2.27	mg/L	0.10	91	80	120			
Nitrogen, Nitrate as N	2.23	mg/L	0.10	89	80	120			
Nitrogen, Nitrite as N	3.66	mg/L	0.10	146	80	120			S
<b>Sample ID: R07100002-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_070928A		09/29/07 21:13		
Chloride	96.9	mg/L	0.50		80	120	0.4	10	A
Fluoride	2.24	mg/L	0.10	89	80	120	1.3	10	
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	80	120	3.5	10	
Nitrogen, Nitrite as N	3.85	mg/L	0.10	154	80	120	5.1	10	S
<b>Method: E300.0</b>							Batch: R31638		
<b>Sample ID: LFB0710013150-3</b>	Laboratory Fortified Blank				Run: DIONEX_071001A		10/01/07 20:24		
Chloride	4.94	mg/L	0.50	99	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
<b>Sample ID: LFB0710013150-4</b>	Laboratory Fortified Blank				Run: DIONEX_071001A		10/01/07 20:40		
Chloride	4.65	mg/L	0.50	93	90	110			
Sulfate	14.3	mg/L	1.0	95	90	110			
<b>Sample ID: R07090385-001AMS</b>	Sample Matrix Spike				Run: DIONEX_071001A		10/02/07 03:47		
Chloride	106	mg/L	0.80	93	80	120			
Sulfate	1610	mg/L	14		80	120			A
<b>Sample ID: R07090385-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_071001A		10/02/07 04:03		
Chloride	105	mg/L	0.80	91	80	120	1.1	10	
Sulfate	1590	mg/L	14		80	120	1.2	10	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: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0330		
Sample ID: MB-GrAB-0330	Method Blank				Run: SUB-C91156			10/10/07 22:43	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0330	Laboratory Control Sample				Run: SUB-C91156			10/10/07 22:43	
Gross Alpha	300	pCi/L	1.0	104	70	130			
Sample ID: Cs137-GrAB-0330	Laboratory Control Sample				Run: SUB-C91156			10/10/07 22:43	
Gross Beta	90	pCi/L	2.0	98	70	130			
Sample ID: C07090855-001AMS	Sample Matrix Spike				Run: SUB-C91156			10/10/07 22:43	
Gross Alpha	400	pCi/L	1.0	72	70	130			
Sample ID: C07090855-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C91156			10/10/07 22:43	
Gross Alpha	400	pCi/L	1.0	70	70	130	3.2	13.9	
Sample ID: C07090855-001AMS	Sample Matrix Spike				Run: SUB-C91156			10/10/07 22:43	
Gross Beta	200	pCi/L	2.0	88	70	130			
Sample ID: C07090855-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C91156			10/10/07 22:43	
Gross Beta	200	pCi/L	2.0	95	70	130	8.3	15.6	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/10/07  
Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R90863		
Sample ID: LCS-R90863	Laboratory Control Sample			Run: SUB-C90863			10/04/07 15:30		
Americium 241	730	pCi/L	20	90	70	130			
Cesium 137	1100	pCi/L	20	80	70	130			
Potassium 40	7200	pCi/L	20	108	70	130			
Sample ID: MB-R90863	Method Blank			Run: SUB-C90863			10/04/07 15:30		
Uranium 238	ND	pCi/L	20						
Actinium 228	ND	pCi/L	20						
Americium 241	ND	pCi/L	20						
Barium 133	ND	pCi/L	20						
Bismuth 212	ND	pCi/L	20						
Bismuth 214	ND	pCi/L	20						
Cesium 134	ND	pCi/L	20						
Cesium 137	ND	pCi/L	20						
Cobalt 60	ND	pCi/L	20						
Iodine 125	ND	pCi/L	20						
Iodine 131	ND	pCi/L	20						
Lead 212	ND	pCi/L	20						
Lead 214	ND	pCi/L	20						
Manganese 54	ND	pCi/L	20						
Potassium 40	ND	pCi/L	20						
Radium 223	ND	pCi/L	20						
Radium 224	ND	pCi/L	20						
Thallium 208	ND	pCi/L	20						
Thorium 228	ND	pCi/L	20						
Thorium 234	ND	pCi/L	20						
Zinc 65	ND	pCi/L	20						
Radium 226	ND	pCi/L	20						
Radium 228	ND	pCi/L	20						
Gross Gamma	ND	pCi/L	20						
Sample ID: R07090384-005E	Sample Duplicate			Run: SUB-C90863			10/04/07 15:30		
Gross Gamma	1100	pCi/L	20				9.4	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/10/07

Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2347		
<b>Sample ID: R07090384-001D</b>	Sample Matrix Spike				Run: SUB-C91100				10/10/07 16:32
Radium 226	15	pCi/L	0.20	85	70	130			
<b>Sample ID: R07090384-001D</b>	Sample Matrix Spike Duplicate				Run: SUB-C91100				10/10/07 16:32
Radium 226	18	pCi/L	0.20	113	70	130	22	30.7	
<b>Sample ID: MB-RA226-2347</b>	Method Blank				Run: SUB-C91100				10/11/07 11:16
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2347</b>	Laboratory Control Sample				Run: SUB-C91100				10/11/07 11:16
Radium 226	16	pCi/L	0.20	129	70	130			
<b>Method: E903.0</b>							Batch: C_RA226-2384		
<b>Sample ID: C07100798-002AMS</b>	Sample Matrix Spike				Run: SUB-C92054				10/30/07 15:07
Radium 226	48	pCi/L	0.20	92	70	130			
- MS and MSD were inadvertently spiked at double the standard amount.									
<b>Sample ID: C07100798-002AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C92054				10/30/07 15:07
Radium 226	60	pCi/L	0.20	120	70	130	22	21	R
- MS and MSD were inadvertently spiked at double the standard amount.									
- The RPD for the spike 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-RA226-2384</b>	Method Blank				Run: SUB-C92054				10/30/07 16:33
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2384</b>	Laboratory Control Sample				Run: SUB-C92054				10/30/07 16:33
Radium 226	13	pCi/L	0.20	104	70	130			
<b>Method: E907.0</b>							Batch: C_R92301		
<b>Sample ID: LCS-R92301</b>	Laboratory Control Sample				Run: SUB-C92301				10/29/07 13:00
Thorium 230	5.20	pCi/L	0.20	88	70	130			
<b>Sample ID: C07100216-001EDUP</b>	Sample Duplicate				Run: SUB-C92301				10/29/07 13:00
Thorium 230	ND	pCi/L	0.20				0.0	30	
<b>Sample ID: C07100216-003EMS</b>	Sample Matrix Spike				Run: SUB-C92301				10/29/07 13:00
Thorium 230	52.4	pCi/L	0.20	93	70	130			
<b>Sample ID: MB-R92301</b>	Method Blank				Run: SUB-C92301				10/29/07 13:00
Thorium 230	ND	pCi/L	0.2						

### 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: 12/10/07  
Work Order: R07090384

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R92443		
Sample ID: LCS-R92443	Laboratory Control Sample				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	6	pCi/L	0.20	97	70	130			
Sample ID: C07100343-003EMS	Sample Matrix Spike				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	20	pCi/L	0.20	105	70	130			
Sample ID: C07100343-003EMSD	Sample Matrix Spike Duplicate				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	20	pCi/L	0.20	106	70	130	0.5	30	
Sample ID: MB-R92443	Method Blank				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	ND	pCi/L	0.2						
Method: E909.0M							Batch: C_R92396		
Sample ID: C07100216-002EDUP	Sample Duplicate				Run: SUB-C92396		10/25/07 11:25		
Lead 210	ND	pCi/L	1.0				0.0	30	
Sample ID: C07100214-001EMS	Sample Matrix Spike				Run: SUB-C92396		10/25/07 11:25		
Lead 210	480	pCi/L	1.0	118	70	130			
Sample ID: MB-R92396	Method Blank				Run: SUB-C92396		10/25/07 11:25		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R92396	Laboratory Control Sample				Run: SUB-C92396		10/25/07 11:25		
Lead 210	94	pCi/L	1.0	116	70	130			
Method: RMO-3008							Batch: C_R92111		
Sample ID: MB-R92111	Method Blank				Run: SUB-C92111		10/29/07 13:00		
Polonium 210	ND	pCi/L	1						
Sample ID: LCS-R92111	Laboratory Control Sample				Run: SUB-C92111		10/29/07 13:00		
Polonium 210	17	pCi/L	1.0	78	70	130			
Sample ID: C07100214-005EMS	Sample Matrix Spike				Run: SUB-C92111		10/29/07 13:00		
Polonium 210	170	pCi/L	1.0	77	70	130			
Sample ID: C07100214-005EMSD	Sample Matrix Spike Duplicate				Run: SUB-C92111		10/29/07 13:00		
Polonium 210	170	pCi/L	1.0	77	70	130	0.3	30	

### 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. Refer to corresponding notes on reverse side.

Company Name: <b>RESPEC</b>		Project Name, PWS #, Permit #, Etc.: <b>PowerTech Dewey-Burdock</b>	
Report Mail Address:		Contact Name, Phone, Fax, E-mail: <b>Eric Kiantz</b>	
Invoice Address:		Purchase Order #: <b>394-6565</b>	
Report Required For: <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____		Notify ELI prior to RUSH sample submittal for additional charges and scheduling	
Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____		Comments:	
EDD/EDT <input type="checkbox"/> Format _____		Receipt Temp <b>4.6 °C</b> Cooler ID(s) <b>on ice</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Custody Seal Y N Intact Y N Signature Y N Match	
Collection Date		Lab ID	
Collection Time			
1 DewBurd GW 18 (Rush) 9/26/07 10:39		Groundwater - Bottle Set	
2 DewBurd CHRO 9/26/07 12:01		Surface water Bottle Set CHRO	
3 DewBurd BUCO 9/26/07 12:46		Surface water Bottle Set BUCO	
4 DewBurd GW 02 (Rush) 9/26/07 14:33		Groundwater Bottle Set GW02	
5 DewBurd GW 08 (Rush) 9/26/07 14:33		Groundwater Bottle Set GW08	
6 DewBurd GW 631 9/26/07 16:40		Groundwater Bottle Set GW631	
7 DewBurd GW 635 9/26/07 18:08		Groundwater Bottle Set GW635	
8 DewBurd Sub 08 9/26/07 18:40		Surface water Bottle Set Sub 08	
9 DewBurd CHRO 9/26/07 18:30		Surface water	
10			
Relinquished by: <b>G22 KRS</b>		Shipped by: <b>Eric Kiantz</b>	
Date/Time: <b>9/27/07 9:54</b>		Date/Time: <b>9/27/07 9:54</b>	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Custody Record MUST be Signed		LABORATORY USE ONLY	
Sample Disposal: _____		Sample Type: _____ # of fractions	
Return to client: _____			

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, & links.



## ANALYTICAL SUMMARY REPORT

December 19, 2007

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

Workorder No.: R07090385      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 5 samples from RESPEC Inc on 9/28/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07090385-001	DewBurd GW619	09/27/07 17:45	09/28/07	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Anions by Ion Chromatography Uranium, Suspended Nitrogen, Ammonia pH Digestion, Total Metals Dissolved Filtration Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Lead 210, Total Polonium 210, Dissolved Polonium 210, Suspended Polonium 210, Total Radium 226, Dissolved Radium 226, Suspended Radium 226, Total Thorium, Isotopic Thorium, Suspended Isotopic Thorium, Isotopic Solids, Total Dissolved
R07090385-002	Dew Burd GW 16	09/27/07 19:18	09/28/07	Aqueous	Same As Above
R07090385-003	Dew Burd GW 4002A	09/27/07 14:35	09/28/07	Aqueous	Same As Above
R07090385-004	Dew Burd GW 4002B	09/27/07 14:39	09/28/07	Aqueous	Same As Above
R07090385-005	Dew Burd GW 13	09/27/07 15:45	09/28/07	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or Rapid\_City@energylab.com.

Report Approved By: 





Date: 19-Dec-07

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R07090385

## 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, and
- Suspended radiochemical data was determined from the subtraction of the dissolved parameter from the total parameter.

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).



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-001  
Client Sample ID: DewBurd GW619

Report Date: 12/19/07  
Collection Date: 09/27/07 17:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	140	mg/L		5		1	A2320 B	10/04/07 16:58/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:58/sn
Bicarbonate as HCO3	171	mg/L		5		1	A2320 B	10/04/07 16:58/sn
Calcium	304	mg/L	D	1		10	E200.7	10/09/07 19:16/eli-c
Magnesium	106	mg/L		0.5		10	E200.7	10/09/07 19:16/eli-c
Potassium	16.9	mg/L		0.5		2	E200.7	10/09/07 21:51/eli-c
Silica	7.5	mg/L		0.5		2	E200.7	10/09/07 21:51/eli-c
Sodium	80	mg/L	D	8		10	E200.7	10/09/07 19:16/eli-c
Chloride	9	mg/L		1		1	E300.0	09/28/07 23:06/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	09/28/07 23:06/jmh
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:34/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:06/jmh
Sulfate	1440	mg/L	D	10		20	E300.0	10/02/07 03:30/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2270	umhos/cm		5		1	A2510 B	10/02/07 18:39/jmh
pH	7.03	s.u.		0.01		1	A4500-H B	10/02/07 18:39/jmh
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 02:10/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 02:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 02:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 21:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 02:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 02:10/eli-c
Copper	0.08	mg/L		0.01		1	E200.8	10/09/07 02:10/eli-c
Iron	1.95	mg/L		0.03		2	E200.7	10/09/07 21:51/eli-c
Lead	0.008	mg/L		0.001		1	E200.8	10/09/07 02:10/eli-c
Manganese	1.51	mg/L		0.01		1	E200.8	10/09/07 02:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 02:10/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 02:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 02:10/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 02:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 02:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/09/07 02:10/eli-c
Uranium	0.0020	mg/L		0.0003		1	E200.8	10/09/07 02:10/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-001  
Client Sample ID: DewBurd GW619

Report Date: 12/19/07  
Collection Date: 09/27/07 17:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 02:10/eli-c
Zinc	0.11	mg/L		0.01		1	E200.8	10/09/07 02:10/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 17:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	367	pCi/L		1.0		1	E900.0	10/14/07 01:13/eli-c
Gross Alpha precision (±)	5.7	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Beta	117	pCi/L		2.0		1	E900.0	10/14/07 01:13/eli-c
Gross Beta precision (±)	5.0	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	120	pCi/L		0.2		1	E903.0	10/16/07 15:03/eli-c
Radium 226 precision (±)	3.9	pCi/L				1	E903.0	10/16/07 15:03/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	120	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	36	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 14:12/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 14:12/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 14:12/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	120	pCi/L		0.2		1	E903.0	10/30/07 15:07/eli-c
Radium 226 precision (±)	10.9	pCi/L				1	E903.0	10/30/07 15:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.34	%				1	A1030 E	12/11/07 16:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-001  
Client Sample ID: DewBurd GW619

Report Date: 12/19/07  
Collection Date: 09/27/07 17:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Anions	28.7	meq/L				1	A1030 E	12/11/07 16:15/eli-c
Cations	27.9	meq/L				1	A1030 E	12/11/07 16:15/eli-c
Solids, Total Dissolved Calculated	1830	mg/L				1	A1030 E	12/11/07 16:15/eli-c
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	12/11/07 16:15/eli-c
- Ion balance achieved using Sulfate from E200.7.								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-002  
Client Sample ID: Dew Burd GW 16

Report Date: 12/19/07  
Collection Date: 09/27/07 19:18  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	158	mg/L		5		1	A2320 B	10/04/07 17:01/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:01/sn
Bicarbonate as HCO3	193	mg/L		5		1	A2320 B	10/04/07 17:01/sn
Calcium	108	mg/L	D	1		10	E200.7	10/09/07 19:46/eli-c
Magnesium	40.7	mg/L		0.5		10	E200.7	10/09/07 19:46/eli-c
Potassium	16.6	mg/L		0.5		2	E200.7	10/09/07 21:54/eli-c
Silica	7.3	mg/L		0.5		2	E200.7	10/09/07 21:54/eli-c
Sodium	44	mg/L	D	8		10	E200.7	10/09/07 19:46/eli-c
Chloride	5	mg/L		1		1	E300.0	09/28/07 23:22/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/28/07 23:22/jmh
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:35/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:22/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:22/jmh
Sulfate	448	mg/L	D	7		10	E300.0	10/02/07 04:20/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1080	umhos/cm		5		1	A2510 B	10/02/07 18:40/jmh
pH	7.43	s.u.		0.01		1	A4500-H B	10/02/07 18:41/jmh
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 02:50/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/09/07 02:50/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 02:50/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 21:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 02:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 02:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 02:50/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 21:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 02:50/eli-c
Manganese	0.16	mg/L		0.01		1	E200.8	10/09/07 02:50/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 02:50/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 02:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 02:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 02:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 02:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/09/07 02:50/eli-c
Uranium	0.0021	mg/L		0.0003		1	E200.8	10/09/07 02:50/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-002  
Client Sample ID: Dew Burd GW 16

Report Date: 12/19/07  
Collection Date: 09/27/07 19:18  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 02:50/eli-c
Zinc	0.04	mg/L		0.01		1	E200.8	10/09/07 02:50/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 17:18/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	62.7	pCi/L		1.0		1	E900.0	10/14/07 01:13/eli-c
Gross Alpha precision (±)	2.1	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Beta	33.1	pCi/L		2.0		1	E900.0	10/14/07 01:13/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	26.2	pCi/L		0.2		1	E903.0	10/16/07 15:03/eli-c
Radium 226 precision (±)	1.9	pCi/L				1	E903.0	10/16/07 15:03/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 14:12/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 14:12/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 14:12/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	17.4	pCi/L		0.2		1	E903.0	10/30/07 15:07/eli-c
Radium 226 precision (±)	4.2	pCi/L				1	E903.0	10/30/07 15:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 11:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.85	%				1	A1030 E	12/11/07 16:20/eli-c
Anions	11.8	meq/L				1	A1030 E	12/11/07 16:20/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R07090385-002

Client Sample ID: Dew Burd GW 16

Report Date: 12/19/07

Collection Date: 09/27/07 19:18

Date Received: 09/28/07

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	11.1	meq/L				1	A1030 E	12/11/07 16:20/eli-c
Solids, Total Dissolved Calculated	715	mg/L				1	A1030 E	12/11/07 16:20/eli-c
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	12/11/07 16:20/eli-c

- Ion balance achieved using Sulfate from E200.7.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-003  
Client Sample ID: Dew Burd GW 4002A

Report Date: 12/19/07  
Collection Date: 09/27/07 14:35  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	140	mg/L		5		1	A2320 B	10/04/07 17:14/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:14/sn
Bicarbonate as HCO3	171	mg/L		5		1	A2320 B	10/04/07 17:14/sn
Calcium	36.8	mg/L		0.5		2	E200.7	10/09/07 21:57/eli-c
Magnesium	11.9	mg/L		0.5		2	E200.7	10/09/07 21:57/eli-c
Potassium	7.2	mg/L		0.5		2	E200.7	10/09/07 21:57/eli-c
Silica	6.6	mg/L		0.5		2	E200.7	10/09/07 21:57/eli-c
Sodium	170	mg/L	D	2		2	E200.7	10/09/07 21:57/eli-c
Chloride	7	mg/L		1		1	E300.0	09/28/07 23:39/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	09/28/07 23:39/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:37/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:39/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:39/jmh
Sulfate	454	mg/L	D	7		10	E300.0	10/02/07 04:36/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1190	umhos/cm		5		1	A2510 B	10/02/07 18:42/jmh
pH	7.81	s.u.		0.01		1	A4500-H B	10/02/07 18:42/jmh
Solids, Total Dissolved TDS @ 180 C	820	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 02:57/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 02:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 02:57/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 21:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 02:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 02:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 02:57/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 21:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 02:57/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/09/07 02:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 02:57/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 02:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 02:57/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 02:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 02:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/09/07 02:57/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	10/09/07 02:57/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-003  
Client Sample ID: Dew Burd GW 4002A

Report Date: 12/19/07  
Collection Date: 09/27/07 14:35  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 02:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 02:57/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 17:25/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	120	pCi/L		1.0		1	E900.0	10/14/07 01:13/eli-c
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Beta	45.5	pCi/L		2.0		1	E900.0	10/14/07 01:13/eli-c
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Lead 210	2.0	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	63.6	pCi/L		0.2		1	E903.0	10/16/07 15:03/eli-c
Radium 226 precision (±)	2.9	pCi/L				1	E903.0	10/16/07 15:03/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	120	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	9.7	pCi/L		1.0		1	E909.0M	12/12/07 14:12/eli-c
Lead 210 precision (±)	8.6	pCi/L				1	E909.0M	12/12/07 14:12/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 14:12/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 14:12/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	12	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Lead 210 precision (±)	8.5	pCi/L				1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	62.7	pCi/L		0.2		1	E903.0	10/30/07 15:07/eli-c
Radium 226 precision (±)	8.0	pCi/L				1	E903.0	10/30/07 15:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 11:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07090385-003  
**Client Sample ID:** Dew Burd GW 4002A

**Report Date:** 12/19/07  
**Collection Date:** 09/27/07 14:35  
**Date Received:** 09/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-4.10	%				1	A1030 E	12/11/07 16:22/eli-c
Anions	11.3	meq/L				1	A1030 E	12/11/07 16:22/eli-c
Cations	10.4	meq/L				1	A1030 E	12/11/07 16:22/eli-c
Solids, Total Dissolved Calculated	716	mg/L				1	A1030 E	12/11/07 16:22/eli-c
TDS Balance (0.80 - 1.20)	1.15	dec. %				1	A1030 E	12/11/07 16:22/eli-c
- Ion balance achieved using Sulfate from E200.7.								

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R07090385-004

Client Sample ID: Dew Burd GW 4002B

Report Date: 12/19/07

Collection Date: 09/27/07 14:39

Date Received: 09/28/07

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	10/04/07 17:18/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:18/sn
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	10/04/07 17:18/sn
Calcium	38.7	mg/L		0.5		2	E200.7	10/09/07 22:01/eli-c
Magnesium	12.4	mg/L		0.5		2	E200.7	10/09/07 22:01/eli-c
Potassium	7.3	mg/L		0.5		2	E200.7	10/09/07 22:01/eli-c
Silica	6.9	mg/L		0.5		2	E200.7	10/09/07 22:01/eli-c
Sodium	182	mg/L	D	2		2	E200.7	10/09/07 22:01/eli-c
Chloride	7	mg/L		1		1	E300.0	09/28/07 23:55/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	09/28/07 23:55/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:38/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:55/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/28/07 23:55/jmh
Sulfate	453	mg/L	D	7		10	E300.0	10/02/07 04:53/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1210	umhos/cm		5		1	A2510 B	10/02/07 18:43/jmh
pH	7.85	s.u.		0.01		1	A4500-H B	10/02/07 18:44/jmh
Solids, Total Dissolved TDS @ 180 C	800	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 03:04/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 03:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 03:04/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 03:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 03:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 03:04/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 03:04/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	10/09/07 03:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 03:04/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 03:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 03:04/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 03:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 03:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/09/07 03:04/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	10/09/07 03:04/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-004  
Client Sample ID: Dew Burd GW 4002B

Report Date: 12/19/07  
Collection Date: 09/27/07 14:39  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 03:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 03:04/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 17:32/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	141	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	49.6	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	60.0	pCi/L		0.2		1	E903.0	10/16/07 15:03/eli-c
Radium 226 precision (±)	2.8	pCi/L				1	E903.0	10/16/07 15:03/eli-c
Thorium 230	0.6	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 14:12/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	19.4	pCi/L		0.2		1	E903.0	12/12/07 14:12/eli-c
Radium 226 precision (±)	9.2	pCi/L				1	E903.0	12/12/07 14:12/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 14:12/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	79.4	pCi/L		0.2		1	E903.0	10/30/07 15:07/eli-c
Radium 226 precision (±)	8.8	pCi/L				1	E903.0	10/30/07 15:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 11:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.215	%				1	A1030 E	12/11/07 16:23/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R07090385-004

**Client Sample ID:** Dew Burd GW 4002B

**Report Date:** 12/19/07

**Collection Date:** 09/27/07 14:39

**Date Received:** 09/28/07

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Anions	11.0	meq/L				1	A1030 E	12/11/07 16:23/eli-c
Cations	11.1	meq/L				1	A1030 E	12/11/07 16:23/eli-c
Solids, Total Dissolved Calculated	717	mg/L				1	A1030 E	12/11/07 16:23/eli-c
TDS Balance (0.80 - 1.20)	1.12	dec. %				1	A1030 E	12/11/07 16:23/eli-c
- Ion balance achieved using Sulfate from E200.7.								

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-005  
Client Sample ID: Dew Burd GW 13

Report Date: 12/19/07  
Collection Date: 09/27/07 15:45  
Date Received: 09/28/07  
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	10/04/07 17:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:19/sn
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	10/04/07 17:19/sn
Calcium	57.4	mg/L		0.5		2	E200.7	10/09/07 22:04/eli-c
Magnesium	21.0	mg/L		0.5		2	E200.7	10/09/07 22:04/eli-c
Potassium	11.3	mg/L		0.5		2	E200.7	10/09/07 22:04/eli-c
Silica	7.7	mg/L		0.5		2	E200.7	10/09/07 22:04/eli-c
Sodium	163	mg/L	D	2		2	E200.7	10/09/07 22:04/eli-c
Chloride	11	mg/L		1		1	E300.0	09/29/07 00:12/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/29/07 00:12/jmh
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	09/28/07 17:39/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 00:12/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 00:12/jmh
Sulfate	488	mg/L	D	7		10	E300.0	10/02/07 05:09/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1280	umhos/cm		5		1	A2510 B	10/02/07 18:45/jmh
pH	7.83	s.u.		0.01		1	A4500-H B	10/02/07 18:45/jmh
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	10/02/07 13:05/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 03:10/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 03:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 03:10/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 03:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 03:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 03:10/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 03:10/eli-c
Manganese	0.10	mg/L		0.01		1	E200.8	10/09/07 03:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 03:10/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 03:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 03:10/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 03:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 03:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/09/07 03:10/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/09/07 03:10/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090385-005  
Client Sample ID: Dew Burd GW 13

Report Date: 12/19/07  
Collection Date: 09/27/07 15:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 03:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 03:10/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 17:38/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.9	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	1.2	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	9.6	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	1.8	pCi/L		0.2		1	E903.0	10/16/07 15:03/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	10/16/07 15:03/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	10/29/07 15:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 14:12/eli-c
Polonium 210	5.2	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Polonium 210 precision (±)	4.6	pCi/L				1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 14:12/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 14:12/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	5.2	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Polonium 210 precision (±)	4.6	pCi/L				1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	1.1	pCi/L		0.2		1	E903.0	10/30/07 15:07/eli-c
Radium 226 precision (±)	1.1	pCi/L				1	E903.0	10/30/07 15:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 11:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07090385-005  
**Client Sample ID:** Dew Burd GW 13

**Report Date:** 12/19/07  
**Collection Date:** 09/27/07 15:45  
**Date Received:** 09/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-1.26	%				1	A1030 E	12/11/07 16:25/eli-c
Anions	12.3	meq/L				1	A1030 E	12/11/07 16:25/eli-c
Cations	12.0	meq/L				1	A1030 E	12/11/07 16:25/eli-c
Solids, Total Dissolved Calculated	781	mg/L				1	A1030 E	12/11/07 16:25/eli-c
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	12/11/07 16:25/eli-c

- Ion balance achieved using Sulfate from E200.7.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 071004A-ALK-SEL-W							
Sample ID: MBLK1_071004A	Method Blank				Run: PH_COND1-R_071004A		10/04/07 15:38		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_071004A	Laboratory Control Sample				Run: PH_COND1-R_071004A		10/04/07 15:44		
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: R07090385-002AMS	Sample Matrix Spike				Run: PH_COND1-R_071004A		10/04/07 17:05		
Alkalinity, Total as CaCO <sub>3</sub>	272	mg/L	5.0	108	80	120			
Sample ID: R07090385-003ADUP	Sample Duplicate				Run: PH_COND1-R_071004A		10/04/07 17:16		
Alkalinity, Total as CaCO <sub>3</sub>	142	mg/L	5.0				1.4	10	
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	173	mg/L	5.0				1.4	10	
Method: A2510 B		Batch: 071002_1_COND-PROBE-W							
Sample ID: LCS1-1_071002	Laboratory Control Sample				Run: PH_COND2-R_071002A		10/02/07 18:11		
Conductivity @ 25 C	149	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_071002	Laboratory Control Sample				Run: PH_COND2-R_071002A		10/02/07 18:12		
Conductivity @ 25 C	4920	umhos/cm	5.0	98	90	110			
Sample ID: LCS_COND-1_071002	Laboratory Control Sample				Run: PH_COND2-R_071002A		10/02/07 18:13		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071002	Method Blank				Run: PH_COND2-R_071002A		10/02/07 18:13		
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 071002A-SLDS-TDS-W							
Sample ID: MBLK1_071002A	Method Blank				Run: BAL-4-R_071002A		10/02/07 13:16		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_071002A	Laboratory Control Sample				Run: BAL-4-R_071002A		10/02/07 13:16		
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	99	90	110			
Sample ID: R07090389-004BMS	Sample Matrix Spike				Run: BAL-4-R_071002A		10/02/07 13:05		
Solids, Total Dissolved TDS @ 180 C	430	mg/L	5.0	106	80	120			
Sample ID: R07090389-004BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_071002A		10/02/07 13:06		
Solids, Total Dissolved TDS @ 180 C	420	mg/L	5.0	99	80	120	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: 12/19/07  
Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 071002_1_PH-W		
Sample ID: LCS_pH-1_071002	Laboratory Control Sample				Run: PH_COND2-R_071002A		10/02/07 18:08		
pH	6.85	s.u.	0.010	100	98.55	101.45			
Method: A4500-NH3 G							Batch: A2007-09-28_2_NH3_01		
Sample ID: MBLK-1	Method Blank				Run: TECHAA2-R_070928A		09/28/07 14:57		
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_070928A		09/28/07 15:00		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_070928A		09/28/07 15:01		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	107	90	110			
Sample ID: R07090384-002BMS	Sample Matrix Spike				Run: TECHAA2-R_070928A		09/28/07 17:30		
Nitrogen, Ammonia as N	0.33	mg/L	0.10	115	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: 12/19/07  
Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R91017		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C91017			10/09/07 14:39		
Silica	1.9	mg/L	0.10	97	85	125			
Boron	1.9	mg/L	0.10	96	85	125			
Iron	1.9	mg/L	0.030	96	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C91017			10/09/07 14:42		
Calcium	23	mg/L	0.50	90	85	125			
Magnesium	23	mg/L	0.50	92	85	125			
Potassium	25	mg/L	0.50	101	85	125			
Sodium	23	mg/L	0.76	90	85	125			
Sample ID: R07090385-001C	Sample Matrix Spike			Run: SUB-C91017			10/09/07 19:19		
Boron	9.11	mg/L	0.10	91	70	130			
Calcium	686	mg/L	1.0	76	70	130			
Iron	10.9	mg/L	0.046	89	70	130			
Magnesium	498	mg/L	0.50	79	70	130			
Potassium	1120	mg/L	0.50	92	70	130			
Silica	16.3	mg/L	0.20	84	70	130			
Sodium	489	mg/L	7.6	82	70	130			
Sample ID: R07090385-001C	Sample Matrix Spike Duplicate			Run: SUB-C91017			10/09/07 19:23		
Boron	9.33	mg/L	0.10	93	70	130	2.4	20	
Calcium	701	mg/L	1.0	79	70	130	2.2	20	
Iron	11.1	mg/L	0.046	91	70	130	1.5	20	
Magnesium	506	mg/L	0.50	80	70	130	1.5	20	
Potassium	1130	mg/L	0.50	92	70	130	0.3	20	
Silica	16.9	mg/L	0.20	89	70	130	3.5	20	
Sodium	488	mg/L	7.6	82	70	130	0.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/19/07

Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_16384		
Sample ID: MB-16384	Method Blank				Run: SUB-C91005		10/09/07 19:47		
Mercury	ND	mg/L	6E-06						
Uranium	ND	mg/L	3E-05						
Sample ID: LCS1-16384	Laboratory Control Sample				Run: SUB-C91005		10/09/07 19:53		
Uranium	0.019	mg/L	0.00030	95	80	120			
Sample ID: LCS-16384	Laboratory Control Sample				Run: SUB-C91005		10/09/07 20:00		
Uranium	0.49	mg/L	0.00032	98	85	115			
Sample ID: C07100330-003C MS4	Post Digestion Spike				Run: SUB-C91005		10/09/07 21:01		
Mercury	0.0055	mg/L	0.0010	79	70	130			
Uranium	0.073	mg/L	0.00030	99	70	130			
Sample ID: C07100330-003C MSD4	Post Digestion Spike Duplicate				Run: SUB-C91005		10/09/07 21:08		
Mercury	0.0055	mg/L	0.0010	78	70	130	1.1	20	
Uranium	0.072	mg/L	0.00030	98	70	130	1.0	20	
Method: E200.8							Batch: C_R90942		
Sample ID: LRB	Method Blank				Run: SUB-C90942		10/08/07 09:59		
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C90942		10/08/07 10:03		
Uranium	0.0522	mg/L	0.00030	104	85	115			
Sample ID: C07090701-001AMS	Sample Matrix Spike				Run: SUB-C90942		10/08/07 10:16		
Uranium	0.12	mg/L	0.0010	100	70	130			
Sample ID: C07090701-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C90942		10/08/07 10:20		
Uranium	0.12	mg/L	0.0010	100	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: 12/19/07

Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R31616		
Sample ID: LFB0709285802-3	Laboratory Fortified Blank				Run: DIONEX_070928A		09/28/07 21:11		
Chloride	4.70	mg/L	0.50	94	90	110			
Fluoride	2.01	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.39	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sample ID: LFB0709285802-4	Laboratory Fortified Blank				Run: DIONEX_070928A		09/28/07 21:27		
Nitrogen, Nitrate as N	2.68	mg/L	0.10	107	90	110			
Sample ID: R07100002-001AMS	Sample Matrix Spike				Run: DIONEX_070928A		09/29/07 20:57		
Chloride	97.4	mg/L	0.50		80	120			A
Fluoride	2.27	mg/L	0.10	91	80	120			
Nitrogen, Nitrate as N	2.23	mg/L	0.10	89	80	120			
Nitrogen, Nitrite as N	3.66	mg/L	0.10	146	80	120			S
Sample ID: R07100002-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_070928A		09/29/07 21:13		
Chloride	96.9	mg/L	0.50		80	120	0.4	10	A
Fluoride	2.24	mg/L	0.10	89	80	120	1.3	10	
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	80	120	3.5	10	
Nitrogen, Nitrite as N	3.85	mg/L	0.10	154	80	120	5.1	10	S
Method: E300.0							Batch: R31638		
Sample ID: LFB0710013150-3	Laboratory Fortified Blank				Run: DIONEX_071001A		10/01/07 20:24		
Sulfate	14.6	mg/L	1.0	97	90	110			
Sample ID: LFB0710013150-4	Laboratory Fortified Blank				Run: DIONEX_071001A		10/01/07 20:40		
Sulfate	14.3	mg/L	1.0	95	90	110			
Sample ID: R07090385-001AMS	Sample Matrix Spike				Run: DIONEX_071001A		10/02/07 03:47		
Sulfate	1610	mg/L	14		80	120			A
Sample ID: R07090385-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_071001A		10/02/07 04:03		
Sulfate	1590	mg/L	14		80	120	1.2	10	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: 12/19/07

Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0331		
Sample ID: RB-GrAB-0331	Method Blank				Run: SUB-C91233			10/13/07 02:39	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0331	Laboratory Control Sample				Run: SUB-C91233			10/13/07 02:39	
Gross Alpha	300	pCi/L	1.0	111	70	130			
Sample ID: C07091288-002AMS	Sample Matrix Spike				Run: SUB-C91233			10/13/07 02:39	
Gross Alpha	200	pCi/L	1.0	86	70	130			
Sample ID: C07091288-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C91233			10/13/07 02:39	
Gross Alpha	200	pCi/L	1.0	82	70	130	4.1	13.7	
Sample ID: Cs137-GrAB-0331	Laboratory Control Sample				Run: SUB-C91233			10/13/07 02:39	
Gross Beta	90	pCi/L	2.0	93	70	130			
Sample ID: C07091288-002AMS	Sample Matrix Spike				Run: SUB-C91233			10/13/07 02:39	
Gross Beta	90	pCi/L	2.0	90	70	130			
Sample ID: C07091288-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C91233			10/13/07 02:39	
Gross Beta	90	pCi/L	2.0	90	70	130	0.5	15.5	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/19/07

Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R91554		
<b>Sample ID: LCS-R91554</b>	Laboratory Control Sample			Run: SUB-C91554			10/18/07 10:39		
Americium 241	760	pCi/L	20	93	70	130			
Cesium 137	1200	pCi/L	20	110	70	130			
Potassium 40	7200	pCi/L	20	108	70	130			
<b>Sample ID: MB-R91554</b>	Method Blank			Run: SUB-C91554			10/18/07 10:39		
Actinium 228	ND	pCi/L	20						
Americium 241	ND	pCi/L	20						
Barium 133	ND	pCi/L	20						
Bismuth 212	ND	pCi/L	20						
Bismuth 214	ND	pCi/L	20						
Cesium 134	ND	pCi/L	20						
Cesium 137	ND	pCi/L	20						
Cobalt 60	ND	pCi/L	20						
Iodine 125	ND	pCi/L	20						
Iodine 131	ND	pCi/L	20						
Lead 212	ND	pCi/L	20						
Lead 214	ND	pCi/L	20						
Manganese 54	ND	pCi/L	20						
Potassium 40	ND	pCi/L	20						
Radium 223	ND	pCi/L	20						
Radium 224	ND	pCi/L	20						
Thallium 208	ND	pCi/L	20						
Thorium 228	ND	pCi/L	20						
Thorium 234	ND	pCi/L	20						
Zinc 65	ND	pCi/L	20						
Radium 228	ND	pCi/L	20						
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R07100002-002E</b>	Sample Duplicate			Run: SUB-C91554			10/18/07 10:39		
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2361		
<b>Sample ID: R07090385-005E</b>	Sample Matrix Spike				Run: SUB-C91313			10/16/07 15:03	
Radium 226	29	pCi/L	0.20	129	70	130			
<b>Sample ID: R07090385-005E</b>	Sample Matrix Spike Duplicate				Run: SUB-C91313			10/16/07 15:03	
Radium 226	29	pCi/L	0.20	128	70	130	0.7	27.9	
<b>Sample ID: MB-RA226-2361</b>	Method Blank				Run: SUB-C91313			10/16/07 15:03	
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2361</b>	Laboratory Control Sample				Run: SUB-C91313			10/16/07 15:03	
Radium 226	16	pCi/L	0.20	127	70	130			
<b>Method: E903.0</b>							Batch: C_RA226-2384		
<b>Sample ID: C07100798-002AMS</b>	Sample Matrix Spike				Run: SUB-C92054			10/30/07 15:07	
Radium 226	48	pCi/L	0.20	92	70	130			
- MS and MSD were inadvertently spiked at double the standard amount.									
<b>Sample ID: C07100798-002AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C92054			10/30/07 15:07	
Radium 226	60	pCi/L	0.20	120	70	130	22	21	R
- MS and MSD were inadvertently spiked at double the standard amount.									
- The RPD for the spike 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-RA226-2384</b>	Method Blank				Run: SUB-C92054			10/30/07 16:33	
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2384</b>	Laboratory Control Sample				Run: SUB-C92054			10/30/07 16:33	
Radium 226	13	pCi/L	0.20	104	70	130			
<b>Method: E907.0</b>							Batch: C_R92301		
<b>Sample ID: LCS-R92301</b>	Laboratory Control Sample				Run: SUB-C92301			10/29/07 11:00	
Thorium 230	5.20	pCi/L	0.20	88	70	130			
<b>Sample ID: C07100216-001EDUP</b>	Sample Duplicate				Run: SUB-C92301			10/29/07 11:00	
Thorium 230	ND	pCi/L	0.20				0.0	30	
<b>Sample ID: C07100216-003EMS</b>	Sample Matrix Spike				Run: SUB-C92301			10/29/07 11:00	
Thorium 230	52.4	pCi/L	0.20	93	70	130			
<b>Sample ID: MB-R92301</b>	Method Blank				Run: SUB-C92301			10/29/07 11:00	
Thorium 230	ND	pCi/L	0.2						

### 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: 12/19/07  
Work Order: R07090385

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_R92443		
<b>Sample ID: LCS-R92443</b>	Laboratory Control Sample				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	5.7	pCi/L	0.20	97	70	130			
<b>Sample ID: R07090385-003E</b>	Sample Matrix Spike				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	21	pCi/L	0.20	105	70	130			
<b>Sample ID: R07090385-003E</b>	Sample Matrix Spike Duplicate				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	21	pCi/L	0.20	106	70	130	0.5	30	
<b>Sample ID: MB-R92443</b>	Method Blank				Run: SUB-C92443		10/29/07 15:00		
Thorium 230	ND	pCi/L	0.2						
<b>Method: E909.0M</b>							Batch: C_R92528		
<b>Sample ID: R07090385-001E</b>	Sample Matrix Spike				Run: SUB-C92528		10/26/07 09:00		
Lead 210	340	pCi/L	1.0	84	70	130			
<b>Sample ID: R07090385-001E</b>	Sample Matrix Spike Duplicate				Run: SUB-C92528		10/26/07 09:00		
Lead 210	340	pCi/L	1.0	83	70	130	0.3	30	
<b>Sample ID: MB-R92528</b>	Method Blank				Run: SUB-C92528		10/26/07 09:00		
Lead 210	ND	pCi/L	1						
<b>Sample ID: LCS-R92528</b>	Laboratory Control Sample				Run: SUB-C92528		10/26/07 09:00		
Lead 210	66	pCi/L	1.0	82	70	130			
<b>Method: RMO-3008</b>							Batch: C_R92119		
<b>Sample ID: MB-R92119</b>	Method Blank				Run: SUB-C92119		10/30/07 14:00		
Polonium 210	ND	pCi/L	1						
<b>Sample ID: LCS-R92119</b>	Laboratory Control Sample				Run: SUB-C92119		10/30/07 14:00		
Polonium 210	19	pCi/L	1.0	83	70	130			
<b>Sample ID: R07090385-005E</b>	Sample Matrix Spike				Run: SUB-C92119		10/30/07 14:00		
Polonium 210	89	pCi/L	1.0	80	70	130			
<b>Sample ID: R07090385-005E</b>	Sample Matrix Spike Duplicate				Run: SUB-C92119		10/30/07 14:00		
Polonium 210	87	pCi/L	1.0	78	70	130	2.5	30	

### 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 \_\_\_\_ of \_\_\_\_

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <b>RESPEC</b>		Project Name, PWS #, Permit #, Etc.: <b>Powers Ten Dewy Burdock</b>	
Report Mail Address:		Contact Name, Phone, Fax, E-mail: <b>Cory Foreman</b>	
Invoice Address:		Invoice Contact & Phone #:	
Report Required For: POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____ EDD/EDT <input type="checkbox"/> Format _____		Purchase Order #: _____	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		ANALYSIS REQUESTED	
Collection Date		Collection Time	
MATRIX		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other	
1 Dew Burd GW 619		9/27/07 17:45 W	
2 Dew Burd Sub 07		9/27/07 18:45 W	
3 Dew Burd Sub 02		9/27/07 16:45 W	
4 Dew Burd Sub 06		9/27/07 18:10 W	
5 Dew Burd GW 16		9/27/07 19:18 W	
6 Dew Burd GW 4002 A		9/27/07 14:35 W	
7 Dew Burd GW 4002 B		9/27/07 14:39 W	
8 Dew Burd GW 13		9/27/07 15:45 W	
9			
10			
Relinquished by: <b>Cory Foreman</b>		Date/Time: <b>9/28/07 (9:37)</b>	
Relinquished by:		Date/Time:	
Signed		Shipped by:	
Sample Disposal: Return to client: _____ Lab Disposal: _____		Received by: <b>Eric Krentz</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.		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: _____	
SEE ATTACHED		Normal Turnaround (TAT)	
RUSH Turnaround (TAT)		Purchase Order #: _____	
Receipt Temp on cooler ID(s) <b>6.8 °C</b>		ELI Quote #: _____	
Custody Seal Y N		Intact Y N	
Signature Y N		Match Y N	
Lab ID		Date/Time: <b>9/28/07 09:40</b>	
LABORATORY USE ONLY		LABORATORY USE ONLY	

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



## ANALYTICAL SUMMARY REPORT

December 19, 2007

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

Workorder No.: R07100002      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 10 samples from RESPEC Inc on 9/29/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07100002-001	DewBurd GW628	09/28/07 9:23	09/29/07	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Anions by Ion Chromatography Uranium, Suspended Nitrogen, Ammonia pH Digestion, Total Metals Dissolved Filtration Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Lead 210, Total Polonium 210, Dissolved Polonium 210, Suspended Polonium 210, Total Radium 226, Dissolved Radium 226, Suspended Radium 226, Total Thorium, Isotopic Thorium, Suspended Isotopic Thorium, Isotopic Solids, Total Dissolved
R07100002-002	DewBurd GW675	09/28/07 10:49	09/29/07	Aqueous	Same As Above
R07100002-003	DewBurd GW42	09/28/07 11:34	09/29/07	Aqueous	Same As Above
R07100002-004	DewBurd GW677	09/28/07 12:26	09/29/07	Aqueous	Same As Above
R07100002-005	DewBurd GW676	09/28/07 13:46	09/29/07	Aqueous	Same As Above
R07100002-006	DewBurd GW679	09/28/07 15:04	09/29/07	Aqueous	Same As Above
R07100002-007	DewBurd GW678	09/28/07 16:22	09/29/07	Aqueous	Same As Above
R07100002-008	DewBurd GW7002	09/28/07 17:48	09/29/07	Aqueous	Same As Above
R07100002-009	DewBurd GW7	09/28/07 17:28	09/29/07	Aqueous	Same As Above
R07100002-010	DewBurd GW650	09/28/07 19:00	09/29/07	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were



accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or [Rapid\\_City@energylab.com](mailto:Rapid_City@energylab.com).

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

A handwritten signature in black ink, appearing to read "Linda Larson", written over a horizontal line.

Linda Larson

Rapid City - Project Manager



Date: 19-Dec-07

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R07100002

## 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 and
- Suspended radiochemical data was determined from the subtraction of the dissolved parameter from the total parameter.

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).



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100002-001  
Client Sample ID: DewBurd GW628

Report Date: 12/19/07  
Collection Date: 09/28/07 09:23  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	134	mg/L		5		1	A2320 B	10/04/07 18:01/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:01/sn
Bicarbonate as HCO3	154	mg/L		5		1	A2320 B	10/04/07 18:01/sn
Calcium	24	mg/L	D	1		10	E200.7	10/09/07 19:59/eli-c
Magnesium	11.4	mg/L		0.5		10	E200.7	10/09/07 19:59/eli-c
Potassium	8.8	mg/L		0.5		2	E200.7	10/09/07 22:24/eli-c
Silica	4.5	mg/L		0.5		2	E200.7	10/09/07 22:24/eli-c
Sodium	435	mg/L	D	8		10	E200.7	10/09/07 19:59/eli-c
Chloride	82	mg/L		1		20	E300.0	10/02/07 07:37/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	09/29/07 20:40/jmh
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:24/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 20:40/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 20:40/jmh
Sulfate	1030	mg/L	D	10		20	E300.0	10/02/07 07:37/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2490	umhos/cm		5		1	A2510 B	10/02/07 19:00/jmh
pH	8.66	s.u.		0.01		1	A4500-H B	10/02/07 19:00/jmh
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	10/02/07 13:10/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 15:39/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/09/07 15:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 15:39/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	10/09/07 22:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 15:39/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 15:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 15:39/eli-c
Iron	0.11	mg/L		0.03		2	E200.7	10/09/07 22:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 15:39/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/09/07 15:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 15:39/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 15:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 15:39/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	10/09/07 15:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 15:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 14:42/eli-c
Uranium	0.0017	mg/L		0.0003		1	E200.8	10/17/07 12:21/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-001  
Client Sample ID: DewBurd GW628

Report Date: 12/19/07  
Collection Date: 09/28/07 09:23  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 15:39/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	10/09/07 15:39/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 19:48/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	29.9	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	2.1	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	14.0	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	7.4	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	6.4	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	4.7	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	6.4	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	4.7	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	6.8	pCi/L		0.2		1	E903.0	10/31/07 12:04/eli-c
Radium 226 precision (±)	2.2	pCi/L				1	E903.0	10/31/07 12:04/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	-4.90	%				1	A1030 E	12/11/07 17:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-001

**Client Sample ID:** DewBurd GW628

**Report Date:** 12/19/07

**Collection Date:** 09/28/07 09:23

**Date Received:** 09/29/07

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
Anions	23.5	meq/L				1	A1030 E	12/11/07 17:30/eli-c
Cations	21.3	meq/L				1	A1030 E	12/11/07 17:30/eli-c
Solids, Total Dissolved Calculated	1530	mg/L				1	A1030 E	12/11/07 17:30/eli-c
TDS Balance (0.80 - 1.20)	1.15	dec. %				1	A1030 E	12/11/07 17:30/eli-c

- Ion balance achieved using Sulfate from E200.7.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-002  
Client Sample ID: DewBurd GW675

Report Date: 12/19/07  
Collection Date: 09/28/07 10:49  
Date Received: 09/29/07  
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>	378	mg/L		5		1	A2320 B	10/04/07 18:03/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/04/07 18:03/sn
Bicarbonate as HCO <sub>3</sub>	461	mg/L		5		1	A2320 B	10/04/07 18:03/sn
Calcium	400	mg/L	D	1		10	E200.7	10/09/07 20:02/eli-c
Magnesium	339	mg/L		0.5		10	E200.7	10/09/07 20:02/eli-c
Potassium	28.0	mg/L		0.5		2	E200.7	10/09/07 22:27/eli-c
Silica	16.0	mg/L		0.5		2	E200.7	10/09/07 22:27/eli-c
Sodium	630	mg/L	D	8		10	E200.7	10/09/07 20:02/eli-c
Chloride	64	mg/L		1		5	E300.0	10/02/07 08:10/jmh
Fluoride	0.1	mg/L		0.1		1	E300.0	09/29/07 21:29/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/04/07 16:25/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 21:29/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 21:29/jmh
Sulfate	3600	mg/L	D	70		100	E300.0	10/02/07 07:53/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	6090	umhos/cm		5		1	A2510 B	10/02/07 19:02/jmh
pH	7.25	s.u.		0.01		1	A4500-H B	10/02/07 19:01/jmh
Solids, Total Dissolved TDS @ 180 C	5900	mg/L		5		1	A2540 C	10/02/07 13:11/sn
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:09/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/09/07 16:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:09/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	10/09/07 22:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:09/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:09/eli-c
Iron	0.13	mg/L		0.03		2	E200.7	10/09/07 22:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:09/eli-c
Manganese	2.89	mg/L		0.01		1	E200.8	10/09/07 16:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:09/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:09/eli-c
Selenium	0.003	mg/L		0.001		1	E200.8	10/09/07 16:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:09/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 14:50/eli-c
Uranium	0.0372	mg/L		0.0003		1	E200.8	10/17/07 12:15/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100002-002  
Client Sample ID: DewBurd GW675

Report Date: 12/19/07  
Collection Date: 09/28/07 10:49  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:09/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	10/09/07 16:09/eli-c
METALS - SUSPENDED								
Uranium	0.0013	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 19:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.8	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	5.5	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	18.5	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	13.7	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	14	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	ND	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	2.3	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	14	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	2.3	pCi/L		0.2		1	E903.0	10/31/07 12:04/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	10/31/07 12:04/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c

### DATA QUALITY

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-002  
**Client Sample ID:** DewBurd GW675

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 10:49  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
A/C Balance (± 5)	-4.99	%					1	A1030 E	12/11/07 17:31/eli-c
Anions	84.2	meq/L					1	A1030 E	12/11/07 17:31/eli-c
Cations	76.2	meq/L					1	A1030 E	12/11/07 17:31/eli-c
Solids, Total Dissolved Calculated	5280	mg/L					1	A1030 E	12/11/07 17:31/eli-c
TDS Balance (0.80 - 1.20)	1.11	dec. %					1	A1030 E	12/11/07 17:31/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-003  
Client Sample ID: DewBurd GW42

Report Date: 12/19/07  
Collection Date: 09/28/07 11:34  
Date Received: 09/29/07  
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	10/04/07 18:05/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	10/04/07 18:05/sn
Bicarbonate as HCO <sub>3</sub>	219	mg/L		5		1	A2320 B	10/04/07 18:05/sn
Calcium	30	mg/L	D	1		10	E200.7	10/09/07 20:06/eli-c
Magnesium	9.4	mg/L		0.5		10	E200.7	10/09/07 20:06/eli-c
Potassium	7.1	mg/L		0.5		2	E200.7	10/09/07 22:30/eli-c
Silica	7.1	mg/L		0.5		2	E200.7	10/09/07 22:30/eli-c
Sodium	242	mg/L	D	2		2	E200.7	10/09/07 22:30/eli-c
Chloride	12	mg/L		1		1	E300.0	09/29/07 21:46/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/29/07 21:46/jmh
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH <sub>3</sub> G	10/04/07 16:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 21:46/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 21:46/jmh
Sulfate	505	mg/L	D	7		10	E300.0	10/02/07 08:26/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1390	umhos/cm		5		1	A2510 B	10/02/07 19:03/jmh
pH	8.02	s.u.		0.01		1	A4500-H B	10/02/07 19:03/jmh
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	10/02/07 13:11/sn
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:17/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 16:17/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:17/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:17/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:17/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	10/09/07 16:17/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:17/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:17/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 16:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:17/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:17/eli-c
Uranium	0.0150	mg/L		0.0003		1	E200.8	10/11/07 15:17/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-003  
Client Sample ID: DewBurd GW42

Report Date: 12/19/07  
Collection Date: 09/28/07 11:34  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:17/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	10/09/07 16:17/eli-c
METALS - SUSPENDED								
Uranium	0.0029	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 20:03/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	371	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	5.4	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	122	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	3.8	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	96.5	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Radium 226 precision (±)	3.2	pCi/L				1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1300	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	280	pCi/L				1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	57	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Lead 210 precision (±)	7.7	pCi/L				1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	13	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	6.5	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	57	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Lead 210 precision (±)	7.7	pCi/L				1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	13	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	6.5	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	79.7	pCi/L		0.2		1	E903.0	10/31/07 12:04/eli-c
Radium 226 precision (±)	7.3	pCi/L				1	E903.0	10/31/07 12:04/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-003  
**Client Sample ID:** DewBurd GW42

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 11:34  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-1.32	%				1	A1030 E	12/11/07 17:38/eli-c
Anions	13.3	meq/L				1	A1030 E	12/11/07 17:38/eli-c
Cations	13.0	meq/L				1	A1030 E	12/11/07 17:38/eli-c
Solids, Total Dissolved Calculated	858	mg/L				1	A1030 E	12/11/07 17:38/eli-c
TDS Balance (0.80 - 1.20)	1.12	dec. %				1	A1030 E	12/11/07 17:38/eli-c

- Ion balance achieved using Sulfate from E200.7.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-004  
Client Sample ID: DewBurd GW677

Report Date: 12/19/07  
Collection Date: 09/28/07 12:26  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	532	mg/L		5		1	A2320 B	10/04/07 18:07/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:07/sn
Bicarbonate as HCO3	649	mg/L		5		1	A2320 B	10/04/07 18:07/sn
Calcium	420	mg/L	D	1		10	E200.7	10/09/07 20:09/eli-c
Magnesium	360	mg/L		0.5		10	E200.7	10/09/07 20:09/eli-c
Potassium	13.2	mg/L		0.5		2	E200.7	10/09/07 22:34/eli-c
Silica	10.2	mg/L		0.5		2	E200.7	10/09/07 22:34/eli-c
Sodium	1810	mg/L	D	8		10	E200.7	10/09/07 20:09/eli-c
Chloride	1720	mg/L	D	8		200	E300.0	10/02/07 08:42/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	09/29/07 22:02/jmh
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 22:02/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 22:02/jmh
Sulfate	4390	mg/L	D	100		200	E300.0	10/02/07 08:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	11000	umhos/cm		5		1	A2510 B	10/02/07 19:05/jmh
pH	7.09	s.u.		0.01		1	A4500-H B	10/02/07 19:05/jmh
Solids, Total Dissolved TDS @ 180 C	8900	mg/L		5		1	A2540 C	10/02/07 13:12/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:24/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/09/07 16:24/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:24/eli-c
Boron	0.9	mg/L		0.1		2	E200.7	10/09/07 22:34/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:24/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:24/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:34/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/11/07 15:25/eli-c
Manganese	2.89	mg/L		0.01		1	E200.8	10/09/07 16:24/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/11/07 15:25/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:24/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:24/eli-c
Selenium	0.003	mg/L		0.001		1	E200.8	10/09/07 16:24/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:25/eli-c
Uranium	0.0218	mg/L		0.0003		1	E200.8	10/11/07 15:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-004  
Client Sample ID: DewBurd GW677

Report Date: 12/19/07  
Collection Date: 09/28/07 12:26  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:24/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	10/09/07 16:24/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.027	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 20:10/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	41.0	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	9.5	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	0.9	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/31/07 12:04/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-3.56	%				1	A1030 E	12/11/07 17:39/eli-c
Anions	140	meq/L				1	A1030 E	12/11/07 17:39/eli-c
Cations	130	meq/L				1	A1030 E	12/11/07 17:39/eli-c
Solids, Total Dissolved Calculated	8510	mg/L				1	A1030 E	12/11/07 17:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07100002-004

Client Sample ID: DewBurd GW677

Report Date: 12/19/07

Collection Date: 09/28/07 12:26

Date Received: 09/29/07

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>DATA QUALITY</b>								
TDS Balance (0.80 - 1.20)	1.04	dec. %				1	A1030 E	12/11/07 17:39/eli-c
- Ion balance achieved using Sulfate from E200.7.								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07100002-005  
Client Sample ID: DewBurd GW676

Report Date: 12/19/07  
Collection Date: 09/28/07 13:46  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	240	mg/L		5		1	A2320 B	10/04/07 18:11/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:11/sn
Bicarbonate as HCO3	293	mg/L		5		1	A2320 B	10/04/07 18:11/sn
Calcium	465	mg/L	D	1		10	E200.7	10/09/07 20:12/eli-c
Magnesium	104	mg/L		0.5		10	E200.7	10/09/07 20:12/eli-c
Potassium	11.6	mg/L		0.5		2	E200.7	10/09/07 22:37/eli-c
Silica	13.7	mg/L		0.5		2	E200.7	10/09/07 22:37/eli-c
Sodium	80	mg/L	D	8		10	E200.7	10/09/07 20:12/eli-c
Chloride	15	mg/L		1		1	E300.0	09/29/07 22:19/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	09/29/07 22:19/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:33/jmh
Nitrogen, Nitrate as N	1.0	mg/L		0.1		1	E300.0	09/29/07 22:19/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 22:19/jmh
Sulfate	1790	mg/L	D	40		50	E300.0	10/02/07 08:59/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2880	umhos/cm		5		1	A2510 B	10/02/07 19:07/jmh
pH	7.13	s.u.		0.01		1	A4500-H B	10/02/07 19:06/jmh
Solids, Total Dissolved TDS @ 180 C	3000	mg/L		5		1	A2540 C	10/02/07 13:12/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:32/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 16:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:32/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	10/09/07 22:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:32/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:32/eli-c
Manganese	0.02	mg/L		0.01		1	E200.8	10/09/07 16:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:32/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:32/eli-c
Selenium	0.017	mg/L		0.001		1	E200.8	10/09/07 16:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:32/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:33/eli-c
Uranium	0.0494	mg/L		0.0003		1	E200.8	10/11/07 15:33/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-005  
Client Sample ID: DewBurd GW676

Report Date: 12/19/07  
Collection Date: 09/28/07 13:46  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:32/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 16:32/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0096	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 20:18/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	37.1	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	2.5	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	11.1	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	4.7	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/31/07 13:11/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-3.70	%				1	A1030 E	12/11/07 17:53/eli-c
Anions	38.2	meq/L				1	A1030 E	12/11/07 17:53/eli-c
Cations	35.5	meq/L				1	A1030 E	12/11/07 17:53/eli-c
Solids, Total Dissolved Calculated	2410	mg/L				1	A1030 E	12/11/07 17:53/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-005  
**Client Sample ID:** DewBurd GW676

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 13:46  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.24	dec. %				1	A1030 E	12/11/07 17:53/eli-c
- Ion balance achieved using Sulfate from E200.7.								
- TDS balance may have been affected by hydratable solids.								

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-006  
Client Sample ID: DewBurd GW679

Report Date: 12/19/07  
Collection Date: 09/28/07 15:04  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	140	mg/L		5		1	A2320 B	10/04/07 18:13/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:13/sn
Bicarbonate as HCO3	171	mg/L		5		1	A2320 B	10/04/07 18:13/sn
Calcium	414	mg/L	D	1		10	E200.7	10/09/07 20:15/eli-c
Magnesium	89.0	mg/L		0.5		10	E200.7	10/09/07 20:15/eli-c
Potassium	12.5	mg/L		0.5		2	E200.7	10/09/07 22:40/eli-c
Silica	10.4	mg/L		0.5		2	E200.7	10/09/07 22:40/eli-c
Sodium	73	mg/L	D	8		10	E200.7	10/09/07 20:15/eli-c
Chloride	12	mg/L		1		1	E300.0	09/29/07 22:35/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	09/29/07 22:35/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:35/jmh
Nitrogen, Nitrate as N	1.2	mg/L		0.1		1	E300.0	09/29/07 22:35/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 22:35/jmh
Sulfate	1580	mg/L	D	40		50	E300.0	10/02/07 09:15/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2520	umhos/cm		5		1	A2510 B	10/02/07 19:09/jmh
pH	7.53	s.u.		0.01		1	A4500-H B	10/02/07 19:08/jmh
Solids, Total Dissolved TDS @ 180 C	2500	mg/L		5		1	A2540 C	10/02/07 13:12/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:39/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 16:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:39/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	10/09/07 22:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:39/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:39/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:39/eli-c
Manganese	0.14	mg/L		0.01		1	E200.8	10/09/07 16:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:39/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:39/eli-c
Selenium	0.016	mg/L		0.001		1	E200.8	10/09/07 16:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:40/eli-c
Uranium	0.0157	mg/L		0.0003		1	E200.8	10/11/07 15:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-006  
Client Sample ID: DewBurd GW679

Report Date: 12/19/07  
Collection Date: 09/28/07 15:04  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 16:39/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.011	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 20:48/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	19.9	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	2.2	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	10.7	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	4.7	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1200	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	230	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	2.5	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	12/12/07 16:38/eli-c
Thorium 230	1.9	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
Thorium 230 precision (±)	1.3	pCi/L				1	E907.0	12/12/07 16:38/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	2.5	pCi/L		0.2		1	E903.0	10/31/07 13:11/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	10/31/07 13:11/eli-c
Thorium 230	1.9	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Thorium 230 precision (±)	1.2	pCi/L				1	E907.0	10/31/07 11:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-006  
**Client Sample ID:** DewBurd GW679

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 15:04  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
A/C Balance (± 5)	-1.81	%					1	A1030 E	12/11/07 17:42/eli-c
Anions	32.7	meq/L					1	A1030 E	12/11/07 17:42/eli-c
Cations	31.5	meq/L					1	A1030 E	12/11/07 17:42/eli-c
Solids, Total Dissolved Calculated	2110	mg/L					1	A1030 E	12/11/07 17:42/eli-c
TDS Balance (0.80 - 1.20)	1.19	dec. %					1	A1030 E	12/11/07 17:42/eli-c

- Ion balance achieved using Sulfate from E200.7.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-007  
Client Sample ID: DewBurd GW678

Report Date: 12/19/07  
Collection Date: 09/28/07 16:22  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	490	mg/L		5		1	A2320 B	10/04/07 18:15/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:15/sn
Bicarbonate as HCO3	597	mg/L		5		1	A2320 B	10/04/07 18:15/sn
Calcium	397	mg/L	D	1		10	E200.7	10/09/07 20:35/eli-c
Magnesium	398	mg/L		0.5		10	E200.7	10/09/07 20:35/eli-c
Potassium	18.9	mg/L		0.5		2	E200.7	10/09/07 22:43/eli-c
Silica	14.9	mg/L		0.5		2	E200.7	10/09/07 22:43/eli-c
Sodium	564	mg/L	D	8		10	E200.7	10/09/07 20:35/eli-c
Chloride	64	mg/L		1		5	E300.0	10/05/07 00:40/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	09/29/07 22:52/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:36/jmh
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	09/29/07 22:52/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 22:52/jmh
Sulfate	3220	mg/L	D	70		100	E300.0	10/02/07 10:04/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5710	umhos/cm		5		1	A2510 B	10/02/07 19:10/jmh
pH	7.23	s.u.		0.01		1	A4500-H B	10/02/07 19:09/jmh
Solids, Total Dissolved TDS @ 180 C	6000	mg/L		5		1	A2540 C	10/02/07 13:13/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:47/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/09/07 16:47/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:47/eli-c
Boron	1.3	mg/L		0.1		2	E200.7	10/09/07 22:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:47/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:47/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:47/eli-c
Manganese	2.85	mg/L		0.01		1	E200.8	10/09/07 16:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:47/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:47/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:47/eli-c
Selenium	0.003	mg/L		0.001		1	E200.8	10/09/07 16:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:47/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:48/eli-c
Uranium	0.0352	mg/L		0.0003		1	E200.8	10/11/07 15:48/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-007  
Client Sample ID: DewBurd GW678

Report Date: 12/19/07  
Collection Date: 09/28/07 16:22  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 16:47/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	10/09/07 16:47/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0032	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 20:56/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	23.2	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	5.7	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	8.1	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	13.6	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/16/07 15:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/31/07 13:11/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.532	%				1	A1030 E	12/11/07 17:43/eli-c
Anions	78.6	meq/L				1	A1030 E	12/11/07 17:43/eli-c
Cations	77.8	meq/L				1	A1030 E	12/11/07 17:43/eli-c
Solids, Total Dissolved Calculated	4950	mg/L				1	A1030 E	12/11/07 17:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07100002-007  
Client Sample ID: DewBurd GW678

Report Date: 12/19/07  
Collection Date: 09/28/07 16:22  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.21	dec. %				1	A1030 E	12/11/07 17:43/eli-c
- TDS balance may have been affected by hydratable solids.								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07100002-008  
Client Sample ID: DewBurd GW7002

Report Date: 12/19/07  
Collection Date: 09/28/07 17:48  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	280	mg/L		5		1	A2320 B	10/04/07 18:18/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:18/sn
Bicarbonate as HCO3	341	mg/L		5		1	A2320 B	10/04/07 18:18/sn
Calcium	206	mg/L	D	1		10	E200.7	10/09/07 20:38/eli-c
Magnesium	77.7	mg/L		0.5		10	E200.7	10/09/07 20:38/eli-c
Potassium	19.9	mg/L		0.5		2	E200.7	10/09/07 22:47/eli-c
Silica	7.3	mg/L		0.5		2	E200.7	10/09/07 22:47/eli-c
Sodium	152	mg/L	D	8		10	E200.7	10/09/07 20:38/eli-c
Chloride	10	mg/L		1		1	E300.0	09/29/07 23:08/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	09/29/07 23:08/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:37/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:08/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:08/jmh
Sulfate	1160	mg/L	D	10		20	E300.0	10/02/07 11:10/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2200	umhos/cm		5		1	A2510 B	10/02/07 19:12/jmh
pH	7.29	s.u.		0.01		1	A4500-H B	10/02/07 19:11/jmh
Solids, Total Dissolved TDS @ 180 C	1900	mg/L		5		1	A2540 C	10/05/07 16:24/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 16:55/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/09/07 16:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 16:55/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 16:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 16:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 16:55/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 16:55/eli-c
Manganese	0.39	mg/L		0.01		1	E200.8	10/09/07 16:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 16:55/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 16:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 16:55/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	10/09/07 16:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 16:55/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 15:55/eli-c
Uranium	0.0007	mg/L		0.0003		1	E200.8	10/11/07 15:55/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07100002-008  
Client Sample ID: DewBurd GW7002

Report Date: 12/19/07  
Collection Date: 09/28/07 17:48  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Vanadium	ND	mg/L		0.1			1	E200.8	10/09/07 16:55/eli-c
Zinc	ND	mg/L		0.01			1	E200.8	10/09/07 16:55/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL									
Mercury	ND	mg/L		0.0002			1	E200.8	10/09/07 21:03/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	45.6	pCi/L		1.0			1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	2.3	pCi/L					1	E900.0	10/15/07 05:56/eli-c
Gross Beta	29.7	pCi/L		2.0			1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	3.8	pCi/L					1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0			1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	1.3	pCi/L		1.0			1	RMO-3008	11/01/07 14:10/eli-c
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	8.5	pCi/L		0.2			1	E903.0	10/16/07 16:09/eli-c
Radium 226 precision (±)	0.9	pCi/L					1	E903.0	10/16/07 16:09/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1200	pCi/L		20			1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	180	pCi/L					1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	12/12/07 16:38/eli-c
RADIONUCLIDES - TOTAL									
Lead 210	ND	pCi/L		1.0			1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	6.3	pCi/L		0.2			1	E903.0	10/31/07 13:11/eli-c
Radium 226 precision (±)	2.1	pCi/L					1	E903.0	10/31/07 13:11/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	10/31/07 11:00/eli-c
DATA QUALITY									
A/C Balance (± 5)	-4.65	%					1	A1030 E	12/11/07 17:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-008  
**Client Sample ID:** DewBurd GW7002

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 17:48  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
Anions	26.3	meq/L					1	A1030 E	12/11/07 17:46/eli-c
Cations	23.9	meq/L					1	A1030 E	12/11/07 17:46/eli-c
Solids, Total Dissolved Calculated	1620	mg/L					1	A1030 E	12/11/07 17:46/eli-c
TDS Balance (0.80 - 1.20)	1.19	dec. %					1	A1030 E	12/11/07 17:46/eli-c

- Ion balance achieved using Sulfate and Chloride from E200.7.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-009  
Client Sample ID: DewBurd GW7

Report Date: 12/19/07  
Collection Date: 09/28/07 17:28  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	176	mg/L		5		1	A2320 B	10/04/07 18:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:19/sn
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	10/04/07 18:19/sn
Calcium	30	mg/L	D	1		10	E200.7	10/09/07 20:42/eli-c
Magnesium	11.5	mg/L		0.5		10	E200.7	10/09/07 20:42/eli-c
Potassium	11.0	mg/L		0.5		2	E200.7	10/09/07 22:50/eli-c
Silica	7.5	mg/L		0.5		2	E200.7	10/09/07 22:50/eli-c
Sodium	237	mg/L	D	2		2	E200.7	10/09/07 22:50/eli-c
Chloride	12	mg/L		1		1	E300.0	09/29/07 23:24/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	09/29/07 23:24/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:38/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:24/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:24/jmh
Sulfate	586	mg/L	D	7		10	E300.0	10/02/07 11:27/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1490	umhos/cm		5		1	A2510 B	10/02/07 19:14/jmh
pH	8.13	s.u.		0.01		1	A4500-H B	10/02/07 19:13/jmh
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	10/02/07 13:14/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/09/07 15:24/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/09/07 15:24/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 15:24/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 15:24/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 15:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 15:24/eli-c
Iron	ND	mg/L		0.03		2	E200.7	10/09/07 22:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 15:24/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	10/09/07 15:24/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 15:24/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 15:24/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 15:24/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/09/07 15:24/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 15:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 16:03/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/11/07 16:03/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100002-009  
Client Sample ID: DewBurd GW7

Report Date: 12/19/07  
Collection Date: 09/28/07 17:28  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 15:24/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/09/07 15:24/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 21:11/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.4	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	1.2	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	5.0	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	10/16/07 16:09/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	10/16/07 16:09/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1200	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	10/18/07 10:39/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
RADIONUCLIDES - TOTAL								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/31/07 13:11/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	-3.73	%				1	A1030 E	12/11/07 17:48/eli-c
Anions	14.1	meq/L				1	A1030 E	12/11/07 17:48/eli-c
Cations	13.0	meq/L				1	A1030 E	12/11/07 17:48/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-009  
**Client Sample ID:** DewBurd GW7

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 17:28  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Solids, Total Dissolved Calculated	896	mg/L				1	A1030 E	12/11/07 17:48/eli-c
TDS Balance (0.80 - 1.20)	1.16	dec. %				1	A1030 E	12/11/07 17:48/eli-c
- Ion balance achieved using Sulfate from E200.7.								

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07100002-010  
Client Sample ID: DewBurd GW650

Report Date: 12/19/07  
Collection Date: 09/28/07 19:00  
Date Received: 09/29/07  
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	10/04/07 18:21/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 18:21/sn
Bicarbonate as HCO3	141	mg/L		5		1	A2320 B	10/04/07 18:21/sn
Calcium	219	mg/L	D	1		10	E200.7	10/09/07 20:45/eli-c
Magnesium	85.2	mg/L		0.5		10	E200.7	10/09/07 20:45/eli-c
Potassium	17.6	mg/L		0.5		2	E200.7	10/09/07 22:53/eli-c
Silica	2.7	mg/L		0.5		2	E200.7	10/09/07 22:53/eli-c
Sodium	110	mg/L	D	8		10	E200.7	10/09/07 20:45/eli-c
Chloride	17	mg/L		1		1	E300.0	09/29/07 23:41/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	09/29/07 23:41/jmh
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	10/04/07 16:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:41/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/07 23:41/jmh
Sulfate	1320	mg/L	D	10		20	E300.0	10/02/07 11:43/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2260	umhos/cm		5		1	A2510 B	10/02/07 19:17/jmh
pH	7.04	s. u.		0.01		1	A4500-H B	10/02/07 19:16/jmh
Solids, Total Dissolved TDS @ 180 C	2000	mg/L		5		1	A2540 C	10/02/07 13:14/sn
METALS - DISSOLVED								
Aluminum	0.6	mg/L		0.1		1	E200.8	10/09/07 15:31/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/09/07 15:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/09/07 15:31/eli-c
Boron	ND	mg/L		0.1		2	E200.7	10/09/07 22:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/09/07 15:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/09/07 15:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/09/07 15:31/eli-c
Iron	13.2	mg/L		0.03		2	E200.7	10/09/07 22:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/09/07 15:31/eli-c
Manganese	2.44	mg/L		0.01		1	E200.8	10/09/07 15:31/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/09/07 15:31/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/09/07 15:31/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/09/07 15:31/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	10/09/07 15:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/09/07 15:31/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/11/07 16:10/eli-c
Uranium	0.0019	mg/L		0.0003		1	E200.8	10/11/07 16:10/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100002-010  
Client Sample ID: DewBurd GW650

Report Date: 12/19/07  
Collection Date: 09/28/07 19:00  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	10/09/07 15:31/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	10/09/07 15:31/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0014	mg/L		0.0003		1	E200.8	10/22/07 13:25/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.0002		1	E200.8	10/09/07 21:18/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	13.1	pCi/L		1.0		1	E900.0	10/15/07 05:56/eli-c
Gross Alpha precision (±)	1.6	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Gross Beta	20.9	pCi/L		2.0		1	E900.0	10/15/07 05:56/eli-c
Gross Beta precision (±)	3.7	pCi/L				1	E900.0	10/15/07 05:56/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	2.7	pCi/L		0.2		1	E903.0	10/16/07 16:09/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	10/16/07 16:09/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	10/18/07 10:39/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	10/18/07 10:39/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 16:38/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	12/12/07 16:38/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	12/12/07 16:38/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/12/07 16:38/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/29/07 08:20/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/01/07 14:10/eli-c
Radium 226	3.2	pCi/L		0.2		1	E903.0	10/31/07 13:11/eli-c
Radium 226 precision (±)	1.5	pCi/L				1	E903.0	10/31/07 13:11/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/31/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-3.87	%				1	A1030 E	12/11/07 17:49/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07100002-010  
**Client Sample ID:** DewBurd GW650

**Report Date:** 12/19/07  
**Collection Date:** 09/28/07 19:00  
**Date Received:** 09/29/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>DATA QUALITY</b>								
Anions	25.9	meq/L				1	A1030 E	12/11/07 17:49/eli-c
Cations	23.9	meq/L				1	A1030 E	12/11/07 17:49/eli-c
Solids, Total Dissolved Calculated	1630	mg/L				1	A1030 E	12/11/07 17:49/eli-c
TDS Balance (0.80 - 1.20)	1.21	dec. %				1	A1030 E	12/11/07 17:49/eli-c

- Ion balance achieved using Sulfate from E200.7.
- TDS balance may have been affected by hydratable solids.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 071004A-ALK-SEL-W							
Sample ID: MBLK1_071004A	Method Blank					Run: PH_COND1-R_071004A		10/04/07 15:38	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_071004A	Laboratory Control Sample					Run: PH_COND1-R_071004A		10/04/07 15:44	
Alkalinity, Total as CaCO <sub>3</sub>	960	mg/L	5.0	96	90	110			
Sample ID: R07090391-003BMS	Sample Matrix Spike					Run: PH_COND1-R_071004A		10/04/07 17:55	
Alkalinity, Total as CaCO <sub>3</sub>	220	mg/L	5.0	96	80	120			
Sample ID: R07100001-001BDUP	Sample Duplicate					Run: PH_COND1-R_071004A		10/04/07 17:59	
Alkalinity, Total as CaCO <sub>3</sub>	106	mg/L	5.0				3.7	10	
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	129	mg/L	5.0				3.7	10	
Sample ID: R07100043-002AMS	Sample Matrix Spike					Run: PH_COND1-R_071004A		10/04/07 18:28	
Alkalinity, Total as CaCO <sub>3</sub>	330	mg/L	5.0	106	80	120			
Method: A2510 B		Batch: 071002_1_COND-PROBE-W							
Sample ID: LCS1-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A		10/02/07 18:11	
Conductivity @ 25 C	149	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A		10/02/07 18:12	
Conductivity @ 25 C	4920	umhos/cm	5.0	98	90	110			
Sample ID: LCS_COND-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A		10/02/07 18:13	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071002	Method Blank					Run: PH_COND2-R_071002A		10/02/07 18:13	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R07100002-009ADUP	Sample Duplicate					Run: PH_COND2-R_071002A		10/02/07 19:14	
Conductivity @ 25 C	1490	umhos/cm	5.0				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: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 071002A-SLDS-TDS-W		
Sample ID: MBLK1_071002A	Method Blank					Run: BAL-4-R_071002A			10/02/07 13:16
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_071002A	Laboratory Control Sample					Run: BAL-4-R_071002A			10/02/07 13:16
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	99	90	110			
Sample ID: R07100002-010AMS	Sample Matrix Spike					Run: BAL-4-R_071002A			10/02/07 13:15
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	102	80	120			
Sample ID: R07100002-010AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_071002A			10/02/07 13:15
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	120	80	120	1.6	10	
Method: A2540 C							Batch: 071005A-SLDS-TDS-W		
Sample ID: LCS1_071005A	Laboratory Control Sample					Run: BAL-4-R_071005A			10/05/07 16:23
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	102	90	110			
Sample ID: MBLK1_071005A	Method Blank					Run: BAL-4-R_071005A			10/05/07 16:23
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R07100044-001AMS	Sample Matrix Spike					Run: BAL-4-R_071005A			10/05/07 16:24
Solids, Total Dissolved TDS @ 180 C	680	mg/L	5.0	99	80	120			
Sample ID: R07100044-001AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_071005A			10/05/07 16:24
Solids, Total Dissolved TDS @ 180 C	670	mg/L	5.0	93	80	120	1.8	10	
Method: A4500-H B							Batch: 071002_1_PH-W		
Sample ID: LCS_pH-1_071002	Laboratory Control Sample					Run: PH_COND2-R_071002A			10/02/07 18:08
pH	6.85	s.u.	0.010	100	98.55	101.45			
Sample ID: R07100002-009ADUP	Sample Duplicate					Run: PH_COND2-R_071002A			10/02/07 19:15
pH	8.14	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: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G			Batch: A2007-10-04_2_NH3_01						
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_071004A			10/04/07 15:23
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_071004A			10/04/07 15:26
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: R07100002-004BMS	Sample Matrix Spike					Run: TECHAA2-R_071004A			10/04/07 16:31
Nitrogen, Ammonia as N	0.37	mg/L	0.10	88	80	120			
Sample ID: R07100023-002AMS	Sample Matrix Spike					Run: TECHAA2-R_071004A			10/04/07 16:45
Nitrogen, Ammonia as N	0.27	mg/L	0.10	108	80	120			
Sample ID: R07100023-002AMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_071004A			10/04/07 16:46
Nitrogen, Ammonia as N	0.26	mg/L	0.10	102	80	120	5.7	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R91017		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C91017			10/09/07 14:39		
Silica	1.9	mg/L	0.10	97	85	125			
Boron	1.9	mg/L	0.10	96	85	125			
Iron	1.9	mg/L	0.030	96	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C91017			10/09/07 14:42		
Calcium	23	mg/L	0.50	90	85	125			
Magnesium	23	mg/L	0.50	92	85	125			
Potassium	25	mg/L	0.50	101	85	125			
Sodium	23	mg/L	0.76	90	85	125			
<b>Sample ID: R07090385-001C</b>	Sample Matrix Spike			Run: SUB-C91017			10/09/07 19:19		
Boron	9.11	mg/L	0.10	91	70	130			
Calcium	686	mg/L	1.0	76	70	130			
Iron	10.9	mg/L	0.046	89	70	130			
Magnesium	498	mg/L	0.50	79	70	130			
Potassium	1120	mg/L	0.50	92	70	130			
Silica	16.3	mg/L	0.20	84	70	130			
Sodium	489	mg/L	7.6	82	70	130			
<b>Sample ID: R07090385-001C</b>	Sample Matrix Spike Duplicate			Run: SUB-C91017			10/09/07 19:23		
Boron	9.33	mg/L	0.10	93	70	130	2.4	20	
Calcium	701	mg/L	1.0	79	70	130	2.2	20	
Iron	11.1	mg/L	0.046	91	70	130	1.5	20	
Magnesium	506	mg/L	0.50	80	70	130	1.5	20	
Potassium	1130	mg/L	0.50	92	70	130	0.3	20	
Silica	16.9	mg/L	0.20	89	70	130	3.5	20	
Sodium	488	mg/L	7.6	82	70	130	0.4	20	
<b>Method: E200.8</b>							Batch: C_16385		
<b>Sample ID: MB-16385</b>	Method Blank			Run: SUB-C91024			10/09/07 19:18		
Mercury	ND	mg/L	3E-05						
<b>Sample ID: C07100384-006BMS4</b>	Post Digestion Spike			Run: SUB-C91024			10/09/07 22:49		
Mercury	0.0059	mg/L	0.0010	84	70	130			
<b>Sample ID: C07100384-006BMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C91024			10/09/07 22:56		
Mercury	0.0060	mg/L	0.0010	85	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: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R91024		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C91024				10/09/07 12:46		
Aluminum	0.0010	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	0.0002						
Chromium	ND	mg/L	0.0001						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	3E-05						
Mercury	2E-05	mg/L	6E-06						
Molybdenum	0.0005	mg/L	7E-05						
Nickel	ND	mg/L	8E-05						
Selenium	ND	mg/L	0.0004						
Silver	ND	mg/L	3E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	0.002	mg/L	0.002						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C91024				10/09/07 12:53		
Aluminum	0.0527	mg/L	0.0010	103	85	115			
Arsenic	0.0517	mg/L	0.0010	103	85	115			
Barium	0.0495	mg/L	0.0010	99	85	115			
Cadmium	0.0509	mg/L	0.0010	102	85	115			
Chromium	0.0514	mg/L	0.0010	103	85	115			
Copper	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0523	mg/L	0.0010	104	85	115			
Manganese	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00528	mg/L	0.0010	105	85	115			
Molybdenum	0.0490	mg/L	0.0010	97	85	115			
Nickel	0.0526	mg/L	0.0010	105	85	115			
Selenium	0.0528	mg/L	0.0010	105	85	115			
Silver	0.0197	mg/L	0.0010	98	85	115			
Vanadium	0.0517	mg/L	0.0010	103	85	115			
Zinc	0.0538	mg/L	0.0021	103	85	115			
<b>Sample ID: R07100002-008C</b>	Post Digestion Spike		Run: SUB-C91024				10/09/07 17:02		
Aluminum	0.0491	mg/L	0.10	97	70	130			
Arsenic	0.0518	mg/L	0.0010	101	70	130			
Barium	0.0617	mg/L	0.10	104	70	130			
Cadmium	0.0469	mg/L	0.010	94	70	130			
Chromium	0.0489	mg/L	0.050	98	70	130			
Copper	0.0469	mg/L	0.010	91	70	130			
Lead	0.0520	mg/L	0.050	104	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: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R91024		
Sample ID: R07100002-008C	Post Digestion Spike		Run: SUB-C91024				10/09/07 17:02		
Manganese	0.447	mg/L	0.010		70	130			A
Mercury	0.00543	mg/L	0.0010	109	70	130			
Molybdenum	0.0477	mg/L	0.10	94	70	130			
Nickel	0.0475	mg/L	0.050	89	70	130			
Selenium	0.0503	mg/L	0.0010	98	70	130			
Silver	0.0162	mg/L	0.010	81	70	130			
Vanadium	0.0493	mg/L	0.10	98	70	130			
Zinc	0.0485	mg/L	0.010	90	70	130			
Sample ID: R07100002-008C	Post Digestion Spike Duplicate		Run: SUB-C91024				10/09/07 17:10		
Aluminum	0.0496	mg/L	0.10	98	70	130	0.0	20	
Arsenic	0.0520	mg/L	0.0010	102	70	130	0.5	20	
Barium	0.0619	mg/L	0.10	104	70	130	0.0	20	
Cadmium	0.0481	mg/L	0.010	96	70	130	2.4	20	
Chromium	0.0491	mg/L	0.050	98	70	130	0.0	20	
Copper	0.0476	mg/L	0.010	92	70	130	1.6	20	
Lead	0.0521	mg/L	0.050	104	70	130	0.3	20	
Manganese	0.445	mg/L	0.010		70	130	0.3	20	A
Mercury	0.00545	mg/L	0.0010	109	70	130	0.4	20	
Molybdenum	0.0489	mg/L	0.10	96	70	130	0.0	20	
Nickel	0.0489	mg/L	0.050	92	70	130	0.0	20	
Selenium	0.0504	mg/L	0.0010	98	70	130	0.2	20	
Silver	0.0163	mg/L	0.010	82	70	130	0.7	20	
Vanadium	0.0498	mg/L	0.10	99	70	130	0.0	20	
Zinc	0.0500	mg/L	0.010	93	70	130	3.2	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: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R91138		
Sample ID: LRB	Method Blank		Run: SUB-C91138			10/11/07 12:05			
Lead	ND	mg/L	2E-05						
Mercury	4E-05	mg/L	6E-06						
Thorium 232	0.0001	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C91138			10/11/07 12:13			
Lead	0.0507	mg/L	0.0010	101	85	115			
Mercury	0.00526	mg/L	0.0010	104	85	115			
Thorium 232	0.0498	mg/L	0.0010	99	85	115			
Uranium	0.0491	mg/L	0.00030	98	85	115			
Sample ID: R07100002-010C	Post Digestion Spike		Run: SUB-C91138			10/11/07 16:18			
Lead	0.0513	mg/L	0.050	101	70	130			
Mercury	0.00515	mg/L	0.0010	102	70	130			
Thorium 232	0.0574	mg/L	0.0010	111	70	130			
Uranium	0.0580	mg/L	0.00030	112	70	130			
Sample ID: R07100002-010C	Post Digestion Spike Duplicate		Run: SUB-C91138			10/11/07 16:26			
Lead	0.0514	mg/L	0.050	101	70	130	0.2	20	
Mercury	0.00519	mg/L	0.0010	103	70	130	0.8	20	
Thorium 232	0.0576	mg/L	0.0010	111	70	130	0.4	20	
Uranium	0.0572	mg/L	0.00030	111	70	130	1.5	20	
Method: E200.8							Batch: C_R91375		
Sample ID: LRB	Method Blank		Run: SUB-C91375			10/17/07 10:20			
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C91375			10/17/07 10:27			
Uranium	0.0516	mg/L	0.00030	103	85	115			
Sample ID: R07100002-001C	Post Digestion Spike		Run: SUB-C91375			10/17/07 12:28			
Uranium	0.0558	mg/L	0.00030	108	70	130			
Sample ID: R07100002-001C	Post Digestion Spike Duplicate		Run: SUB-C91375			10/17/07 12:35			
Uranium	0.0554	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

Project: Edgemont

Report Date: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R31616		
Sample ID: LFB0709285802-3	Laboratory Fortified Blank			Run: DIONEX_070928A			09/28/07 21:11		
Chloride	4.70	mg/L	0.50	94	90	110			
Fluoride	2.01	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.39	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sample ID: LFB0709285802-4	Laboratory Fortified Blank			Run: DIONEX_070928A			09/28/07 21:27		
Nitrogen, Nitrate as N	2.68	mg/L	0.10	107	90	110			
Sample ID: R07100002-001AMS	Sample Matrix Spike			Run: DIONEX_070928A			09/29/07 20:57		
Chloride	97.4	mg/L	0.50		80	120			A
Fluoride	2.27	mg/L	0.10	91	80	120			
Nitrogen, Nitrate as N	2.23	mg/L	0.10	89	80	120			
Nitrogen, Nitrite as N	3.66	mg/L	0.10	146	80	120			S
Sample ID: R07100002-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_070928A			09/29/07 21:13		
Chloride	96.9	mg/L	0.50		80	120	0.4	10	A
Fluoride	2.24	mg/L	0.10	89	80	120	1.3	10	
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	80	120	3.5	10	
Nitrogen, Nitrite as N	3.85	mg/L	0.10	154	80	120	5.1	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: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>									Batch: R31638
<b>Sample ID: LFB0710013150-3</b>	Laboratory Fortified Blank				Run: DIONEX_071001A				10/01/07 20:24
Chloride	4.94	mg/L	0.50	99	90	110			
Sulfate	14.6	mg/L	1.0	97	90	110			
<b>Sample ID: LFB0710013150-4</b>	Laboratory Fortified Blank				Run: DIONEX_071001A				10/01/07 20:40
Chloride	4.65	mg/L	0.50	93	90	110			
Sulfate	14.3	mg/L	1.0	95	90	110			
<b>Sample ID: R07090389-003BMS</b>	Sample Matrix Spike				Run: DIONEX_071001A				10/02/07 07:04
Chloride	494	mg/L	4.0	92	80	120			
Sulfate	6780	mg/L	72	117	80	120			
<b>Sample ID: R07090389-003BMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_071001A				10/02/07 07:20
Chloride	482	mg/L	4.0	89	80	120	2.4	10	
Sulfate	6530	mg/L	72	100	80	120	6.4	10	
<b>Sample ID: R07100002-007AMS</b>	Sample Matrix Spike				Run: DIONEX_071001A				10/02/07 10:21
Chloride	560	mg/L	4.0	96	80	120			
Sulfate	4960	mg/L	72	116	80	120			
<b>Sample ID: R07100002-007AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_071001A				10/02/07 10:37
Chloride	544	mg/L	4.0	93	80	120	2.9	10	
Sulfate	4980	mg/L	72	118	80	120	5.4	10	
<b>Method: E300.0</b>									Batch: R31689
<b>Sample ID: LFB0710040616-3</b>	Laboratory Fortified Blank				Run: DIONEX_071004A				10/04/07 19:28
Chloride	5.09	mg/L	0.50	102	90	110			
<b>Sample ID: LFB0710040616-4</b>	Laboratory Fortified Blank				Run: DIONEX_071004A				10/04/07 19:44
Chloride	4.53	mg/L	0.50	91	90	110			
<b>Sample ID: R07100091-001AMS</b>	Sample Matrix Spike				Run: DIONEX_071004A				10/04/07 23:51
Chloride	194	mg/L	0.50		80	120			A
<b>Sample ID: R07100091-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_071004A				10/05/07 00:07
Chloride	194	mg/L	0.50		80	120	0.2	10	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: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0								Batch: C_GrAB-0331	
Sample ID: RB-GrAB-0331	Method Blank					Run: SUB-C91233			10/13/07 02:39
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0331	Laboratory Control Sample					Run: SUB-C91233			10/13/07 02:39
Gross Alpha	300	pCi/L	1.0	111	70	130			
Sample ID: C07091288-002AMS	Sample Matrix Spike					Run: SUB-C91233			10/13/07 02:39
Gross Alpha	200	pCi/L	1.0	86	70	130			
Sample ID: C07091288-002AMSD	Sample Matrix Spike Duplicate					Run: SUB-C91233			10/13/07 02:39
Gross Alpha	200	pCi/L	1.0	82	70	130	4.1	13.7	
Sample ID: Cs137-GrAB-0331	Laboratory Control Sample					Run: SUB-C91233			10/13/07 02:39
Gross Beta	90	pCi/L	2.0	93	70	130			
Sample ID: C07091288-002AMS	Sample Matrix Spike					Run: SUB-C91233			10/13/07 02:39
Gross Beta	90	pCi/L	2.0	90	70	130			
Sample ID: C07091288-002AMSD	Sample Matrix Spike Duplicate					Run: SUB-C91233			10/13/07 02:39
Gross Beta	90	pCi/L	2.0	90	70	130	0.5	15.5	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R91554		
<b>Sample ID: LCS-R91554</b>	Laboratory Control Sample			Run: SUB-C91554			10/18/07 10:39		
Americium 241	760	pCi/L	20	93	70	130			
Cesium 137	1200	pCi/L	20	110	70	130			
Potassium 40	7200	pCi/L	20	108	70	130			
<b>Sample ID: MB-R91554</b>	Method Blank			Run: SUB-C91554			10/18/07 10:39		
Americium 241	ND	pCi/L	20						
Barium 133	ND	pCi/L	20						
Bismuth 212	ND	pCi/L	20						
Bismuth 214	ND	pCi/L	20						
Cesium 134	ND	pCi/L	20						
Cesium 137	ND	pCi/L	20						
Cobalt 60	ND	pCi/L	20						
Iodine 125	ND	pCi/L	20						
Iodine 131	ND	pCi/L	20						
Lead 212	ND	pCi/L	20						
Lead 214	ND	pCi/L	20						
Manganese 54	ND	pCi/L	20						
Potassium 40	ND	pCi/L	20						
Radium 223	ND	pCi/L	20						
Radium 224	ND	pCi/L	20						
Thallium 208	ND	pCi/L	20						
Thorium 228	ND	pCi/L	20						
Thorium 234	ND	pCi/L	20						
Zinc 65	ND	pCi/L	20						
Radium 228	ND	pCi/L	20						
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R07100002-002E</b>	Sample Duplicate			Run: SUB-C91554			10/18/07 10:39		
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-2362		
Sample ID: R07100002-001E	Sample Matrix Spike					Run: SUB-C91384			10/16/07 15:05
Radium 226	29	pCi/L	0.20	104	70	130			
Sample ID: R07100002-001E	Sample Matrix Spike Duplicate					Run: SUB-C91384			10/16/07 15:05
Radium 226	25	pCi/L	0.20	82	70	130	18	26.6	
Sample ID: MB-RA226-2362	Method Blank					Run: SUB-C91384			10/16/07 16:09
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2362	Laboratory Control Sample					Run: SUB-C91384			10/17/07 07:54
Radium 226	12	pCi/L	0.20	98	70	130			
Method: E903.0							Batch: C_RA226-2389		
Sample ID: C07091026-001AMS	Sample Matrix Spike					Run: SUB-C92060			10/31/07 12:04
Radium 226	15	pCi/L	1.0	71	70	130			
- MSD recovery low, but MS and RPD are within limits, LCS <70% but acceptable according to Control Charts so the batch was approved.									
Sample ID: C07091026-001AMS	Sample Matrix Spike Duplicate					Run: SUB-C92060			10/31/07 12:04
Radium 226	13	pCi/L	1.0	63	70	130	13	28.3	S
- MSD recovery low, but MS and RPD are within limits, LCS <70% but acceptable according to Control Charts so the batch was approved.									
Sample ID: MB-RA226-2389	Method Blank					Run: SUB-C92060			10/31/07 14:46
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2389	Laboratory Control Sample					Run: SUB-C92060			10/31/07 14:46
Radium 226	8.8	pCi/L	0.20	69	70	130			S
MSD recovery low, but MS and RPD are within limits, LCS <70% but acceptable according to Control Charts so the batch was approved.									
Method: E907.0							Batch: C_R92402		
Sample ID: LCS-R92402	Laboratory Control Sample					Run: SUB-C92402			10/31/07 00:00
Thorium 230	6.1	pCi/L	0.20	103	70	130			
Sample ID: R07100002-005E	Sample Matrix Spike					Run: SUB-C92402			10/31/07 11:00
Thorium 230	18	pCi/L	0.20	93	70	130			
Sample ID: R07100002-005E	Sample Matrix Spike Duplicate					Run: SUB-C92402			10/31/07 11:00
Thorium 230	19	pCi/L	0.20	99	70	130	6.4	30	
Sample ID: MB-R92402	Method Blank					Run: SUB-C92402			10/31/07 00:00
Thorium 230	ND	pCi/L	0.2						

### 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: 12/19/07

Work Order: R07100002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R92397		
<b>Sample ID: LCS-R92397</b>	Laboratory Control Sample			Run: SUB-C92397			10/29/07 08:20		
Lead 210	79	pCi/L	1.0	98	70	130			
<b>Sample ID: R07100002-001E</b>	Sample Matrix Spike			Run: SUB-C92397			10/29/07 08:20		
Lead 210	390	pCi/L	1.0	96	70	130			
<b>Sample ID: R07100002-001E</b>	Sample Matrix Spike Duplicate			Run: SUB-C92397			10/29/07 08:20		
Lead 210	420	pCi/L	1.0	105	70	130	8.9	30	
<b>Sample ID: MB-R92397</b>	Method Blank			Run: SUB-C92397			10/29/07 08:20		
Lead 210	ND	pCi/L	1						
<b>Method: RMO-3008</b>							Batch: C_R92278		
<b>Sample ID: R07100002-005E</b>	Sample Matrix Spike			Run: SUB-C92278			11/01/07 14:10		
Polonium 210	82	pCi/L	1.0	73	70	130			
<b>Sample ID: R07100002-005E</b>	Sample Matrix Spike Duplicate			Run: SUB-C92278			11/01/07 14:10		
Polonium 210	98	pCi/L	1.0	88	70	130	18	30	
<b>Sample ID: MB-R92278</b>	Method Blank			Run: SUB-C92278			11/01/07 14:10		
Polonium 210	ND	pCi/L	1						
<b>Sample ID: LCS-R92278</b>	Laboratory Control Sample			Run: SUB-C92278			11/01/07 14:10		
Polonium 210	16	pCi/L	1.0	70	70	130			

### 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. Refer to corresponding notes on reverse side.

Company Name: <b>RESPEC</b>			Project Name, PWS #, Permit #, Etc.: <b>PowerTech Dewey Burdock</b>		
Report Mail Address:			Contact Name, Phone, Fax, E-mail: <b>Cory Foreman cforeman@respec.com</b> <b>605-381-0024</b>		
Invoice Address:			Sampler Name if other than Contact: <b>ELIE KRANTZ</b> <b>605-381-9800</b>		
Invoice Contact & Phone #: <b>Cory Foreman</b> <b>605-381-0024</b>			Purchase Order #:		ELI Quote #:
Report Required For: POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____ EDD/EDT <input type="checkbox"/> Format _____			ANALYSIS REQUESTED <b>See Quote</b>		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:
Number of Containers _____ Sample Type: A W S V B O _____ Air Water Soils/Solids Vegetation _____ Bioassay Other _____			SEE ATTACHED Normal Turnaround (TAT) _____ RUSH Turnaround (TAT) _____		Receipt Temp <b>6.1 °C</b> Cooler ID(s) _____ Custody Seal Y N _____ Intact Y N _____ Signature Y N _____ Match _____ Lab ID _____
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)			Collection Date	Collection Time	MATRIX
1 <b>Dew Burd BVC 04</b>			<b>9/28/07</b>	<b>8:16</b>	<b>W</b>
2 <b>Dew Burd GW 628</b>			<b>9/28/07</b>	<b>9:23</b>	<b>W</b>
3 <b>Dew Burd GW 675</b>			<b>9/28/07</b>	<b>10:49</b>	<b>W</b>
4 <b>Dew Burd GW 42</b>			<b>9/28/07</b>	<b>11:34</b>	<b>W</b>
5 <b>Dew Burd GW 677</b>			<b>9/28/07</b>	<b>12:26</b>	<b>W</b>
6 <b>Dew Burd GW 676</b>			<b>9/28/07</b>	<b>13:46</b>	<b>W</b>
7 <b>Dew Burd GW 679</b>			<b>9/28/07</b>	<b>15:04</b>	<b>W</b>
8 <b>Dew Burd GW 678</b>			<b>9/28/07</b>	<b>16:22</b>	<b>W</b>
9 <b>Dew Burd GW 7002</b>			<b>9/28/07</b>	<b>17:48</b>	<b>W</b>
10 <b>Dew Burd GW 7</b>			<b>9/28/07</b>	<b>17:28</b>	<b>W</b>
Custody Record MUST be Signed			Relinquished by: <b>[Signature]</b> Date/Time: <b>9/29/07 0758</b>	Shipped by: _____ Date/Time: _____	Received by: <b>[Signature]</b> Date/Time: <b>9/29/07 0758</b>
Sample Disposal: _____			Return to client: _____	Lab Disposal: _____	Sample Type: _____ # of fractions _____

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, & links.

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



Dewey-Burdock TR  
June 2011

2.7-H-149

Appendix 2.7-H



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 2 of 2

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <b>RESPEC</b>		Project Name, PWS #, Permit #, Etc.: <b>PowerTech, Dewey Burdock</b>	
Report Mail Address:		Contact Name, Phone, Fax, E-mail: <b>Cory Foreman cforeman@respec.com</b>	
Invoice Address:		Invoice Contact & Phone #: <b>Cory Foreman</b>	
Report Required For: <b>POTW/WWTP</b> <input type="checkbox"/> <b>DW</b> <input type="checkbox"/>		Sampler Name if other than Contact: <b>Eric Krantz</b>	
Special Report Formats - ELI must be notified prior to sample submittal for the following: <b>NEIAC</b> <input type="checkbox"/> <b>A2LA</b> <input type="checkbox"/> <b>Level IV</b> <input type="checkbox"/> Other: _____ EDD/EDT <input type="checkbox"/> Formal _____		Purchase Order #: <b>605-381-9605</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		ANALYSIS REQUESTED	
1 <b>Dew Burd GW650</b>		Number of Containers Sample Type: <b>AW S V B O</b> Air Water Soils/Solids Vegetation Bioassay Other	
2 <b>9/28/07 19:00 W</b>		SEE ATTACHED	
3		Normal Turnaround (TAT)	
4		RUSH Turnaround (TAT)	
5		Notify ELI prior to RUSH sample submittal for additional charges and scheduling	
6		Comments:	
7		Receipt Temp _____ °C	
8		Cooler ID(s) _____	
9		Custody Seal Y N	
10		Intact Y N	
		Signature Y N	
		Match	
		Lab ID	
Custody Record MUST be Signed		LABORATORY USE ONLY	
Relinquished by: <b>G22446</b>		Received by: <b>Eric Krantz</b>	
Relinquished by: <b>9/24/07 07:58</b>		Received by: <b>9/24/07 07:58</b>	
Sample Disposal: _____		Sample Type: <b>GW</b>	
Return to client: _____		# of fractions: _____	

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, & links.



## ANALYTICAL SUMMARY REPORT

December 19, 2007

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

Workorder No.: R07110146      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 10 samples from RESPEC Inc on 11/13/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07110146-001	DewBurdGW7002	11/12/07 8:10	11/13/07	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R07110146-002	DewBurdGW7	11/12/07 8:20	11/13/07	Aqueous	Same As Above
R07110146-003	DewBurdGW2	11/12/07 9:25	11/13/07	Aqueous	Same As Above
R07110146-004	DewBurdGW18	11/12/07 10:15	11/13/07	Aqueous	Same As Above
R07110146-005	DewBurdGW18	11/12/07 10:20	11/13/07	Aqueous	Same As Above
R07110146-006	DewBurdGW42	11/12/07 11:20	11/13/07	Aqueous	Same As Above
R07110146-007	DewBurdGW13	11/12/07 12:15	11/13/07	Aqueous	Same As Above
R07110146-008	DewBurdGW619	11/12/07 14:25	11/13/07	Aqueous	Same As Above
R07110146-009	DewBurdGW650	11/12/07 15:30	11/13/07	Aqueous	Same As Above
R07110146-010	DewBurdGW16	11/12/07 16:05	11/13/07	Aqueous	Same As Above



Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or [Rapid\\_City@energylab.com](mailto:Rapid_City@energylab.com).

Report Approved By:

A handwritten signature in black ink, appearing to read "Linda Larson", written over a horizontal line.

Linda Larson

Rapid City - Project Manager



Date: 19-Dec-07

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R07110146

## 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 and
- The "D" qualifier on the sodium value (only) indicates that the project specific minimum report limit of 0.5mg/L was not supported by MDL data on the ICP instrument. Therefore, the report limit for sodium was derated to the listed value.

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).



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-001  
Client Sample ID: DewBurdGW7002

Report Date: 12/19/07  
Collection Date: 11/12/07 08:10  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	250	mg/L		5		1	A2320 B	11/26/07 15:54/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 15:54/sn
Bicarbonate as HCO3	305	mg/L		5		1	A2320 B	11/26/07 15:54/sn
Calcium	237	mg/L		0.5		1	E200.7	11/27/07 16:50/eli-c
Magnesium	90.4	mg/L		0.5		1	E200.7	11/27/07 16:50/eli-c
Potassium	22.2	mg/L		0.5		1	E200.7	11/27/07 16:50/eli-c
Silica	8.2	mg/L		0.5		1	E200.7	11/27/07 16:50/eli-c
Sodium	192	mg/L	D	0.8		1	E200.7	11/27/07 16:50/eli-c
Chloride	11	mg/L		1		1	E300.0	11/14/07 20:00/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/14/07 20:00/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:28/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/14/07 20:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 20:00/jmh
Sulfate	1040	mg/L	D	40		50	E300.0	11/14/07 19:13/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2210	umhos/cm		5		1	A2510 B	11/16/07 18:12/jmh
Oxidation-Reduction Potential	190	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.22	s.u.		0.01		1	A4500-H B	11/16/07 14:04/jmh
Sodium Adsorption Ratio (SAR)	2.7			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	1900	mg/L		5		1	A2540 C	11/15/07 16:02/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:07/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/15/07 19:07/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:07/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 16:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:07/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:07/eli-c
Iron	0.25	mg/L		0.03		1	E200.7	11/27/07 16:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:07/eli-c
Manganese	0.37	mg/L		0.01		1	E200.8	11/15/07 19:07/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:07/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:07/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:07/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:07/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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

Page 1 of 30



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07110146-001  
**Client Sample ID:** DewBurdGW7002

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 08:10  
**Date Received:** 11/13/07  
**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	11/15/07 19:07/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	11/15/07 19:07/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:07/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 19:07/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:01/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 18:20/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:00/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	39.8	pCi/L		1.0		1	E900.0	12/03/07 03:33/eli-c
Gross Alpha precision (±)	2.1	pCi/L				1	E900.0	12/03/07 03:33/eli-c
Gross Beta	34.1	pCi/L		2.0		1	E900.0	12/03/07 03:33/eli-c
Gross Beta precision (±)	3.9	pCi/L				1	E900.0	12/03/07 03:33/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	4.1	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	2.6	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	8.1	pCi/L		0.2		1	E903.0	11/25/07 13:07/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	11/25/07 13:07/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	1600	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	500	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 09:55/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	938	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	74.1	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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

Page 2 of 30



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-001  
Client Sample ID: DewBurdGW7002

Report Date: 12/19/07  
Collection Date: 11/12/07 08:10  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
A/C Balance (± 5)	2.47	%					1	A1030 E	12/10/07 16:38/eli-c
Anions	26.9	meq/L					1	A1030 E	12/10/07 16:38/eli-c
Cations	28.2	meq/L					1	A1030 E	12/10/07 16:38/eli-c
Solids, Total Dissolved Calculated	1750	mg/L					1	A1030 E	12/10/07 16:38/eli-c
TDS Balance (0.80 - 1.20)	1.09	dec. %					1	A1030 E	12/10/07 16:38/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-002  
Client Sample ID: DewBurdGW7

Report Date: 12/19/07  
Collection Date: 11/12/07 08:20  
Date Received: 11/13/07  
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	11/26/07 15:56/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 15:56/sn
Bicarbonate as HCO3	207	mg/L		5		1	A2320 B	11/26/07 15:56/sn
Calcium	36.0	mg/L		0.5		1	E200.7	11/27/07 16:53/eli-c
Magnesium	15.3	mg/L		0.5		1	E200.7	11/27/07 16:53/eli-c
Potassium	11.1	mg/L		0.5		1	E200.7	11/27/07 16:53/eli-c
Silica	7.8	mg/L		0.5		1	E200.7	11/27/07 16:53/eli-c
Sodium	289	mg/L	D	0.8		1	E200.7	11/27/07 16:53/eli-c
Chloride	12	mg/L		1		1	E300.0	11/14/07 20:32/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/14/07 20:32/jmh
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:32/jmh
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	11/14/07 20:32/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 20:32/jmh
Sulfate	567	mg/L	D	40		50	E300.0	11/14/07 20:16/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1440	umhos/cm		5		1	A2510 B	11/16/07 18:14/jmh
Oxidation-Reduction Potential	210	mV				1	A2580 B	11/13/07 09:00/sn
pH	8.05	s.u.		0.01		1	A4500-H B	11/16/07 14:08/jmh
Sodium Adsorption Ratio (SAR)	10			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	11/15/07 16:03/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:13/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 19:13/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:13/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 16:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:13/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:13/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:13/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 16:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:13/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	11/15/07 19:13/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:13/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:13/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:13/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:13/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-002  
Client Sample ID: DewBurdGW7

Report Date: 12/19/07  
Collection Date: 11/12/07 08:20  
Date Received: 11/13/07  
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	11/15/07 19:13/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/15/07 19:13/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:13/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 19:13/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:08/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 18:27/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:02/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	7.2	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	1.1	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	14.9	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	2.1	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	1.1	pCi/L		0.2		1	E903.0	11/25/07 16:09/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/25/07 16:09/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	130	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	39	pCi/L				1	E901.1	11/16/07 10:50/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 10:55/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	206	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	65.0	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-002  
Client Sample ID: DewBurdGW7

Report Date: 12/19/07  
Collection Date: 11/12/07 08:20  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	1.13	%				1	A1030 E	12/10/07 16:39/eli-c
Anions	15.6	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Cations	15.9	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Solids, Total Dissolved Calculated	1040	mg/L				1	A1030 E	12/10/07 16:39/eli-c
TDS Balance (0.80 - 1.20)	0.980	dec. %				1	A1030 E	12/10/07 16:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-003  
Client Sample ID: DewBurdGW2

Report Date: 12/19/07  
Collection Date: 11/12/07 09:25  
Date Received: 11/13/07  
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	11/26/07 15:58/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	11/26/07 15:58/sn
Bicarbonate as HCO <sub>3</sub>	254	mg/L		5		1	A2320 B	11/26/07 15:58/sn
Calcium	51.7	mg/L		0.5		1	E200.7	11/27/07 16:57/eli-c
Magnesium	16.6	mg/L		0.5		1	E200.7	11/27/07 16:57/eli-c
Potassium	11.4	mg/L		0.5		1	E200.7	11/27/07 16:57/eli-c
Silica	8.1	mg/L		0.5		1	E200.7	11/27/07 16:57/eli-c
Sodium	286	mg/L	D	0.8		1	E200.7	11/27/07 16:57/eli-c
Chloride	11	mg/L		1		1	E300.0	11/14/07 21:04/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/14/07 21:04/jmh
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH <sub>3</sub> G	11/13/07 17:33/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/14/07 21:04/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 21:04/jmh
Sulfate	577	mg/L	D	40		50	E300.0	11/14/07 20:48/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1500	umhos/cm		5		1	A2510 B	11/16/07 18:15/jmh
Oxidation-Reduction Potential	140	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.85	s.u.		0.01		1	A4500-H B	11/16/07 14:10/jmh
Sodium Adsorption Ratio (SAR)	8.8			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	11/15/07 16:03/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 19:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:20/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 16:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:20/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 16:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:20/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	11/15/07 19:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:20/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:20/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:20/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:33/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:20/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-003  
Client Sample ID: DewBurdGW2

Report Date: 12/19/07  
Collection Date: 11/12/07 09:25  
Date Received: 11/13/07  
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	11/15/07 19:20/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/15/07 19:20/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 19:20/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:14/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 18:34/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:04/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	8.7	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	1.1	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	12.4	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	2.0	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.6	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	1.3	pCi/L		0.2		1	E903.0	11/25/07 17:09/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/25/07 17:09/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	260	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	49	pCi/L				1	E901.1	11/16/07 10:50/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 11:55/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	674	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	70.4	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-003  
Client Sample ID: DewBurdGW2

Report Date: 12/19/07  
Collection Date: 11/12/07 09:25  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	0.663	%				1	A1030 E	12/10/07 16:39/eli-c
Anions	16.5	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Cations	16.7	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Solids, Total Dissolved Calculated	1090	mg/L				1	A1030 E	12/10/07 16:39/eli-c
TDS Balance (0.80 - 1.20)	0.970	dec. %				1	A1030 E	12/10/07 16:39/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110146-004  
**Client Sample ID:** DewBurdGW18

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 10:15  
**Date Received:** 11/13/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	176	mg/L		5		1	A2320 B	11/26/07 16:00/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:00/sn
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	11/26/07 16:00/sn
Calcium	33.0	mg/L		0.5		1	E200.7	11/27/07 17:00/eli-c
Magnesium	11.6	mg/L		0.5		1	E200.7	11/27/07 17:00/eli-c
Potassium	7.0	mg/L		0.5		1	E200.7	11/27/07 17:00/eli-c
Silica	7.3	mg/L		0.5		1	E200.7	11/27/07 17:00/eli-c
Sodium	280	mg/L	D	0.8		1	E200.7	11/27/07 17:00/eli-c
Chloride	13	mg/L		1		1	E300.0	11/14/07 21:36/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/14/07 21:36/jmh
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:34/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/14/07 21:36/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 21:36/jmh
Sulfate	534	mg/L	D	40		50	E300.0	11/14/07 21:20/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1360	umhos/cm		5		1	A2510 B	11/16/07 18:15/jmh
Oxidation-Reduction Potential	80	mV				1	A2580 B	11/13/07 09:00/sn
pH	8.02	s.u.		0.01		1	A4500-H B	11/16/07 14:12/jmh
Sodium Adsorption Ratio (SAR)	11			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	11/15/07 16:05/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:27/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/15/07 19:27/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:27/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:27/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:27/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 17:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:27/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	11/15/07 19:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:27/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:27/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07110146-004  
Client Sample ID: DewBurdGW18

Report Date: 12/19/07  
Collection Date: 11/12/07 10:15  
Date Received: 11/13/07  
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	11/15/07 19:27/eli-c
Uranium	0.0066	mg/L		0.0003		1	E200.8	11/15/07 19:27/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:27/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 19:27/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:21/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 18:40/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:06/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.9	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	1.3	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	12.1	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	4.6	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Lead 210 precision (±)	1.1	pCi/L				1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	3.2	pCi/L		0.2		1	E903.0	11/25/07 18:10/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	11/25/07 18:10/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	370	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	61	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 12:56/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	945	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	73.2	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110146-004  
**Client Sample ID:** DewBurdGW18

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 10:15  
**Date Received:** 11/13/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-0.239	%				1	A1030 E	12/10/07 16:39/eli-c
Anions	15.0	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Cations	15.0	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Solids, Total Dissolved Calculated	994	mg/L				1	A1030 E	12/10/07 16:39/eli-c
TDS Balance (0.80 - 1.20)	0.970	dec. %				1	A1030 E	12/10/07 16:39/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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:** R07110146-005  
**Client Sample ID:** DewBurdGW18

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 10:20  
**Date Received:** 11/13/07  
**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	11/26/07 16:02/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:02/sn
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	11/26/07 16:02/sn
Calcium	32.5	mg/L		0.5		1	E200.7	11/27/07 17:03/eli-c
Magnesium	11.4	mg/L		0.5		1	E200.7	11/27/07 17:03/eli-c
Potassium	7.0	mg/L		0.5		1	E200.7	11/27/07 17:03/eli-c
Silica	7.3	mg/L		0.5		1	E200.7	11/27/07 17:03/eli-c
Sodium	276	mg/L	D	0.8		1	E200.7	11/27/07 17:03/eli-c
Chloride	13	mg/L		1		1	E300.0	11/14/07 22:08/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/14/07 22:08/jmh
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:35/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/14/07 22:08/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 22:08/jmh
Sulfate	536	mg/L	D	40		50	E300.0	11/14/07 21:52/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5		1	A2510 B	11/16/07 18:16/jmh
Oxidation-Reduction Potential	85	mV				1	A2580 B	11/13/07 09:00/sn
pH	8.06	s.u.		0.01		1	A4500-H B	11/16/07 14:13/jmh
Sodium Adsorption Ratio (SAR)	11			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	11/15/07 16:06/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:34/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/15/07 19:34/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:34/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:34/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:34/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:34/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 17:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:34/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	11/15/07 19:34/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:34/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:34/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:34/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:34/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-005  
Client Sample ID: DewBurdGW18

Report Date: 12/19/07  
Collection Date: 11/12/07 10:20  
Date Received: 11/13/07  
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	11/15/07 19:34/eli-c
Uranium	0.0065	mg/L		0.0003		1	E200.8	11/15/07 19:34/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:34/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 19:34/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:28/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 18:47/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:09/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	20.0	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	1.4	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	13.0	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	3.6	pCi/L		0.2		1	E903.0	11/25/07 19:10/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	11/25/07 19:10/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	330	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	62	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 13:56/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	944	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	73.2	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110146-005  
**Client Sample ID:** DewBurdGW18

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 10:20  
**Date Received:** 11/13/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-0.843	%				1	A1030 E	12/10/07 16:39/eli-c
Anions	15.0	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Cations	14.7	meq/L				1	A1030 E	12/10/07 16:39/eli-c
Solids, Total Dissolved Calculated	988	mg/L				1	A1030 E	12/10/07 16:39/eli-c
TDS Balance (0.80 - 1.20)	0.970	dec. %				1	A1030 E	12/10/07 16:39/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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:** R07110146-006  
**Client Sample ID:** DewBurdGW42

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 11:20  
**Date Received:** 11/13/07  
**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	11/26/07 16:04/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:04/sn
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	11/26/07 16:04/sn
Calcium	34.0	mg/L		0.5		1	E200.7	11/27/07 17:07/eli-c
Magnesium	11.8	mg/L		0.5		1	E200.7	11/27/07 17:07/eli-c
Potassium	7.2	mg/L		0.5		1	E200.7	11/27/07 17:07/eli-c
Silica	7.2	mg/L		0.5		1	E200.7	11/27/07 17:07/eli-c
Sodium	270	mg/L	D	0.8		1	E200.7	11/27/07 17:07/eli-c
Chloride	13	mg/L		1		1	E300.0	11/14/07 23:43/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/14/07 23:43/jmh
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:36/jmh
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	11/14/07 23:43/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/14/07 23:43/jmh
Sulfate	519	mg/L	D	40		50	E300.0	11/14/07 22:55/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1310	umhos/cm		5		1	A2510 B	11/16/07 18:17/jmh
Oxidation-Reduction Potential	240	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.95	s.u.		0.01		1	A4500-H B	11/16/07 14:14/jmh
Sodium Adsorption Ratio (SAR)	10			0.10		1	Calculation	12/10/07 16:45/kl
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	11/15/07 16:06/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:40/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 19:40/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:40/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:40/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:40/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:40/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 17:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:40/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	11/15/07 19:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:40/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:40/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:40/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:40/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07110146-006  
**Client Sample ID:** DewBurdGW42

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 11:20  
**Date Received:** 11/13/07  
**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	11/15/07 19:40/eli-c
Uranium	0.0324	mg/L		0.0003		1	E200.8	11/15/07 19:40/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:40/eli-c
Zinc	0.03	mg/L		0.01		1	E200.8	11/15/07 19:40/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:34/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 19:08/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:11/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	375	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	4.5	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	173	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	4.5	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	21	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Lead 210 precision (±)	2.3	pCi/L				1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	102	pCi/L		0.2		1	E903.0	11/25/07 19:59/eli-c
Radium 226 precision (±)	3.6	pCi/L				1	E903.0	11/25/07 19:59/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	70000	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	610	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Polonium 210 precision (±)	0.34	pCi/L				1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 14:57/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	11/26/07 14:10/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110146-006  
Client Sample ID: DewBurdGW42

Report Date: 12/19/07  
Collection Date: 11/12/07 11:20  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - TOTAL								
Radon 222	132000	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	474	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.342	%				1	A1030 E	12/10/07 16:40/eli-c
Anions	14.7	meq/L				1	A1030 E	12/10/07 16:40/eli-c
Cations	14.6	meq/L				1	A1030 E	12/10/07 16:40/eli-c
Solids, Total Dissolved Calculated	969	mg/L				1	A1030 E	12/10/07 16:40/eli-c
TDS Balance (0.80 - 1.20)	0.970	dec. %				1	A1030 E	12/10/07 16:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-007  
Client Sample ID: DewBurdGW13

Report Date: 12/19/07  
Collection Date: 11/12/07 12:15  
Date Received: 11/13/07  
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	11/26/07 16:06/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	11/26/07 16:06/sn
Bicarbonate as HCO <sub>3</sub>	173	mg/L		5		1	A2320 B	11/26/07 16:06/sn
Calcium	61.3	mg/L		0.5		1	E200.7	11/27/07 17:10/eli-c
Magnesium	25.1	mg/L		0.5		1	E200.7	11/27/07 17:10/eli-c
Potassium	11.7	mg/L		0.5		1	E200.7	11/27/07 17:10/eli-c
Silica	6.2	mg/L		0.5		1	E200.7	11/27/07 17:10/eli-c
Sodium	175	mg/L	D	0.8		1	E200.7	11/27/07 17:10/eli-c
Chloride	11	mg/L		1		1	E300.0	11/15/07 00:15/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/15/07 00:15/jmh
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH <sub>3</sub> G	11/13/07 17:38/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/15/07 00:15/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/15/07 00:15/jmh
Sulfate	520	mg/L	D	40		50	E300.0	11/14/07 23:59/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1140	umhos/cm		5		1	A2510 B	11/16/07 18:18/jmh
Oxidation-Reduction Potential	230	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.75	s.u.		0.01		1	A4500-H B	11/16/07 14:16/jmh
Sodium Adsorption Ratio (SAR)	4.7			0.10		1	Calculation	12/10/07 16:45/kl
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	11/15/07 16:07/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 19:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 19:47/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 19:47/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 19:47/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 19:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 19:47/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 17:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 19:47/eli-c
Manganese	0.20	mg/L		0.01		1	E200.8	11/15/07 19:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 19:47/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 19:47/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 19:47/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 19:47/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.

D - RL increased due to sample matrix interference.





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110146-007  
Client Sample ID: DewBurdGW13

Report Date: 12/19/07  
Collection Date: 11/12/07 12:15  
Date Received: 11/13/07  
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	11/15/07 19:47/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/15/07 19:47/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 19:47/eli-c
Zinc	0.04	mg/L		0.01		1	E200.8	11/15/07 19:47/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 03:41/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 19:14/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:13/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	7.5	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	1.0	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	11.7	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	2.6	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.8	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	1.6	pCi/L		0.2		1	E903.0	11/25/07 21:00/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/25/07 21:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	4300	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	370	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 15:57/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	305	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	64.5	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110146-007

**Client Sample ID:** DewBurdGW13

**Report Date:** 12/19/07

**Collection Date:** 11/12/07 12:15

**Date Received:** 11/13/07

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-3.53	%				1	A1030 E	12/10/07 16:40/eli-c
Anions	14.0	meq/L				1	A1030 E	12/10/07 16:40/eli-c
Cations	13.1	meq/L				1	A1030 E	12/10/07 16:40/eli-c
Solids, Total Dissolved Calculated	898	mg/L				1	A1030 E	12/10/07 16:40/eli-c
TDS Balance (0.80 - 1.20)	0.990	dec. %				1	A1030 E	12/10/07 16:40/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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:** R07110146-008  
**Client Sample ID:** DewBurdGW619

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 14:25  
**Date Received:** 11/13/07  
**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>	98	mg/L		5		1	A2320 B	11/26/07 16:09/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	11/26/07 16:09/sn
Bicarbonate as HCO <sub>3</sub>	119	mg/L		5		1	A2320 B	11/26/07 16:09/sn
Calcium	263	mg/L		0.5		1	E200.7	11/27/07 17:13/eli-c
Magnesium	96.4	mg/L		0.5		1	E200.7	11/27/07 17:13/eli-c
Potassium	16.2	mg/L		0.5		1	E200.7	11/27/07 17:13/eli-c
Silica	6.0	mg/L		0.5		1	E200.7	11/27/07 17:13/eli-c
Sodium	86.1	mg/L	D	0.8		1	E200.7	11/27/07 17:13/eli-c
Chloride	10	mg/L		1		1	E300.0	11/15/07 00:47/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/15/07 00:47/jmh
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH <sub>3</sub> G	11/13/07 17:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/15/07 00:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/15/07 00:47/jmh
Sulfate	1180	mg/L	D	40		50	E300.0	11/15/07 00:31/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1860	umhos/cm		5		1	A2510 B	11/16/07 18:19/jmh
Oxidation-Reduction Potential	25	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.03	s.u.		0.01		1	A4500-H B	11/16/07 14:18/jmh
Sodium Adsorption Ratio (SAR)	1.2			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	1900	mg/L		5		1	A2540 C	11/15/07 16:08/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 20:08/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 20:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 20:08/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 20:08/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 20:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 20:08/eli-c
Iron	4.39	mg/L		0.03		1	E200.7	11/27/07 17:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 20:08/eli-c
Manganese	1.15	mg/L		0.01		1	E200.8	11/15/07 20:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 20:08/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 20:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 20:08/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 20:08/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07110146-008  
Client Sample ID: DewBurdGW619

Report Date: 12/19/07  
Collection Date: 11/12/07 14:25  
Date Received: 11/13/07  
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	11/15/07 20:08/eli-c
Uranium	0.0015	mg/L		0.0003		1	E200.8	11/15/07 20:08/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 20:08/eli-c
Zinc	0.07	mg/L		0.01		1	E200.8	11/15/07 20:08/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 04:02/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 19:21/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:15/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	341	pCi/L		1.0		1	E900.0	12/03/07 03:32/eli-c
Gross Alpha precision (±)	4.8	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Gross Beta	170	pCi/L		2.0		1	E900.0	12/03/07 03:32/eli-c
Gross Beta precision (±)	5.7	pCi/L				1	E900.0	12/03/07 03:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	100	pCi/L		0.2		1	E903.0	11/25/07 21:46/eli-c
Radium 226 precision (±)	3.6	pCi/L				1	E903.0	11/25/07 21:46/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	4200	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	360	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	3.5	pCi/L		0.2		1	E903.0	12/02/07 16:57/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/02/07 16:57/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	2990	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-008  
Client Sample ID: DewBurdGW619

Report Date: 12/19/07  
Collection Date: 11/12/07 14:25  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
Radon 222 precision (±)	91.9	pCi/L					1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY									
A/C Balance (± 5)	-2.56	%					1	A1030 E	12/10/07 16:40/eli-c
Anions	26.8	meq/L					1	A1030 E	12/10/07 16:40/eli-c
Cations	25.5	meq/L					1	A1030 E	12/10/07 16:40/eli-c
Solids, Total Dissolved Calculated	1720	mg/L					1	A1030 E	12/10/07 16:40/eli-c
TDS Balance (0.80 - 1.20)	1.09	dec. %					1	A1030 E	12/10/07 16:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-009  
Client Sample ID: DewBurdGW650

Report Date: 12/19/07  
Collection Date: 11/12/07 15:30  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	108	mg/L		5		1	A2320 B	11/26/07 16:12/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:12/sn
Bicarbonate as HCO3	132	mg/L		5		1	A2320 B	11/26/07 16:12/sn
Calcium	221	mg/L		0.5		1	E200.7	11/27/07 17:16/eli-c
Magnesium	100	mg/L		0.5		1	E200.7	11/27/07 17:16/eli-c
Potassium	18.1	mg/L		0.5		1	E200.7	11/27/07 17:16/eli-c
Silica	1.1	mg/L		0.5		1	E200.7	11/27/07 17:16/eli-c
Sodium	139	mg/L	D	0.8		1	E200.7	11/27/07 17:16/eli-c
Chloride	16	mg/L		1		1	E300.0	11/15/07 01:19/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	11/15/07 01:19/jmh
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:46/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/15/07 01:19/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/15/07 01:19/jmh
Sulfate	1000	mg/L	D	40		50	E300.0	11/15/07 01:03/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1770	umhos/cm		5		1	A2510 B	11/16/07 18:20/jmh
Oxidation-Reduction Potential	190	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.22	s.u.		0.01		1	A4500-H B	11/16/07 14:20/jmh
Sodium Adsorption Ratio (SAR)	1.9			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	1600	mg/L		5		1	A2540 C	11/15/07 16:09/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 20:35/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 20:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 20:35/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 20:35/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 20:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 20:35/eli-c
Iron	0.68	mg/L		0.03		1	E200.7	11/27/07 17:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 20:35/eli-c
Manganese	1.39	mg/L		0.01		1	E200.8	11/15/07 20:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 20:35/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 20:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 20:35/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 20:35/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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:** R07110146-009  
**Client Sample ID:** DewBurdGW650

**Report Date:** 12/19/07  
**Collection Date:** 11/12/07 15:30  
**Date Received:** 11/13/07  
**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	11/15/07 20:35/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/15/07 20:35/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 20:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/15/07 20:35/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 04:08/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 19:28/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:17/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5.6	pCi/L		1.0		1	E900.0	12/04/07 04:32/eli-c
Gross Alpha precision (±)	1.5	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Gross Beta	20.1	pCi/L		2.0		1	E900.0	12/04/07 04:32/eli-c
Gross Beta precision (±)	3.7	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Lead 210	1.4	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Lead 210 precision (±)	0.60	pCi/L				1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	2.4	pCi/L		0.2		1	E903.0	11/25/07 22:46/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	11/25/07 22:46/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	2200	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	290	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 17:58/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	134	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	60.8	pCi/L				1	D5072-92	11/15/07 18:10/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110146-009  
Client Sample ID: DewBurdGW650

Report Date: 12/19/07  
Collection Date: 11/12/07 15:30  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	4.96	%				1	A1030 E	12/10/07 16:41/eli-c
Anions	23.5	meq/L				1	A1030 E	12/10/07 16:41/eli-c
Cations	26.0	meq/L				1	A1030 E	12/10/07 16:41/eli-c
Solids, Total Dissolved Calculated	1560	mg/L				1	A1030 E	12/10/07 16:41/eli-c
TDS Balance (0.80 - 1.20)	1.01	dec. %				1	A1030 E	12/10/07 16:41/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-010  
Client Sample ID: DewBurdGW16

Report Date: 12/19/07  
Collection Date: 11/12/07 16:05  
Date Received: 11/13/07  
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	11/26/07 16:15/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:15/sn
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	11/26/07 16:15/sn
Calcium	103	mg/L		0.5		1	E200.7	11/27/07 17:20/eli-c
Magnesium	39.4	mg/L		0.5		1	E200.7	11/27/07 17:20/eli-c
Potassium	16.0	mg/L		0.5		1	E200.7	11/27/07 17:20/eli-c
Silica	6.5	mg/L		0.5		1	E200.7	11/27/07 17:20/eli-c
Sodium	44.1	mg/L	D	0.8		1	E200.7	11/27/07 17:20/eli-c
Chloride	5	mg/L		1		1	E300.0	11/15/07 01:51/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/15/07 01:51/jmh
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:47/jmh
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	11/15/07 01:51/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/15/07 01:51/jmh
Sulfate	428	mg/L	D	40		50	E300.0	11/15/07 01:35/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	925	umhos/cm		5		1	A2510 B	11/16/07 18:21/jmh
Oxidation-Reduction Potential	240	mV				1	A2580 B	11/13/07 09:00/sn
pH	7.48	s.u.		0.01		1	A4500-H B	11/16/07 14:22/jmh
Sodium Adsorption Ratio (SAR)	0.94			0.10		1	Calculation	12/10/07 16:45/lkl
Solids, Total Dissolved TDS @ 180 C	760	mg/L		5		1	A2540 C	11/15/07 16:09/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/15/07 20:42/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/15/07 20:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/15/07 20:42/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 17:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/15/07 20:42/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/15/07 20:42/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/15/07 20:42/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/27/07 17:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/15/07 20:42/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	11/15/07 20:42/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/15/07 20:42/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/15/07 20:42/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/15/07 20:42/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 13:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/15/07 20:42/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

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: R07110146-010  
Client Sample ID: DewBurdGW16

Report Date: 12/19/07  
Collection Date: 11/12/07 16:05  
Date Received: 11/13/07  
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	11/15/07 20:42/eli-c
Uranium	0.0007	mg/L		0.0003		1	E200.8	11/15/07 20:42/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/15/07 20:42/eli-c
Zinc	0.06	mg/L		0.01		1	E200.8	11/15/07 20:42/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 04:15/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/19/07 19:35/eli-c
METALS - DISSOLVED - SPECIATED								
Selenium-IV	ND	mg/L		0.0010		1	A3114 B	11/28/07 09:19/eli-c
Selenium-VI	ND	mg/L		0.0010		1	A3114 B	11/28/07 15:15/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	12.2	pCi/L		1.0		1	E900.0	12/04/07 04:32/eli-c
Gross Alpha precision (±)	1.0	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Gross Beta	24.0	pCi/L		2.0		1	E900.0	12/04/07 04:32/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Lead 210	2.2	pCi/L		1.0		1	E909.0M	11/19/07 10:35/eli-c
Lead 210 precision (±)	0.70	pCi/L				1	E909.0M	11/19/07 10:35/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	8.1	pCi/L		0.2		1	E903.0	11/25/07 23:47/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	11/25/07 23:47/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/21/07 14:10/eli-c
Gross Gamma	2300	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	260	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	1.2	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Lead 210 precision (±)	0.22	pCi/L				1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 18:58/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1090	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110146-010  
Client Sample ID: DewBurdGW16

Report Date: 12/19/07  
Collection Date: 11/12/07 16:05  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222 precision (±)	72.1	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.55	%				1	A1030 E	12/10/07 16:43/eli-c
Anions	11.0	meq/L				1	A1030 E	12/10/07 16:43/eli-c
Cations	10.7	meq/L				1	A1030 E	12/10/07 16:43/eli-c
Solids, Total Dissolved Calculated	686	mg/L				1	A1030 E	12/10/07 16:43/eli-c
TDS Balance (0.80 - 1.20)	1.11	dec. %				1	A1030 E	12/10/07 16:43/eli-c
- Ion balance achieved using Sulfate data from E200.7.								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B			Batch: 071126A-ALK-SEL-W						
Sample ID: MBLK2_071126A	Method Blank				Run: PH_COND1-R_071126A			11/26/07 15:38	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS2_071126A	Laboratory Control Sample				Run: PH_COND1-R_071126A			11/26/07 15:41	
Alkalinity, Total as CaCO <sub>3</sub>	910	mg/L	5.0	91	90	110			
Sample ID: R07110147-004AMS	Sample Matrix Spike				Run: PH_COND1-R_071126A			11/26/07 16:25	
Alkalinity, Total as CaCO <sub>3</sub>	102	mg/L	5.0	96	80	120			
Sample ID: R07110147-004AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_071126A			11/26/07 16:29	
Alkalinity, Total as CaCO <sub>3</sub>	94.0	mg/L	5.0	89	80	120	8.2	10	
Method: A2510 B			Batch: 071116_1_COND-PROBE-W						
Sample ID: LCS1-1_071116	Laboratory Control Sample				Run: PH_COND2-R_071116A			11/16/07 18:09	
Conductivity @ 25 C	151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_071116	Laboratory Control Sample				Run: PH_COND2-R_071116A			11/16/07 18:10	
Conductivity @ 25 C	4890	umhos/cm	5.0	98	90	110			
Sample ID: LCS_COND-1_071116	Laboratory Control Sample				Run: PH_COND2-R_071116A			11/16/07 18:10	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071116	Method Blank				Run: PH_COND2-R_071116A			11/16/07 18:11	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R07110146-001ADUP	Sample Duplicate				Run: PH_COND2-R_071116A			11/16/07 18:13	
Conductivity @ 25 C	2220	umhos/cm	5.0				0.5	10	
Method: A2540 C			Batch: 071115A-SLDS-TDS-W						
Sample ID: LCS1_071115A	Laboratory Control Sample				Run: BAL-4-R_071115A			11/15/07 15:53	
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	99	90	110			
Sample ID: MBLK1_071115A	Method Blank				Run: BAL-4-R_071115A			11/16/07 13:54	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R07110146-003AMS	Sample Matrix Spike				Run: BAL-4-R_071115A			11/15/07 16:04	
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	99	80	120			
Sample ID: R07110146-003AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_071115A			11/15/07 16:05	
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	100	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-071128		
Sample ID: MBLK	Method Blank					Run: SUB-C93452			11/28/07 13:26
Selenium	ND	mg/L	0.0004						
Sample ID: C07110603-001EMS	Sample Matrix Spike					Run: SUB-C93452			11/28/07 13:50
Selenium	0.050	mg/L	0.0010	100	85	115			
Sample ID: C07110603-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C93452			11/28/07 13:52
Selenium	0.050	mg/L	0.0010	101	85	115	0.6	10	
Sample ID: 301-119-5	Laboratory Control Sample					Run: SUB-C93452			11/28/07 13:54
Selenium	0.049	mg/L	0.0010	99	90	110			
Method: A3114 B							Batch: C_SEIV3114-071128		
Sample ID: MBLK	Method Blank					Run: SUB-C93423			11/28/07 08:58
Selenium-IV	ND	mg/L	0.0002						
Sample ID: C07110603-001EMS	Sample Matrix Spike					Run: SUB-C93423			11/28/07 09:21
Selenium-IV	0.046	mg/L	0.0010	93	85	115			
Sample ID: C07110603-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C93423			11/28/07 09:23
Selenium-IV	0.048	mg/L	0.0010	95	85	115	2.7	10	
Sample ID: 301-119-5	Laboratory Control Sample					Run: SUB-C93423			11/28/07 09:25
Selenium-IV	0.048	mg/L	0.0010	96	90	110			
Method: A4500-H B							Batch: 071116_1_PH-W		
Sample ID: LCS_pH-1_071116	Laboratory Control Sample					Run: PH_COND2-R_071116B			11/16/07 14:01
pH	6.85	s.u.	0.010	100	98.55	101.45			
Sample ID: R07110146-001ADUP	Sample Duplicate					Run: PH_COND2-R_071116B			11/16/07 14:07
pH	7.22	s.u.	0.010				0.0	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: 12/19/07

Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2007-11-13_2_NH3_01		
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_071113A			11/13/07 16:08
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_071113A			11/13/07 16:10
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: R07110146-001BMS	Sample Matrix Spike					Run: TECHAA2-R_071113A			11/13/07 17:29
Nitrogen, Ammonia as N	0.57	mg/L	0.10	113	80	120			
Sample ID: R07110146-001BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_071113A			11/13/07 17:31
Nitrogen, Ammonia as N	0.57	mg/L	0.10	114	80	120	0.4	10	
Method: D5072-92							Batch: C_R93068		
Sample ID: R07110146-010G	Sample Duplicate					Run: SUB-C93068			11/15/07 18:10
Radon 222	1150	pCi/L	100				5.6	30	
Sample ID: MB-R93068	Method Blank					Run: SUB-C93068			11/15/07 18:10
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R93068	Laboratory Control Sample					Run: SUB-C93068			11/15/07 18:10
Radon 222	303	pCi/L	100	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R93405		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C93405			11/27/07 11:57		
Silica	2.0	mg/L	0.10	98	85	125			
Boron	1.9	mg/L	0.10	96	85	125			
Iron	2.0	mg/L	0.030	99	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C93405			11/27/07 12:00		
Calcium	24	mg/L	0.50	97	85	125			
Magnesium	24	mg/L	0.50	94	85	125			
Potassium	26	mg/L	0.50	104	85	125			
Sodium	24	mg/L	0.76	97	85	125			
Sample ID: R07110146-001C	Sample Matrix Spike			Run: SUB-C93405			11/27/07 15:02		
Boron	8.88	mg/L	0.10	89	70	130			
Calcium	619	mg/L	1.0	81	70	130			
Iron	9.14	mg/L	0.046	88	70	130			
Magnesium	482	mg/L	0.50	81	70	130			
Potassium	1100	mg/L	0.50	90	70	130			
Silica	16.2	mg/L	0.20	85	70	130			
Sodium	551	mg/L	7.6	80	70	130			
Sample ID: R07110146-001C	Sample Matrix Spike Duplicate			Run: SUB-C93405			11/27/07 15:05		
Boron	9.32	mg/L	0.10	93	70	130	4.8	20	
Calcium	632	mg/L	1.0	84	70	130	2.1	20	
Iron	9.49	mg/L	0.046	91	70	130	3.8	20	
Magnesium	491	mg/L	0.50	82	70	130	1.7	20	
Potassium	1110	mg/L	0.50	91	70	130	1.6	20	
Silica	16.4	mg/L	0.20	86	70	130	1.0	20	
Sodium	577	mg/L	7.6	85	70	130	4.6	20	
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C93405			11/27/07 21:56		
Silica	1.9	mg/L	0.10	96	85	125			
Boron	1.9	mg/L	0.10	93	85	125			
Iron	1.9	mg/L	0.030	95	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C93405			11/27/07 21:59		
Calcium	23	mg/L	0.50	94	85	125			
Magnesium	23	mg/L	0.50	93	85	125			
Potassium	26	mg/L	0.50	105	85	125			
Sodium	23	mg/L	0.76	94	85	125			
Sample ID: C07110667-001BMS	Sample Matrix Spike			Run: SUB-C93405			11/27/07 17:43		
Boron	0.966	mg/L	0.10	92	70	130			
Calcium	105	mg/L	0.50	80	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R93405		
Sample ID: C07110667-001BMS	Sample Matrix Spike		Run: SUB-C93405			11/27/07 17:43			
Iron	0.934	mg/L	0.030	93	70	130			
Magnesium	56.9	mg/L	0.50	87	70	130			
Potassium	116	mg/L	0.50	93	70	130			
Silica	50.9	mg/L	0.10		0	0			A
Sodium	58.9	mg/L	0.76	89	70	130			
Silicon	23.8	mg/L	0.047	2380	70	130			S
Sample ID: C07110667-001BMSD	Sample Matrix Spike Duplicate		Run: SUB-C93405			11/27/07 17:46			
Boron	0.999	mg/L	0.10	95	70	130	3.4	20	
Calcium	108	mg/L	0.50	84	70	130	2.2	20	
Iron	0.952	mg/L	0.030	95	70	130	1.9	20	
Magnesium	57.5	mg/L	0.50	88	70	130	1.0	20	
Potassium	116	mg/L	0.50	93	70	130	0.1	20	
Silica	51.5	mg/L	0.10		0	0			A
Sodium	58.5	mg/L	0.76	89	70	130	0.7	20	
Silicon	24.1	mg/L	0.047	2410	70	130	1.2	20	S
Method: E200.8							Batch: C_16851		
Sample ID: MB-16851	Method Blank		Run: SUB-C93179			11/19/07 17:53			
Mercury	ND	mg/L	6E-06						
Sample ID: C07110611-007C MS4	Post Digestion Spike		Run: SUB-C93179			11/19/07 20:43			
Mercury	0.0062	mg/L	0.0010	88	70	130			
Sample ID: C07110611-007C MSD4	Post Digestion Spike Duplicate		Run: SUB-C93179			11/19/07 20:49			
Mercury	0.0058	mg/L	0.0010	83	70	130	6.5	20	
Method: E200.8							Batch: C_16875		
Sample ID: MB-16875	Method Blank		Run: SUB-C93209			11/21/07 02:47			
Uranium	5E-05	mg/L	2E-05						
Sample ID: LCS1-16875	Laboratory Control Sample		Run: SUB-C93209			11/21/07 02:54			
Uranium	0.0526	mg/L	0.00030	100	80	120			
Sample ID: R07110147-004K	Post Digestion Spike		Run: SUB-C93209			11/21/07 04:48			
Uranium	0.0241	mg/L	0.00030	95	70	130			
Sample ID: R07110147-004K	Post Digestion Spike Duplicate		Run: SUB-C93209			11/21/07 04:55			
Uranium	0.0241	mg/L	0.00030	95	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.  
S - Spike recovery outside of advisory limits.





## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 12/19/07

Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R92944		
Sample ID: LRB	Method Blank		Run: SUB-C92944				11/15/07 12:39		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	6E-05	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						
Silver	0.001	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-C92944				11/15/07 12:46		
Aluminum	0.0479	mg/L	0.0010	96	85	115			
Arsenic	0.0514	mg/L	0.0010	103	85	115			
Barium	0.0531	mg/L	0.0010	106	85	115			
Cadmium	0.0522	mg/L	0.0010	104	85	115			
Chromium	0.0509	mg/L	0.0010	102	85	115			
Copper	0.0516	mg/L	0.0010	103	85	115			
Lead	0.0531	mg/L	0.0010	106	85	115			
Manganese	0.0507	mg/L	0.0010	101	85	115			
Mercury	0.00542	mg/L	0.0010	108	85	115			
Molybdenum	0.0508	mg/L	0.0010	102	85	115			
Nickel	0.0510	mg/L	0.0010	102	85	115			
Silver	0.0209	mg/L	0.0010	98	85	115			
Thorium 232	0.0528	mg/L	0.0010	106	85	115			
Uranium	0.0530	mg/L	0.00030	106	85	115			
Vanadium	0.0511	mg/L	0.0010	102	85	115			
Zinc	0.0536	mg/L	0.0010	105	85	115			
Sample ID: C07110507-001BMS4	Post Digestion Spike		Run: SUB-C92944				11/15/07 14:08		
Aluminum	0.104	mg/L	0.10	107	70	130			
Arsenic	0.0932	mg/L	0.0010	102	70	130			
Barium	0.103	mg/L	0.10	83	70	130			
Cadmium	0.0500	mg/L	0.010	100	70	130			
Chromium	0.0489	mg/L	0.050	97	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R92944		
Sample ID: C07110507-001BMS4	Post Digestion Spike		Run: SUB-C92944				11/15/07 14:08		
Copper	0.0485	mg/L	0.010	96	70	130			
Lead	0.0505	mg/L	0.050	101	70	130			
Manganese	0.130	mg/L	0.010	92	70	130			
Mercury	0.00519	mg/L	0.0010	104	70	130			
Molybdenum	0.0562	mg/L	0.10	101	70	130			
Nickel	0.0479	mg/L	0.050	96	70	130			
Silver	0.0181	mg/L	0.010	91	70	130			
Thorium 232	0.0519	mg/L	0.0010	104	70	130			
Uranium	0.0529	mg/L	0.00030	104	70	130			
Vanadium	0.0476	mg/L	0.10	94	70	130			
Zinc	0.0512	mg/L	0.010	98	70	130			
Sample ID: C07110507-001BMSD4	Post Digestion Spike Duplicate		Run: SUB-C92944				11/15/07 14:14		
Aluminum	0.112	mg/L	0.10	125	70	130	8.0	20	
Arsenic	0.0938	mg/L	0.0010	103	70	130	0.6	20	
Barium	0.106	mg/L	0.10	88	70	130	2.2	20	
Cadmium	0.0503	mg/L	0.010	101	70	130	0.6	20	
Chromium	0.0493	mg/L	0.050	98	70	130	0.0	20	
Copper	0.0488	mg/L	0.010	97	70	130	0.7	20	
Lead	0.0511	mg/L	0.050	102	70	130	1.1	20	
Manganese	0.133	mg/L	0.010	99	70	130	2.4	20	
Mercury	0.00526	mg/L	0.0010	105	70	130	1.4	20	
Molybdenum	0.0573	mg/L	0.10	103	70	130	0.0	20	
Nickel	0.0490	mg/L	0.050	98	70	130	0.0	20	
Silver	0.0172	mg/L	0.010	86	70	130	5.2	20	
Thorium 232	0.0524	mg/L	0.0010	105	70	130	1.0	20	
Uranium	0.0538	mg/L	0.00030	106	70	130	1.7	20	
Vanadium	0.0478	mg/L	0.10	94	70	130	0.0	20	
Zinc	0.0518	mg/L	0.010	100	70	130	1.2	20	
Sample ID: C07110518-001AMS	Sample Matrix Spike		Run: SUB-C92944				11/15/07 13:06		
Uranium	0.38	mg/L	0.00030		70	130			A
Sample ID: C07110518-001AMSD	Sample Matrix Spike Duplicate		Run: SUB-C92944				11/15/07 13:13		
Uranium	0.38	mg/L	0.00030		70	130	0.3	20	A
Sample ID: R07110146-008C	Post Digestion Spike		Run: SUB-C92944				11/15/07 20:15		
Aluminum	0.0450	mg/L	0.10	90	70	130			
Arsenic	0.0527	mg/L	0.0010	104	70	130			
Barium	0.0623	mg/L	0.10	106	70	130			
Cadmium	0.0491	mg/L	0.010	98	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R92944		
Sample ID: R07110146-008C	Post Digestion Spike			Run: SUB-C92944			11/15/07 20:15		
Chromium	0.0486	mg/L	0.050	97	70	130			
Copper	0.0563	mg/L	0.010	95	70	130			
Lead	0.0534	mg/L	0.050	105	70	130			
Manganese	1.19	mg/L	0.010		70	130			A
Mercury	0.00487	mg/L	0.0010	97	70	130			
Molybdenum	0.0518	mg/L	0.10	103	70	130			
Nickel	0.0521	mg/L	0.050	96	70	130			
Silver	0.0155	mg/L	0.010	78	70	130			
Thorium 232	0.0563	mg/L	0.0010	112	70	130			
Uranium	0.0570	mg/L	0.00030	111	70	130			
Vanadium	0.0501	mg/L	0.10	100	70	130			
Zinc	0.110	mg/L	0.010	87	70	130			
Sample ID: R07110146-008C	Post Digestion Spike Duplicate			Run: SUB-C92944			11/15/07 20:21		
Aluminum	0.0418	mg/L	0.10	84	70	130	0.0	20	
Arsenic	0.0514	mg/L	0.0010	102	70	130	2.5	20	
Barium	0.0614	mg/L	0.10	104	70	130	0.0	20	
Cadmium	0.0481	mg/L	0.010	96	70	130	1.9	20	
Chromium	0.0464	mg/L	0.050	92	70	130	0.0	20	
Copper	0.0542	mg/L	0.010	90	70	130	3.8	20	
Lead	0.0526	mg/L	0.050	104	70	130	1.6	20	
Manganese	1.16	mg/L	0.010		70	130	2.9	20	A
Mercury	0.00490	mg/L	0.0010	98	70	130	0.6	20	
Molybdenum	0.0497	mg/L	0.10	99	70	130	0.0	20	
Nickel	0.0495	mg/L	0.050	91	70	130	0.0	20	
Silver	0.0164	mg/L	0.010	82	70	130	5.1	20	
Thorium 232	0.0552	mg/L	0.0010	110	70	130	2.0	20	
Uranium	0.0560	mg/L	0.00030	109	70	130	1.9	20	
Vanadium	0.0480	mg/L	0.10	96	70	130	0.0	20	
Zinc	0.109	mg/L	0.010	83	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R32251		
Sample ID: LFB0711142429-3	Laboratory Fortified Blank			Run: DIONEX_071114A			11/14/07 18:41		
Chloride	4.81	mg/L	0.50	96	90	110			
Fluoride	1.96	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.43	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	2.39	mg/L	0.10	96	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
Sample ID: LFB0711142429-4	Laboratory Fortified Blank			Run: DIONEX_071114A			11/14/07 18:57		
Chloride	4.95	mg/L	0.50	99	90	110			
Fluoride	2.02	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.50	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	14.5	mg/L	1.0	97	90	110			
Sample ID: R07110146-001AMS	Sample Matrix Spike			Run: DIONEX_071114A			11/14/07 19:29		
Chloride	258	mg/L	2.0	94	80	120			
Fluoride	102	mg/L	3.2	102	80	120			
Nitrogen, Nitrate as N	126	mg/L	0.84	101	80	120			
Nitrogen, Nitrite as N	125	mg/L	1.1	100	80	120			
Sulfate	1670	mg/L	36	85	80	120			
Sample ID: R07110146-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_071114A			11/14/07 19:44		
Chloride	251	mg/L	2.0	91	80	120	2.9	10	
Fluoride	98.9	mg/L	3.2	99	80	120	3.1	10	
Nitrogen, Nitrate as N	122	mg/L	0.84	98	80	120	3.3	10	
Nitrogen, Nitrite as N	121	mg/L	1.1	97	80	120	3.1	10	
Sulfate	1650	mg/L	36	81	80	120	1.7	10	
Sample ID: R07110146-006AMS	Sample Matrix Spike			Run: DIONEX_071114A			11/14/07 23:11		
Chloride	261	mg/L	2.0	95	80	120			
Fluoride	102	mg/L	3.2	102	80	120			
Nitrogen, Nitrate as N	127	mg/L	0.84	101	80	120			
Nitrogen, Nitrite as N	125	mg/L	1.1	100	80	120			
Sulfate	1140	mg/L	36	83	80	120			
Sample ID: R07110146-006AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_071114A			11/14/07 23:27		
Chloride	257	mg/L	2.0	93	80	120	1.5	10	
Fluoride	101	mg/L	3.2	101	80	120	1.8	10	
Nitrogen, Nitrate as N	124	mg/L	0.84	99	80	120	2.3	10	
Nitrogen, Nitrite as N	122	mg/L	1.1	98	80	120	2.5	10	
Sulfate	1130	mg/L	36	82	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: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0360		
Sample ID: MB-GrAB-0360	Method Blank				Run: SUB-C93851			11/30/07 22:31	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0360	Laboratory Control Sample				Run: SUB-C93851			11/30/07 22:32	
Gross Alpha	200	pCi/L	1.0	98	70	130			
Sample ID: Cs137-GrAB-0360	Laboratory Control Sample				Run: SUB-C93851			11/30/07 22:32	
Gross Beta	90	pCi/L	2.0	97	70	130			
Sample ID: C07110713-001EMS	Sample Matrix Spike				Run: SUB-C93851			11/30/07 22:32	
Gross Alpha	400	pCi/L	1.0	82	70	130			
Sample ID: C07110713-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C93851			11/30/07 22:31	
Gross Alpha	400	pCi/L	1.0	81	70	130	1.2	12.4	
Sample ID: C07110713-001EMS	Sample Matrix Spike				Run: SUB-C93851			11/30/07 22:31	
Gross Beta	200	pCi/L	2.0	93	70	130			
Sample ID: C07110713-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C93851			11/30/07 22:31	
Gross Beta	200	pCi/L	2.0	87	70	130	6.7	15.6	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R93000		
<b>Sample ID: LCS-R93000</b>	Laboratory Control Sample				Run: SUB-C93000		11/16/07 10:50		
Cesium 137	1100	pCi/L	20	82	70	130			
Potassium 40	7000	pCi/L	20	105	70	130			
<b>Sample ID: MB-R93000</b>	Method Blank				Run: SUB-C93000		11/16/07 10:50		
Americium 241	ND	pCi/L	20						
Barium 133	ND	pCi/L	20						
Bismuth 212	ND	pCi/L	20						
Bismuth 214	ND	pCi/L	20						
Cesium 134	ND	pCi/L	20						
Cesium 137	ND	pCi/L	20						
Cobalt 60	ND	pCi/L	20						
Iodine 125	ND	pCi/L	20						
Iodine 131	ND	pCi/L	20						
Lead 212	ND	pCi/L	20						
Lead 214	ND	pCi/L	20						
Manganese 54	ND	pCi/L	20						
Potassium 40	ND	pCi/L	20						
Radium 223	ND	pCi/L	20						
Radium 224	ND	pCi/L	20						
Thallium 208	ND	pCi/L	20						
Thorium 228	ND	pCi/L	20						
Thorium 234	ND	pCi/L	20						
Zinc 65	ND	pCi/L	20						
Radium 228	ND	pCi/L	20						
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R07110146-010H</b>	Sample Duplicate				Run: SUB-C93000		11/16/07 10:50		
Gross Gamma	2000	pCi/L	20				13	30	
<b>Method: E903.0</b>							Batch: C_16875		
<b>Sample ID: C07110557-001FMS</b>	Sample Matrix Spike				Run: SUB-C93643		12/02/07 05:53		
Radium 226	60	pCi/L	0.20	97	70	130			
<b>Sample ID: C07110557-001FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C93643		12/02/07 06:53		
Radium 226	54	pCi/L	0.20	86	70	130	10	30.1	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-2443		
Sample ID: R07110146-001H	Sample Matrix Spike					Run: SUB-C93312			11/25/07 14:08
Radium 226	28	pCi/L	0.20	95	70	130			
Sample ID: R07110146-001H	Sample Matrix Spike Duplicate					Run: SUB-C93312			11/25/07 15:08
Radium 226	26	pCi/L	0.20	83	70	130	9.2	26	
Sample ID: MB-RA226-2443	Method Blank					Run: SUB-C93312			11/26/07 04:49
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2443	Laboratory Control Sample					Run: SUB-C93312			11/26/07 06:50
Radium 226	12	pCi/L	0.20	92	70	130			
Method: E907.0							Batch: C_16875		
Sample ID: R07110146-008I	Sample Duplicate					Run: SUB-C93872			11/26/07 14:10
Thorium 230	0.233	pCi/L	0.20		70	130	2.6	30	
Sample ID: R07110146-009I	Sample Matrix Spike					Run: SUB-C93872			11/26/07 14:10
Thorium 230	3.25	pCi/L	0.20	87	70	130			
Sample ID: LCS-16875	Laboratory Control Sample					Run: SUB-C93872			11/26/07 14:10
Thorium 230	54.8	pCi/L	0.21	94	70	130			
Sample ID: MB-16875	Method Blank					Run: SUB-C93872			11/26/07 14:10
Thorium 230	ND	pCi/L	0.2						
Method: E907.0							Batch: C_R93870		
Sample ID: LCS-R93870	Laboratory Control Sample					Run: SUB-C93870			11/21/07 14:10
Thorium 230	6	pCi/L	0.20	98	70	130			
Sample ID: R07110146-009H	Sample Matrix Spike					Run: SUB-C93870			11/21/07 14:10
Thorium 230	17	pCi/L	0.20	88	70	130			
Sample ID: R07110146-009H	Sample Matrix Spike Duplicate					Run: SUB-C93870			11/21/07 14:10
Thorium 230	20	pCi/L	0.20	104	70	130	16	30	
Sample ID: MB-R93870	Method Blank					Run: SUB-C93870			11/21/07 14:10
Thorium 230	ND	pCi/L	0.2						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_16875
Sample ID: R07110146-001I	Sample Matrix Spike				Run: SUB-C93672				12/03/07 04:30
Lead 210	330	pCi/L	1.0	83	70	130			
Sample ID: R07110146-001I	Sample Matrix Spike Duplicate				Run: SUB-C93672				12/03/07 04:30
Lead 210	360	pCi/L	1.0	89	70	130	6.7	30	
Sample ID: MB-R93672	Method Blank				Run: SUB-C93672				12/03/07 04:30
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R93672	Laboratory Control Sample				Run: SUB-C93672				12/03/07 04:30
Lead 210	85	pCi/L	1.0	106	70	130			
Method: E909.0M									Batch: C_R93315
Sample ID: R07110146-001H	Sample Matrix Spike				Run: SUB-C93315				11/19/07 10:35
Lead 210	430	pCi/L	1.0	106	70	130			
Sample ID: R07110146-001H	Sample Matrix Spike Duplicate				Run: SUB-C93315				11/19/07 10:35
Lead 210	440	pCi/L	1.0	110	70	130	3.9	30	
Sample ID: MB-R93315	Method Blank				Run: SUB-C93315				11/19/07 10:35
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R93315	Laboratory Control Sample				Run: SUB-C93315				11/19/07 10:35
Lead 210	87	pCi/L	1.0	108	70	130			
Method: RMO-3008									Batch: C_16875
Sample ID: R07110146-006I	Sample Matrix Spike				Run: SUB-C93514				11/26/07 12:30
Polonium 210	24	pCi/L	1.0	85	70	130			
Sample ID: R07110146-006I	Sample Matrix Spike Duplicate				Run: SUB-C93514				11/26/07 12:30
Polonium 210	21	pCi/L	1.0	73	70	130	15	30	
Sample ID: LCS-R93514	Laboratory Control Sample				Run: SUB-C93514				11/26/07 12:30
Polonium 210	19	pCi/L	1.0	86	70	130			
Sample ID: MB-R93514	Method Blank				Run: SUB-C93514				11/26/07 12:30
Polonium 210	ND	pCi/L	1						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 12/19/07  
Work Order: R07110146

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008									Batch: C_R93495
Sample ID: LCS-R93495	Laboratory Control Sample					Run: SUB-C93495			11/20/07 13:30
Polonium 210	22	pCi/L	1.0	96	70	130			
Sample ID: MB-R93495	Method Blank					Run: SUB-C93495			11/20/07 13:30
Polonium 210	ND	pCi/L	1						

### 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>RESPEC</b>		Project Name: <b>POWER T&amp;H Dewey Burdock</b>		Sample Origin:	EPA/State Compliance:
Report Mail Address: <b>3824 Jet Dr. Rapid City, SD 57703</b>		Contact Name: <b>Corey Foreman</b> Phone/Fax: <b>605.374.4400</b>		State:	Yes <input type="checkbox"/> No <input type="checkbox"/>
Invoice Address:		Invoice Contact & Phone:		Email:	Sampler: (Please Print) <b>Eric Krantz</b>
Special Report/Formats - ELL must be notified prior to sample submittal for the following:		Purchase Order:		Quote/Bottle Order:	
<input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWT <input type="checkbox"/> State: <input type="checkbox"/> Other:		<input type="checkbox"/> A2LA <input checked="" type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		Contact ELL prior to RUSH sample submittal for charges and scheduling - See instruction Page	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by: Cooler (Yes/No):	
Collection Date		Collection Time		Receipt Temp On Ice: <b>4.6</b> °C Yes <input type="checkbox"/> No <input type="checkbox"/>	
MATRIX		ANALYSIS REQUESTED		Custody Seal Y N Intact Y N Signature Y N Match	
11/12/07		0810		Set 19	
11/12/07		0820		Set 18	
11/12/07		0925		Set 17	
11/12/07		1015		Set 16	
11/12/07		1020		Set 15	
11/12/07		1120		Set 14	
11/12/07		1215		Set 13	
11/12/07		1425		Set 3	
11/12/07		1530		Set 2	
11/12/07		1605		Set 9	
Signature:		Signature:		Signature:	
Date/Time:		Date/Time:		Date/Time:	
Received by (print):		Received by (print):		Received by (print):	
Signature:		Signature:		Signature:	
Date/Time:		Date/Time:		Date/Time:	
Returned by (print):		Returned by (print):		Returned by (print):	
Signature:		Signature:		Signature:	
Date/Time:		Date/Time:		Date/Time:	
Returned to Client:		Returned to Client:		Returned to Client:	
Signature:		Signature:		Signature:	
Date/Time:		Date/Time:		Date/Time:	
Signature:		Signature:		Signature:	
Date/Time:		Date/Time:		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.



## ANALYTICAL SUMMARY REPORT

January 28, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R07110184

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 11/15/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07110184-001	DewBurdGW628	11/14/07 10:59	11/15/07	Aqueous	Metals by ICP/CPMS, Dissolved Metals by ICP/CPMS, Suspended Metals by ICP/CPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R07110184-002	DewBurdGW4002	11/14/07 11:45	11/15/07	Aqueous	Same As Above
R07110184-003	DewBurdGW679	11/14/07 13:45	11/15/07	Aqueous	Same As Above
R07110184-004	DewBurdGW631	11/14/07 15:20	11/15/07	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or Rapid\_City@energylab.com.

*Anda Luoma*  
Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110184-001  
Client Sample ID: DewBurdGW628

Report Date: 01/28/08  
Collection Date: 11/14/07 10:59  
Date Received: 11/15/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	11/27/07 17:28/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/27/07 17:28/sn
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	11/27/07 17:28/sn
Calcium	43.2	mg/L		0.5		1	E200.7	11/29/07 20:56/eli-c
Chloride	35	mg/L		1		5	E300.0	11/21/07 02:32/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/16/07 21:03/jmh
Magnesium	16.9	mg/L		0.5		1	E200.7	11/29/07 20:56/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	11/29/07 16:02/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/16/07 21:03/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/07 21:03/jmh
Potassium	8.5	mg/L		0.5		1	E200.7	11/29/07 20:56/eli-c
Silica	7.2	mg/L		0.5		1	E200.7	11/29/07 20:56/eli-c
Sodium	233	mg/L	D	0.8		1	E200.7	11/30/07 17:10/eli-c
Sulfate	635	mg/L	D	40		50	E300.0	11/16/07 20:15/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1800	umhos/cm		5.0		1	A2510 B	11/16/07 18:38/jmh
Oxidation-Reduction Potential	96	mV				1	A2580 B	11/15/07 00:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	11/16/07 14:33/jmh
Sodium Adsorption Ratio (SAR)	7.6	meq/L		0.10		1	Calculation	12/20/07 17:41/sec
Solids, Total Dissolved TDS @ 180 C	1300	mg/L		5		1	A2540 C	12/24/07 08:25/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/22/07 07:21/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/22/07 07:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/22/07 07:21/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/29/07 20:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/22/07 07:21/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/22/07 07:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/22/07 07:21/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/29/07 20:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/22/07 07:21/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	11/22/07 07:21/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/26/07 18:41/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/22/07 07:21/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/22/07 07:21/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/03/07 14:51/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 18:41/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

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:** R07110184-001  
**Client Sample ID:** DewBurdGW628

**Report Date:** 01/28/08  
**Collection Date:** 11/14/07 10:59  
**Date Received:** 11/15/07  
**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	11/22/07 07:21/eli-c
Uranium	0.0034	mg/L		0.0003		1	E200.8	11/22/07 07:21/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/22/07 07:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/22/07 07:21/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/29/07 00:48/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 23:23/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:32/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	83.9	pCi/L		1.0		1	E900.0	12/06/07 03:35/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Gross Beta	47.1	pCi/L		2.0		1	E900.0	12/06/07 03:35/eli-c
Gross Beta precision (±)	4.1	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	2.7	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	20.7	pCi/L		0.2		1	E903.0	11/27/07 13:15/eli-c
Radium 226 precision (±)	1.4	pCi/L				1	E903.0	11/27/07 13:15/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/29/07 14:30/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	82	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/29/07 08:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/29/07 12:20/eli-c
Radium 226	0.3	pCi/L		0.2		1	E903.0	12/04/07 11:30/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	12/04/07 11:30/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	11/28/07 14:15/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/28/07 14:15/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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:** R07110184-001  
**Client Sample ID:** DewBurdGW628

**Report Date:** 01/28/08  
**Collection Date:** 11/14/07 10:59  
**Date Received:** 11/15/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	2740	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	70.4	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.74	%				1	A1030 E	12/26/07 13:54/sec
Anions	14.4	meq/L				1	A1030 E	12/26/07 13:54/sec
Cations	13.9	meq/L				1	A1030 E	12/26/07 13:54/sec
Solids, Total Dissolved Calculated	923	mg/L				1	A1030 E	12/26/07 13:54/sec
TDS Balance (0.80 - 1.20)	1.44	dec. %				1	A1030 E	12/26/07 13:54/sec

- Ion Balance achieved using Sulfate from E200.7.

- TDS rechecked, TDS balance may be affected by analytes not requested or by active, clay size particulates.

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110184-002  
Client Sample ID: DewBurdGW4002

Report Date: 01/28/08  
Collection Date: 11/14/07 11:45  
Date Received: 11/15/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	140	mg/L		5		1	A2320 B	11/27/07 17:31/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/27/07 17:31/sn
Bicarbonate as HCO3	171	mg/L		5		1	A2320 B	11/27/07 17:31/sn
Calcium	41.4	mg/L		0.5		1	E200.7	11/29/07 21:00/eli-c
Chloride	7	mg/L		1		1	E300.0	11/16/07 21:34/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/16/07 21:34/jmh
Magnesium	13.9	mg/L		0.5		1	E200.7	11/29/07 21:00/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/29/07 16:04/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/16/07 21:34/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/07 21:34/jmh
Potassium	7.3	mg/L		0.5		1	E200.7	11/29/07 21:00/eli-c
Silica	7.6	mg/L		0.5		1	E200.7	11/29/07 21:00/eli-c
Sodium	197	mg/L	D	0.8		1	E200.7	11/30/07 17:13/eli-c
Sulfate	448	mg/L	D	40		50	E300.0	11/16/07 21:18/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1130	umhos/cm		5.0		1	A2510 B	11/16/07 18:40/jmh
Oxidation-Reduction Potential	140	mV				1	A2580 B	11/15/07 00:00/jmh
pH	7.65	s.u.		0.01		1	A4500-H B	11/16/07 14:35/jmh
Sodium Adsorption Ratio (SAR)	6.7	meq/L		0.10		1	Calculation	12/20/07 17:41/sec
Solids, Total Dissolved TDS @ 180 C	850	mg/L		5		1	A2540 C	11/16/07 11:50/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/22/07 07:27/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/22/07 07:27/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/22/07 07:27/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/29/07 21:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/22/07 07:27/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/22/07 07:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/22/07 07:27/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/29/07 21:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/22/07 07:27/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	11/22/07 07:27/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/26/07 18:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/22/07 07:27/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/22/07 07:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/03/07 14:53/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 18:48/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110184-002  
Client Sample ID: DewBurdGW4002

Report Date: 01/28/08  
Collection Date: 11/14/07 11:45  
Date Received: 11/15/07  
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	11/22/07 07:27/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	11/22/07 07:27/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/22/07 07:27/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/22/07 07:27/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/29/07 00:55/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 23:30/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	227	pCi/L		1.0		1	E900.0	12/06/07 03:35/eli-c
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Gross Beta	87.9	pCi/L		2.0		1	E900.0	12/06/07 03:35/eli-c
Gross Beta precision (±)	3.1	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Lead 210	6.2	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	54.2	pCi/L		0.2		1	E903.0	11/27/07 13:15/eli-c
Radium 226 precision (±)	2.2	pCi/L				1	E903.0	11/27/07 13:15/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/29/07 14:30/eli-c
Gross Gamma	2200	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	110	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/29/07 08:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/29/07 12:20/eli-c
Radium 226	2.4	pCi/L		0.2		1	E903.0	12/04/07 11:30/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/04/07 11:30/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/28/07 14:15/eli-c
RADIONUCLIDES - TOTAL								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110184-002  
Client Sample ID: DewBurdGW4002

Report Date: 01/28/08  
Collection Date: 11/14/07 11:45  
Date Received: 11/15/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	8010	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	105	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.56	%				1	A1030 E	12/20/07 17:54/sec
Anions	12.3	meq/L				1	A1030 E	12/20/07 17:54/sec
Cations	12.0	meq/L				1	A1030 E	12/20/07 17:54/sec
Solids, Total Dissolved Calculated	799	mg/L				1	A1030 E	12/20/07 17:54/sec
TDS Balance (0.80 - 1.20)	1.06	dec. %				1	A1030 E	12/20/07 17:54/sec

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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:** R07110184-003  
**Client Sample ID:** DewBurdGW679

**Report Date:** 01/28/08  
**Collection Date:** 11/14/07 13:45  
**Date Received:** 11/15/07  
**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>	136	mg/L		5		1	A2320 B	11/27/07 17:33/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	11/27/07 17:33/sn
Bicarbonate as HCO <sub>3</sub>	166	mg/L		5		1	A2320 B	11/27/07 17:33/sn
Calcium	447	mg/L	D	1		10	E200.7	11/29/07 20:50/eli-c
Chloride	12	mg/L		1		1	E300.0	11/16/07 22:06/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/16/07 22:06/jmh
Magnesium	92.5	mg/L		0.5		1	E200.7	11/29/07 21:19/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	11/29/07 16:07/sn
Nitrogen, Nitrate as N	1.3	mg/L		0.1		1	E300.0	11/16/07 22:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/07 22:06/jmh
Potassium	11.4	mg/L		0.5		1	E200.7	11/29/07 21:19/eli-c
Silica	12.6	mg/L		0.5		1	E200.7	11/29/07 21:19/eli-c
Sodium	74.9	mg/L	D	0.8		1	E200.7	11/30/07 17:32/eli-c
Sulfate	1500	mg/L	D	40		50	E300.0	11/16/07 21:50/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2470	umhos/cm		5.0		1	A2510 B	11/16/07 18:41/jmh
Oxidation-Reduction Potential	230	mV				1	A2580 B	11/15/07 00:00/jmh
pH	7.34	s.u.		0.01		1	A4500-H B	11/16/07 14:36/jmh
Sodium Adsorption Ratio (SAR)	0.84	meq/L		0.10		1	Calculation	12/20/07 17:41/sec
Solids, Total Dissolved TDS @ 180 C	2600	mg/L		5		1	A2540 C	11/16/07 11:51/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/22/07 07:34/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/22/07 07:34/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/22/07 07:34/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	11/29/07 21:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/22/07 07:34/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/22/07 07:34/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/22/07 07:34/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/29/07 21:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/22/07 07:34/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	11/22/07 07:34/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/26/07 18:55/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/22/07 07:34/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/22/07 07:34/eli-c
Selenium	0.012	mg/L		0.001		1	A3114 B	12/03/07 14:55/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 18:55/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110184-003  
Client Sample ID: DewBurdGW679

Report Date: 01/28/08  
Collection Date: 11/14/07 13:45  
Date Received: 11/15/07  
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	11/22/07 07:34/eli-c
Uranium	0.0144	mg/L		0.0003		1	E200.8	11/22/07 07:34/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/22/07 07:34/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/22/07 07:34/eli-c
METALS - SUSPENDED								
Uranium	0.0008	mg/L		0.0003		1	E200.8	11/29/07 01:03/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	11/20/07 23:37/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:36/eli-c
Selenium-VI	0.012	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	13.3	pCi/L		1.0		1	E900.0	12/06/07 03:35/eli-c
Gross Alpha precision (±)	1.9	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Gross Beta	16.3	pCi/L		2.0		1	E900.0	12/06/07 03:35/eli-c
Gross Beta precision (±)	4.7	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Lead 210	9.1	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	2.3	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	11/27/07 13:15/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/29/07 14:30/eli-c
Gross Gamma	1500	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	240	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/29/07 08:25/eli-c
Lead 210 precision (±)	0.11	pCi/L				1	E909.0M	11/29/07 08:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/29/07 12:20/eli-c
Radium 226	0.5	pCi/L		0.2		1	E903.0	12/04/07 11:30/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	12/04/07 11:30/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	11/28/07 14:15/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	11/28/07 14:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110184-003  
**Client Sample ID:** DewBurdGW679

**Report Date:** 01/28/08  
**Collection Date:** 11/14/07 13:45  
**Date Received:** 11/15/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	819	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c
Radon 222 precision (±)	51.2	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.35	%				1	A1030 E	12/20/07 17:55/sec
Anions	34.4	meq/L				1	A1030 E	12/20/07 17:55/sec
Cations	33.5	meq/L				1	A1030 E	12/20/07 17:55/sec
Solids, Total Dissolved Calculated	2230	mg/L				1	A1030 E	12/20/07 17:55/sec
TDS Balance (0.80 - 1.20)	1.15	dec. %				1	A1030 E	12/20/07 17:55/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110184-004  
Client Sample ID: DewBurdGW631

Report Date: 01/28/08  
Collection Date: 11/14/07 15:20  
Date Received: 11/15/07  
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	11/27/07 17:35/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/27/07 17:35/sn
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	11/27/07 17:35/sn
Calcium	307	mg/L	D	1		10	E200.7	11/29/07 20:53/eli-c
Chloride	10	mg/L		1		1	E300.0	11/16/07 22:38/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	11/16/07 22:38/jmh
Magnesium	89.3	mg/L		0.5		1	E200.7	11/29/07 21:22/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/29/07 16:08/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/16/07 22:38/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/07 22:38/jmh
Potassium	15.7	mg/L		0.5		1	E200.7	11/29/07 21:22/eli-c
Silica	7.8	mg/L		0.5		1	E200.7	11/29/07 21:22/eli-c
Sodium	92.9	mg/L	D	0.8		1	E200.7	11/30/07 17:36/eli-c
Sulfate	1220	mg/L	D	40		50	E300.0	11/16/07 22:22/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2170	umhos/cm		5.0		1	A2510 B	11/16/07 18:42/jmh
Oxidation-Reduction Potential	ND	mV				1	A2580 B	11/15/07 00:00/jmh
pH	7.23	s.u.		0.01		1	A4500-H B	11/16/07 14:38/jmh
Sodium Adsorption Ratio (SAR)	1.2	meq/L		0.10		1	Calculation	12/20/07 17:41/sec
Solids, Total Dissolved TDS @ 180 C	2000	mg/L		5		1	A2540 C	11/16/07 11:52/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/22/07 08:01/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/22/07 08:01/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/22/07 08:01/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/29/07 21:22/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/22/07 08:01/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/22/07 08:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/22/07 08:01/eli-c
Iron	0.84	mg/L		0.03		1	E200.7	11/29/07 21:22/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/22/07 08:01/eli-c
Manganese	0.29	mg/L		0.01		1	E200.8	11/22/07 08:01/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/26/07 19:02/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/22/07 08:01/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/22/07 08:01/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/03/07 14:57/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 19:02/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110184-004  
Client Sample ID: DewBurdGW631

Report Date: 01/28/08  
Collection Date: 11/14/07 15:20  
Date Received: 11/15/07  
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	11/22/07 08:01/eli-c
Uranium	0.0029	mg/L		0.0003		1	E200.8	11/22/07 08:01/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/22/07 08:01/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/22/07 08:01/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/29/07 01:10/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 23:44/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:38/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	46.5	pCi/L		1.0		1	E900.0	12/06/07 03:35/eli-c
Gross Alpha precision (±)	2.4	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Gross Beta	29.4	pCi/L		2.0		1	E900.0	12/06/07 03:35/eli-c
Gross Beta precision (±)	3.8	pCi/L				1	E900.0	12/06/07 03:35/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	3.5	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	2.0	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	9.5	pCi/L		0.2		1	E903.0	11/27/07 13:15/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	11/27/07 13:15/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/29/07 14:30/eli-c
Gross Gamma	1900	pCi/L		20		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	280	pCi/L				1	E901.1	11/16/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/29/07 08:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/29/07 12:20/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/04/07 11:30/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/28/07 14:15/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	4220	pCi/L		100		1	D5072-92	11/15/07 18:10/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110184-004  
**Client Sample ID:** DewBurdGW631

**Report Date:** 01/28/08  
**Collection Date:** 11/14/07 15:20  
**Date Received:** 11/15/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222 precision (±)	80.0	pCi/L				1	D5072-92	11/15/07 18:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	-3.03	%				1	A1030 E	12/20/07 17:55/sec
Anions	28.9	meq/L				1	A1030 E	12/20/07 17:55/sec
Cations	27.2	meq/L				1	A1030 E	12/20/07 17:55/sec
Solids, Total Dissolved Calculated	1830	mg/L				1	A1030 E	12/20/07 17:55/sec
TDS Balance (0.80 - 1.20)	1.09	dec. %				1	A1030 E	12/20/07 17:55/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 071127A-ALK-SEL-W							
Sample ID: MBLK1_071127A	Method Blank					Run: PH_COND1-R_071127A			11/27/07 15:43
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_071127A	Laboratory Control Sample					Run: PH_COND1-R_071127A			11/27/07 15:45
Alkalinity, Total as CaCO <sub>3</sub>	984	mg/L	5.0	98	90	110			
Sample ID: R07110184-004AMS	Sample Matrix Spike					Run: PH_COND1-R_071127A			11/27/07 17:38
Alkalinity, Total as CaCO <sub>3</sub>	268	mg/L	5.0	102	80	120			
Sample ID: R07110184-004AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_071127A			11/27/07 17:40
Alkalinity, Total as CaCO <sub>3</sub>	256	mg/L	5.0	91	80	120	4.6	10	
Method: A2510 B		Batch: 071116_1_COND-PROBE-W							
Sample ID: LCS1-1_071116	Laboratory Control Sample					Run: PH_COND2-R_071116A			11/16/07 18:09
Conductivity @ 25 C	151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_071116	Laboratory Control Sample					Run: PH_COND2-R_071116A			11/16/07 18:10
Conductivity @ 25 C	4890	umhos/cm	5.0	98	90	110			
Sample ID: LCS_COND-1_071116	Laboratory Control Sample					Run: PH_COND2-R_071116A			11/16/07 18:10
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071116	Method Blank					Run: PH_COND2-R_071116A			11/16/07 18:11
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 071116A-SLDS-TDS-W							
Sample ID: LCS1_071116A	Laboratory Control Sample					Run: BAL-4-R_071116A			11/16/07 11:13
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	110	90	110			
Sample ID: MBLK1_071116A	Method Blank					Run: BAL-4-R_071116A			11/16/07 11:15
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R07110184-004AMS	Sample Matrix Spike					Run: BAL-4-R_071116A			11/16/07 11:53
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	106	80	120			
Sample ID: R07110184-004AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_071116A			11/16/07 11:54
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	102	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: 01/28/08  
Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-071203		
Sample ID: MBLK	Method Blank					Run: SUB-C93637			12/03/07 09:29
Selenium-IV	ND	mg/L	0.0002						
Sample ID: R07110184-001E	Sample Matrix Spike					Run: SUB-C93637			12/03/07 09:53
Selenium-IV	0.050	mg/L	0.0010	99	85	115			
Sample ID: R07110184-001E	Sample Matrix Spike Duplicate					Run: SUB-C93637			12/03/07 09:55
Selenium-IV	0.050	mg/L	0.0010	99	85	115	0.0	10	
Sample ID: 301-119-5	Laboratory Control Sample					Run: SUB-C93637			12/03/07 09:57
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Method: A3114 B							Batch: C_SE3114-071203B		
Sample ID: MBLK	Method Blank					Run: SUB-C93669			12/03/07 14:47
Selenium	ND	mg/L	0.0004						
Sample ID: C07110759-001EMS	Sample Matrix Spike					Run: SUB-C93669			12/03/07 15:12
Selenium	0.049	mg/L	0.0010	97	85	115			
Sample ID: C07110759-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C93669			12/03/07 15:14
Selenium	0.050	mg/L	0.0010	101	85	115	3.6	10	
Sample ID: 301-119-4	Laboratory Control Sample					Run: SUB-C93669			12/03/07 15:16
Selenium	0.050	mg/L	0.0010	100	90	110			
Method: A4500-H B							Batch: 071116_1_PH-W		
Sample ID: LCS_pH-1_071116	Laboratory Control Sample					Run: PH_COND2-R_071116B			11/16/07 14:01
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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G							Batch: A2007-11-29_2_NH3_01		
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_071129A			11/29/07 14:58
Nitrogen, Ammonia as N	0.23	mg/L	0.10	90	90	110			
Sample ID: LFB-5	Laboratory Fortified Blank					Run: TECHAA2-R_071129A			11/29/07 14:59
Nitrogen, Ammonia as N	0.24	mg/L	0.10	95	90	110			
Sample ID: MBLK-6	Method Blank					Run: TECHAA2-R_071129A			11/29/07 15:00
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: R07110184-001BDUP	Sample Duplicate					Run: TECHAA2-R_071129A			11/29/07 16:03
Nitrogen, Ammonia as N	0.20	mg/L	0.10				0.5	10	
Sample ID: R07110184-002BMS	Sample Matrix Spike					Run: TECHAA2-R_071129A			11/29/07 16:05
Nitrogen, Ammonia as N	0.32	mg/L	0.10	126	80	120			S
Method: D5072-92							Batch: C_R93068		
Sample ID: C07110603-010GDUP	Sample Duplicate					Run: SUB-C93068			11/15/07 18:10
Radon 222	1150	pCi/L	100				5.6	30	
Sample ID: MB-R93068	Method Blank					Run: SUB-C93068			11/15/07 18:10
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R93068	Laboratory Control Sample					Run: SUB-C93068			11/15/07 18:10
Radon 222	303	pCi/L	100	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: 01/28/08  
Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R93581		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C93581			11/29/07 15:05		
Silica	2.1	mg/L	0.10	107	85	125			
Boron	2.0	mg/L	0.10	101	85	125			
Iron	2.1	mg/L	0.030	105	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C93581			11/29/07 15:08		
Calcium	25	mg/L	0.50	99	85	125			
Magnesium	25	mg/L	0.50	98	85	125			
Potassium	28	mg/L	0.50	111	85	125			
Sample ID: C07110854-001CMS	Sample Matrix Spike			Run: SUB-C93581			11/29/07 19:50		
Boron	0.974	mg/L	0.10	94	70	130			
Iron	0.930	mg/L	0.030	92	70	130			
Calcium	77.7	mg/L	0.50	77	70	130			
Magnesium	57.1	mg/L	0.50	82	70	130			
Potassium	113	mg/L	0.50	93	70	130			
Silica	17.5	mg/L	0.10		0	0			A
- Matrix spike recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: C07110854-001CMSD	Sample Matrix Spike Duplicate			Run: SUB-C93581			11/29/07 19:54		
Boron	1.02	mg/L	0.10	99	70	130	4.5	20	
Iron	0.972	mg/L	0.030	97	70	130	4.4	20	
Calcium	80.1	mg/L	0.50	81	70	130	3.0	20	
Magnesium	58.3	mg/L	0.50	84	70	130	2.1	20	
Potassium	117	mg/L	0.50	96	70	130	3.1	20	
Silica	18.0	mg/L	0.10		0	0			A
- Matrix spike duplicate recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Method: E200.7							Batch: C_R93622		
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C93622			11/30/07 14:32		
Sodium	24	mg/L	0.76	95	85	125			
Sample ID: C07110945-001CMS	Sample Matrix Spike			Run: SUB-C93622			11/30/07 16:27		
Sodium	600	mg/L	5.3	83	70	130			
Sample ID: C07110945-001CMSD	Sample Matrix Spike Duplicate			Run: SUB-C93622			11/30/07 16:30		
Sodium	600	mg/L	5.3	83	70	130	0.2	20	
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C93622			11/30/07 18:28		
Sodium	23	mg/L	0.76	93	85	125			

### 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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>									Batch: C_16890
<b>Sample ID: MB-16890</b>	Method Blank						Run: SUB-C93209		11/20/07 21:28
Mercury	ND	mg/L	6E-06						
<b>Sample ID: C07110739-001B MS4</b>	Post Digestion Spike						Run: SUB-C93209		11/20/07 22:56
Mercury	0.0061	mg/L	0.0010	87	70	130			
- Matrix spike recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
<b>Sample ID: C07110739-001B MSD4</b>	Post Digestion Spike Duplicate						Run: SUB-C93209		11/20/07 23:03
Mercury	0.0060	mg/L	0.0010	86	70	130	1.6	20	
- Matrix spike duplicate recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
<b>Method: E200.8</b>									Batch: C_16960
<b>Sample ID: MB-16960</b>	Method Blank						Run: SUB-C93496		11/29/07 00:25
Uranium	7E-05	mg/L	4E-05						
<b>Sample ID: LCS1-16960</b>	Laboratory Control Sample						Run: SUB-C93496		11/29/07 00:33
Uranium	0.0598	mg/L	0.00030	119	80	120			
<b>Sample ID: R07110184-004I</b>	Post Digestion Spike						Run: SUB-C93496		11/29/07 01:18
Uranium	0.00316	mg/L	0.00030	97	70	130			
<b>Sample ID: R07110184-004I</b>	Post Digestion Spike Duplicate						Run: SUB-C93496		11/29/07 01:25
Uranium	0.00313	mg/L	0.00030	96	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R93267		
<b>Sample ID: LFB</b>	Laboratory Fortified Blank			Run: SUB-C93267			11/21/07 22:44		
Aluminum	0.0462	mg/L	0.0010	92	85	115			
Arsenic	0.0508	mg/L	0.0010	102	85	115			
Barium	0.0508	mg/L	0.0010	102	85	115			
Cadmium	0.0501	mg/L	0.0010	100	85	115			
Chromium	0.0495	mg/L	0.0010	99	85	115			
Copper	0.0517	mg/L	0.0010	103	85	115			
Lead	0.0512	mg/L	0.0010	102	85	115			
Manganese	0.0497	mg/L	0.0010	99	85	115			
Molybdenum	0.0497	mg/L	0.0010	99	85	115			
Nickel	0.0508	mg/L	0.0010	102	85	115			
Thorium 232	0.0509	mg/L	0.0010	102	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			
Vanadium	0.0499	mg/L	0.0010	100	85	115			
Zinc	0.0523	mg/L	0.0010	102	85	115			
<b>Sample ID: LRB</b>	Method Blank			Run: SUB-C93267			11/21/07 11:49		
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank			Run: SUB-C93267			11/21/07 11:53		
Uranium	0.0522	mg/L	0.00030	104	85	115			
<b>Sample ID: C07110764-001BMS</b>	Sample Matrix Spike			Run: SUB-C93267			11/21/07 20:01		
Uranium	0.064	mg/L	0.00030	124	70	130			
<b>Sample ID: C07110764-001BMSSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C93267			11/21/07 20:05		
Uranium	0.054	mg/L	0.00030	104	70	130	17	20	
<b>Sample ID: LRB</b>	Method Blank			Run: SUB-C93267			11/21/07 22:37		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	6E-05	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	6E-05	mg/L	5E-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						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 01/28/08

Project: Edgemont

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R93267		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C93267				11/21/07 22:37		
Zinc	0.001	mg/L	0.0003						
<b>Sample ID: R07110184-003C</b>	Post Digestion Spike		Run: SUB-C93267				11/22/07 07:41		
Aluminum	0.0438	mg/L	0.10	86	70	130			
Arsenic	0.0512	mg/L	0.0010	102	70	130			
Barium	0.0712	mg/L	0.10	101	70	130			
Cadmium	0.0459	mg/L	0.010	92	70	130			
Chromium	0.0465	mg/L	0.050	93	70	130			
Copper	0.0483	mg/L	0.010	93	70	130			
Lead	0.0518	mg/L	0.050	104	70	130			
Manganese	0.0844	mg/L	0.010	89	70	130			
Molybdenum	0.0619	mg/L	0.10	98	70	130			
Nickel	0.0527	mg/L	0.050	90	70	130			
Thorium 232	0.0545	mg/L	0.0010	109	70	130			
Uranium	0.0681	mg/L	0.00030	107	70	130			
Vanadium	0.0484	mg/L	0.10	96	70	130			
Zinc	0.0485	mg/L	0.010	85	70	130			
<b>Sample ID: R07110184-003C</b>	Post Digestion Spike Duplicate		Run: SUB-C93267				11/22/07 07:48		
Aluminum	0.0462	mg/L	0.10	90	70	130	0.0	20	
Arsenic	0.0474	mg/L	0.0010	94	70	130	7.6	20	
Barium	0.0701	mg/L	0.10	99	70	130	0.0	20	
Cadmium	0.0455	mg/L	0.010	91	70	130	0.9	20	
Chromium	0.0473	mg/L	0.050	95	70	130	0.0	20	
Copper	0.0439	mg/L	0.010	84	70	130	9.7	20	
Lead	0.0517	mg/L	0.050	103	70	130	0.2	20	
Manganese	0.0861	mg/L	0.010	93	70	130	1.9	20	
Molybdenum	0.0621	mg/L	0.10	98	70	130	0.0	20	
Nickel	0.0498	mg/L	0.050	84	70	130	0.0	20	
Thorium 232	0.0545	mg/L	0.0010	109	70	130	0.1	20	
Uranium	0.0680	mg/L	0.00030	107	70	130	0.1	20	
Vanadium	0.0490	mg/L	0.10	97	70	130	0.0	20	
Zinc	0.0442	mg/L	0.010	77	70	130	9.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 01/28/08  
Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R93352		
Sample ID: LRB	Method Blank		Run: SUB-C93352				11/26/07 11:53		
Mercury	ND	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C93352				11/26/07 12:00		
Mercury	0.00513	mg/L	0.0010	103	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Sample ID: R07110147-001E	Post Digestion Spike		Run: SUB-C93352				11/26/07 12:20		
Mercury	0.0506	mg/L	0.0010	101	70	130			
Silver	0.188	mg/L	0.010	94	70	130			
Sample ID: R07110147-001E	Post Digestion Spike Duplicate		Run: SUB-C93352				11/26/07 12:27		
Mercury	0.0513	mg/L	0.0010	103	70	130	1.5	20	
Silver	0.190	mg/L	0.010	95	70	130	1.2	20	
Sample ID: R07110184-004C	Post Digestion Spike		Run: SUB-C93352				11/26/07 19:09		
Mercury	0.0531	mg/L	0.0010	106	70	130			
Silver	0.261	mg/L	0.010	130	70	130			
Sample ID: R07110184-004C	Post Digestion Spike Duplicate		Run: SUB-C93352				11/26/07 19:29		
Mercury	0.0529	mg/L	0.0010	106	70	130	0.4	20	
Silver	0.239	mg/L	0.010	120	70	130	8.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R32294		
Sample ID: LFB0711160116-3	Laboratory Fortified Blank		Run: DIONEX_071116A				11/16/07 19:43		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	1.95	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	90	110			
Sulfate	14.0	mg/L	1.0	94	90	110			
Sample ID: LFB0711160116-4	Laboratory Fortified Blank		Run: DIONEX_071116A				11/16/07 19:59		
Chloride	4.91	mg/L	0.50	98	90	110			
Fluoride	2.01	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.47	mg/L	0.10	99	90	110			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	90	110			
Sulfate	14.5	mg/L	1.0	97	90	110			
Sample ID: R07110184-001AMS	Sample Matrix Spike		Run: DIONEX_071116A				11/16/07 20:31		
Chloride	276	mg/L	2.0	94	80	120			
Fluoride	101	mg/L	3.2	101	80	120			
Nitrogen, Nitrate as N	122	mg/L	0.84	98	80	120			
Nitrogen, Nitrite as N	124	mg/L	1.1	99	80	120			
Sulfate	1330	mg/L	36	93	80	120			
Sample ID: R07110184-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_071116A				11/16/07 20:47		
Chloride	271	mg/L	2.0	91	80	120	1.9	10	
Fluoride	98.8	mg/L	3.2	99	80	120	2.2	10	
Nitrogen, Nitrate as N	120	mg/L	0.84	96	80	120	1.6	10	
Nitrogen, Nitrite as N	121	mg/L	1.1	97	80	120	2.0	10	
Sulfate	1320	mg/L	36	91	80	120	1.3	10	
Sample ID: R07110196-001AMS	Sample Matrix Spike		Run: DIONEX_071116A				11/16/07 23:42		
Chloride	17.2	mg/L	0.50	87	80	120			
Fluoride	2.34	mg/L	0.10	97	80	120			
Nitrogen, Nitrate as N	3.63	mg/L	0.10	114	80	120			
Nitrogen, Nitrite as N	2.44	mg/L	0.10	98	80	120			
Sulfate	112	mg/L	1.0		80	120			A
Sample ID: R07110196-001AMSD	Sample Matrix Spike Duplicate		Run: DIONEX_071116A				11/16/07 23:58		
Chloride	17.2	mg/L	0.50	86	80	120	0.2	10	
Fluoride	2.18	mg/L	0.10	89	80	120	7.1	10	
Nitrogen, Nitrate as N	3.45	mg/L	0.10	107	80	120	5.1	10	
Nitrogen, Nitrite as N	2.29	mg/L	0.10	92	80	120	6.3	10	
Sulfate	111	mg/L	1.0		80	120	0.1	10	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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R32339		
<b>Sample ID: LFB0711202015-3</b>	Laboratory Fortified Blank				Run: DIONEX_071120A		11/20/07 19:38		
Chloride	4.65	mg/L	0.50	93	90	110			
<b>Sample ID: LFB0711202015-4</b>	Laboratory Fortified Blank				Run: DIONEX_071120A		11/20/07 19:54		
Chloride	4.68	mg/L	0.50	94	90	110			
<b>Method: E900.0</b>							Batch: C_GrAB-0362		
<b>Sample ID: MB-GrAB-0362</b>	Method Blank				Run: SUB-C93940		12/05/07 03:47		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
<b>Sample ID: UNAT-GrAB-0362</b>	Laboratory Control Sample				Run: SUB-C93940		12/05/07 03:47		
Gross Alpha	300	pCi/L	1.0	105	70	130			
<b>Sample ID: Cs137-GrAB-0362</b>	Laboratory Control Sample				Run: SUB-C93940		12/05/07 03:47		
Gross Beta	90	pCi/L	2.0	91	70	130			
<b>Sample ID: C07110703-001AMS</b>	Sample Matrix Spike				Run: SUB-C93940		12/05/07 03:47		
Gross Alpha	221	pCi/L	1.0	90	70	130			
<b>Sample ID: C07110703-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C93940		12/05/07 03:47		
Gross Alpha	195	pCi/L	1.0	79	70	130	13	13	
<b>Sample ID: C07110703-001AMS</b>	Sample Matrix Spike				Run: SUB-C93940		12/05/07 03:47		
Gross Beta	72.2	pCi/L	2.0	68	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 low response is considered to be matrix related. The batch is approved.									
<b>Sample ID: C07110703-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C93940		12/05/07 03:47		
Gross Beta	86.6	pCi/L	2.0	83	70	130	18	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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R93000		
<b>Sample ID: LCS-R93000</b>	Laboratory Control Sample			Run: SUB-C93000			11/16/07 10:50		
Cesium 137	1100	pCi/L	20	82	70	130			
Potassium 40	7000	pCi/L	20	105	70	130			
<b>Sample ID: MB-R93000</b>	Method Blank			Run: SUB-C93000			11/16/07 10:50		
Americium 241	ND	pCi/L	20						
Barium 133	ND	pCi/L	20						
Bismuth 212	ND	pCi/L	20						
Bismuth 214	ND	pCi/L	20						
Cesium 134	ND	pCi/L	20						
Cesium 137	ND	pCi/L	20						
Cobalt 60	ND	pCi/L	20						
Iodine 125	ND	pCi/L	20						
Iodine 131	ND	pCi/L	20						
Lead 212	ND	pCi/L	20						
Lead 214	ND	pCi/L	20						
Manganese 54	ND	pCi/L	20						
Potassium 40	ND	pCi/L	20						
Radium 223	ND	pCi/L	20						
Radium 224	ND	pCi/L	20						
Thallium 208	ND	pCi/L	20						
Thorium 228	ND	pCi/L	20						
Thorium 234	ND	pCi/L	20						
Zinc 65	ND	pCi/L	20						
Radium 228	ND	pCi/L	20						
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R07110184-004H</b>	Sample Duplicate			Run: SUB-C93000			11/15/07 10:50		
Gross Gamma	1730	pCi/L	20				12	30	
<b>Method: E903.0</b>							Batch: C_RA226-2452		
<b>Sample ID: MB-RA226-2452</b>	Method Blank			Run: SUB-C93253			11/21/07 15:50		
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2452</b>	Laboratory Control Sample			Run: SUB-C93253			11/21/07 15:50		
Radium 226	12	pCi/L	0.20	96	70	130			
<b>Sample ID: R07110184-001H</b>	Sample Matrix Spike			Run: SUB-C93253			11/27/07 13:15		
Radium 226	39	pCi/L	0.20	88	70	130			
<b>Sample ID: R07110184-001H</b>	Sample Matrix Spike Duplicate			Run: SUB-C93253			11/27/07 13:15		
Radium 226	43	pCi/L	0.20	108	70	130	10	22.2	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_16960		
Sample ID: C07110911-002FMS	Sample Matrix Spike				Run: SUB-C94000		11/28/07 14:15		
Thorium 230	16.1	pCi/L	0.20	106	70	130			
Sample ID: LCS-16960	Laboratory Control Sample				Run: SUB-C94000		11/28/07 14:15		
Thorium 230	6.70	pCi/L	0.21	114	70	130			
Sample ID: MB-16960	Method Blank				Run: SUB-C94000		11/28/07 14:15		
Thorium 230	ND	pCi/L	0.2						
Method: E907.0							Batch: C_R93936		
Sample ID: LCS-R93936	Laboratory Control Sample				Run: SUB-C93936		11/29/07 14:30		
Thorium 230	6.40	pCi/L	0.20	108	70	130			
Sample ID: C07110728-007AMS	Sample Matrix Spike				Run: SUB-C93936		11/29/07 14:30		
Thorium 230	69.2	pCi/L	0.20	118	70	130			
Sample ID: C07110728-007AMSD	Sample Matrix Spike Duplicate				Run: SUB-C93936		11/29/07 14:30		
Thorium 230	60.3	pCi/L	0.20	103	70	130	14	30	
Sample ID: MB-R93936	Method Blank				Run: SUB-C93936		11/29/07 14:30		
Thorium 230	ND	pCi/L	0.2						
Method: E909.0M							Batch: C_16960		
Sample ID: C07110911-001FMS	Sample Matrix Spike				Run: SUB-C93745		11/29/07 08:25		
Lead 210	300	pCi/L	1.0	74	70	130			
Sample ID: C07110911-001FMDS	Sample Matrix Spike Duplicate				Run: SUB-C93745		11/29/07 08:25		
Lead 210	450	pCi/L	1.0	112	70	130	40	30	R
Method: E909.0M							Batch: C_R93516		
Sample ID: C07110728-001AMS	Sample Matrix Spike				Run: SUB-C93516		11/21/07 07:30		
Lead 210	390	pCi/L	1.0	97	70	130			
Sample ID: C07110728-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C93516		11/21/07 07:30		
Lead 210	440	pCi/L	1.0	109	70	130	12	30	
Sample ID: MB-R93516	Method Blank				Run: SUB-C93516		11/21/07 07:30		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R93516	Laboratory Control Sample				Run: SUB-C93516		11/21/07 07:30		
Lead 210	98	pCi/L	1.0	122	70	130			

### 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: 01/28/08

Work Order: R07110184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_16960		
Sample ID: C07110982-002FMS	Sample Matrix Spike				Run: SUB-C93735		11/29/07 12:20		
Polonium 210	92	pCi/L	1.0	79	70	130			
Sample ID: C07110982-002FMSD	Sample Matrix Spike Duplicate				Run: SUB-C93735		11/29/07 12:20		
Polonium 210	110	pCi/L	1.0	94	70	130	17	30	
Sample ID: LCS-16960	Laboratory Control Sample				Run: SUB-C93735		11/29/07 12:20		
Polonium 210	18	pCi/L	1.0	79	70	130			
Sample ID: MB-16960	Method Blank				Run: SUB-C93735		11/29/07 12:20		
Polonium 210	ND	pCi/L	1						
Method: RMO-3008							Batch: C_R93504		
Sample ID: C07110759-004HMS	Sample Matrix Spike				Run: SUB-C93504		11/20/07 13:30		
Polonium 210	180	pCi/L	1.0	81	70	130			
Sample ID: C07110759-004HMSD	Sample Matrix Spike Duplicate				Run: SUB-C93504		11/20/07 13:30		
Polonium 210	170	pCi/L	1.0	76	70	130	6.2	30	
Sample ID: LCS-R93504	Laboratory Control Sample				Run: SUB-C93504		11/20/07 13:30		
Polonium 210	17	pCi/L	1.0	77	70	130			
Sample ID: MB-R93504	Method Blank				Run: SUB-C93504		11/20/07 13:30		
Polonium 210	ND	pCi/L	1						

### 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>Riverbank Dewey Burdock</b>		Sample Origin State:	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>344 6400</b>		Email: <b>Eric Korte</b>	Sampler: (Please Print) <b>Eric Korte</b>
Invoice Address: <b>RESPEC</b>		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"/> NELAC <input type="checkbox"/> Other:		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		ANALYSIS REQUESTED  <b>As per Q10X</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	SEE ATTACHED Normal Turnaround (TAT)
1. Dew Burdock GN 628		11/14/07	10:59	W	RUSH Comments: Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page <b>GN</b>
2. Dew Burdock GN 4002		11/14/07	11:45	W	
3. Dew Burdock GN 679		11/14/07	13:45	W	
4. Dew Burdock GN 651		11/14/07	15:20	W	
5.					
6.					
7.					
8.					
9.					
10.					
Custody Record Must be Signed		Signature: <b>Eric Korte</b> Date/Time: <b>11/15/07 8:15</b>		Signature: <b>Eric Korte</b> Date/Time: <b>11/15/07 8:15</b>	
Sample Disposal: Return to Client:		Lab Disposal:		Received by Laboratory: <b>Linda Larson</b> Date/Time: <b>11/15/07 16:05</b> Signature: <b>Linda Larson</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 test schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

February 05, 2008

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

Workorder No.: R07110303

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 8 samples from RESPEC Inc on 11/28/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R07110303-001	DewBurdGW635	11/27/07 8:25	11/28/07	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R07110303-002	DewBurdGW676	11/27/07 12:20	11/28/07	Aqueous	Same As Above
R07110303-003	DewBurdGW678	11/27/07 13:40	11/28/07	Aqueous	Same As Above
R07110303-004	DewBurdGW677	11/27/07 15:20	11/28/07	Aqueous	Same As Above
R07110303-005	DewBurdGW08	11/27/07 16:30	11/28/07	Aqueous	Same As Above
R07110303-006	DewBurdGW08-2	11/27/07 16:40	11/28/07	Aqueous	Same As Above
R07110303-007	DewBurdGW675	11/27/07 17:34	11/28/07	Aqueous	Same As Above
R07110303-008	DewBurdGWBK02	11/28/07 11:00	11/28/07	Aqueous	Same As Above


Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of the sample tests listed above and applicable analytical notes.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were



accompanied by appropriate quality control samples throughout the test. Where applicable, the results of these quality control samples will be included, following your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please contact Energy Laboratories Inc. - Rapid City at (605) 342-1225, (888) 672-1225 or [Rapid\\_City@energylab.com](mailto:Rapid_City@energylab.com).

Report Approved By: 

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110303-001  
Client Sample ID: DewBurdGW635

Report Date: 02/04/08  
Collection Date: 11/27/07 08:25  
Date Received: 11/28/07  
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	12/11/07 18:10/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:10/sn
Bicarbonate as HCO3	144	mg/L		5		1	A2320 B	12/11/07 18:10/sn
Calcium	120	mg/L		0.5		1	E200.7	12/14/07 13:03/eli-c
Chloride	23	mg/L		1		5	E300.0	11/30/07 02:16/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	11/29/07 02:58/jmh
Magnesium	49.0	mg/L		0.5		1	E200.7	12/14/07 13:03/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:07/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/29/07 02:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 02:58/jmh
Potassium	8.3	mg/L		0.5		1	E200.7	12/14/07 13:03/eli-c
Silica	9.0	mg/L		0.5		1	E200.7	12/14/07 13:03/eli-c
Sodium	480	mg/L	D	8		10	E200.7	12/14/07 18:06/eli-c
Sulfate	1370	mg/L	D	40		50	E300.0	11/29/07 02:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2830	umhos/cm		5.0		1	A2510 B	12/02/07 13:27/jmh
Oxidation-Reduction Potential	270	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.64	s.u.		0.01		1	A4500-H B	12/02/07 13:50/jmh
Sodium Adsorption Ratio (SAR)	9.3	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	12/03/07 13:39/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 17:25/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 17:25/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 17:25/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	12/14/07 13:03/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 17:25/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 17:25/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 17:25/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 13:03/eli-c
Lead	0.003	mg/L		0.001		10	E200.8	12/07/07 17:25/eli-c
Manganese	0.07	mg/L		0.01		10	E200.8	12/07/07 17:25/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 17:25/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 17:25/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 17:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 15:54/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 17:25/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07110303-001  
Client Sample ID: DewBurdGW635

Report Date: 02/04/08  
Collection Date: 11/27/07 08:25  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 17:25/eli-c
Uranium	0.0020	mg/L		0.0003		10	E200.8	12/07/07 17:25/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 17:25/eli-c
Zinc	0.02	mg/L		0.01		10	E200.8	12/07/07 17:25/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	12/13/07 01:29/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 21:26/eli-c
METALS - SPECIATED								
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	12/20/07 11:23/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.4	pCi/L		1.0		1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	1.7	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Gross Beta	6.3	pCi/L		2.0		1	E900.0	12/17/07 22:28/eli-c
Gross Beta precision (±)	4.7	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Lead 210	1.7	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Lead 210 precision (±)	0.60	pCi/L				1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	1.9	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	0.8	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	5.1	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 18:37/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110303-001  
Client Sample ID: DewBurdGW635

Report Date: 02/04/08  
Collection Date: 11/27/07 08:25  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	902	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c
Radon 222 precision (±)	67.7	pCi/L				1	D5072-92	11/30/07 07:34/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.831	%				1	A1030 E	01/16/08 16:41/sec
Anions	31.6	meq/L				1	A1030 E	01/16/08 16:41/sec
Cations	31.1	meq/L				1	A1030 E	01/16/08 16:41/sec
Solids, Total Dissolved Calculated	2120	mg/L				1	A1030 E	01/16/08 16:41/sec
TDS Balance (0.80 - 1.20)	1.08	dec. %				1	A1030 E	01/16/08 16:41/sec

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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: R07110303-002  
Client Sample ID: DewBurdGW676

Report Date: 02/04/08  
Collection Date: 11/27/07 12:20  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	228	mg/L		5		1	A2320 B	12/11/07 18:12/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:12/sn
Bicarbonate as HCO3	278	mg/L		5		1	A2320 B	12/11/07 18:12/sn
Calcium	514	mg/L	D	1		10	E200.7	12/14/07 18:09/eli-c
Chloride	16	mg/L		1		1	E300.0	11/29/07 04:02/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/29/07 04:02/jmh
Magnesium	113	mg/L		0.5		1	E200.7	12/14/07 13:07/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:09/sn
Nitrogen, Nitrate as N	1.0	mg/L		0.1		1	E300.0	11/29/07 04:02/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 04:02/jmh
Potassium	12.3	mg/L		0.5		1	E200.7	12/14/07 13:07/eli-c
Silica	14.4	mg/L		0.5		1	E200.7	12/14/07 13:07/eli-c
Sodium	88.8	mg/L	D	0.8		1	E200.7	12/14/07 13:07/eli-c
Sulfate	1720	mg/L	D	40		50	E300.0	11/29/07 03:14/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2860	umhos/cm		5.0		1	A2510 B	12/02/07 13:28/jmh
Oxidation-Reduction Potential	250	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.17	s.u.		0.01		1	A4500-H B	12/02/07 13:51/jmh
Sodium Adsorption Ratio (SAR)	0.92	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	2900	mg/L		5		1	A2540 C	12/03/07 13:40/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 17:31/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 17:31/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 17:31/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	12/14/07 13:07/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 17:31/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 17:31/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 17:31/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 13:07/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 17:31/eli-c
Manganese	ND	mg/L		0.01		10	E200.8	12/07/07 17:31/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 17:31/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 17:31/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 17:31/eli-c
Selenium	0.014	mg/L		0.001		1	A3114 B	12/18/07 15:56/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 17:31/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

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: R07110303-002  
Client Sample ID: DewBurdGW676

Report Date: 02/04/08  
Collection Date: 11/27/07 12:20  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 17:31/eli-c
Uranium	0.0548	mg/L		0.0003		10	E200.8	12/07/07 17:31/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 17:31/eli-c
Zinc	0.03	mg/L		0.01		10	E200.8	12/07/07 17:31/eli-c
METALS - SUSPENDED								
Uranium	0.0011	mg/L		0.0003		1	E200.8	12/13/07 01:33/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 21:33/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:25/eli-ca
Selenium-VI	0.014	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	31.9	pCi/L		1.0		1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	2.3	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Gross Beta	21.6	pCi/L		2.0		1	E900.0	12/17/07 22:28/eli-c
Gross Beta precision (±)	5.0	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 18:37/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	453	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c
Radon 222 precision (±)	60.5	pCi/L				1	D5072-92	11/30/07 07:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110303-002  
**Client Sample ID:** DewBurdGW676

**Report Date:** 02/04/08  
**Collection Date:** 11/27/07 12:20  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
A/C Balance (± 5)	-2.19	%					1	A1030 E	01/16/08 16:42/sec
Anions	40.9	meq/L					1	A1030 E	01/16/08 16:42/sec
Cations	39.1	meq/L					1	A1030 E	01/16/08 16:42/sec
Solids, Total Dissolved Calculated	2600	mg/L					1	A1030 E	01/16/08 16:42/sec
TDS Balance (0.80 - 1.20)	1.12	dec. %					1	A1030 E	01/16/08 16:42/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110303-003  
Client Sample ID: DewBurdGW678

Report Date: 02/04/08  
Collection Date: 11/27/07 13:40  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	480	mg/L		5		1	A2320 B	12/11/07 18:16/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:16/sn
Bicarbonate as HCO3	585	mg/L		5		1	A2320 B	12/11/07 18:16/sn
Calcium	422	mg/L	D	1		10	E200.7	12/14/07 18:12/eli-
Chloride	61	mg/L	D	2		50	E300.0	11/29/07 04:18/jmh
Fluoride	0.9	mg/L		0.1		1	E300.0	11/29/07 05:06/jmh
Magnesium	434	mg/L		0.5		10	E200.7	12/14/07 18:12/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:10/sn
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	11/29/07 05:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 05:06/jmh
Potassium	20.1	mg/L		0.5		1	E200.7	12/14/07 13:10/eli-c
Silica	15.4	mg/L		0.5		1	E200.7	12/14/07 13:10/eli-c
Sodium	609	mg/L	D	8		10	E200.7	12/14/07 18:12/eli-c
Sulfate	3440	mg/L	D	40		50	E300.0	11/29/07 04:18/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5780	umhos/cm		5.0		1	A2510 B	12/02/07 13:29/jmh
Oxidation-Reduction Potential	210	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.42	s.u.		0.01		1	A4500-H B	12/02/07 13:52/jmh
Sodium Adsorption Ratio (SAR)	5.0	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	6100	mg/L		5		1	A2540 C	12/03/07 13:43/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 17:38/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 17:38/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 17:38/eli-c
Boron	1.4	mg/L		0.1		1	E200.7	12/14/07 13:10/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 17:38/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 17:38/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 17:38/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 13:10/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 17:38/eli-c
Manganese	3.31	mg/L		0.01		10	E200.8	12/07/07 17:38/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 17:38/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 17:38/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 17:38/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 15:58/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 17:38/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110303-003  
Client Sample ID: DewBurdGW678

Report Date: 02/04/08  
Collection Date: 11/27/07 13:40  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 17:38/eli-c
Uranium	0.0349	mg/L		0.0003		10	E200.8	12/07/07 17:38/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 17:38/eli-c
Zinc	0.01	mg/L		0.01		10	E200.8	12/07/07 17:38/eli-c
METALS - SUSPENDED								
Uranium	0.0008	mg/L		0.0003		1	E200.8	12/13/07 01:37/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 21:39/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:27/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.9	pCi/L		1.0		1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	5.3	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Gross Beta	35.3	pCi/L		2.0		1	E900.0	12/17/07 22:28/eli-c
Gross Beta precision (±)	14.4	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Lead 210	4.0	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Lead 210 precision (±)	0.90	pCi/L				1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Polonium 210 precision (±)	0.69	pCi/L				1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	0.7	pCi/L		0.2		1	E903.0	12/17/07 18:37/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/17/07 18:37/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	391	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110303-003  
Client Sample ID: DewBurdGW678

Report Date: 02/04/08  
Collection Date: 11/27/07 13:40  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222 precision (±)	59.2	pCi/L				1	D5072-92	11/30/07 07:34/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.551	%				1	A1030 E	01/16/08 16:43/sec
Anions	83.1	meq/L				1	A1030 E	01/16/08 16:43/sec
Cations	84.0	meq/L				1	A1030 E	01/16/08 16:43/sec
Solids, Total Dissolved Calculated	5280	mg/L				1	A1030 E	01/16/08 16:43/sec
TDS Balance (0.80 - 1.20)	1.16	dec. %				1	A1030 E	01/16/08 16:43/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110303-004  
Client Sample ID: DewBurdGW677

Report Date: 02/04/08  
Collection Date: 11/27/07 15:20  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	482	mg/L		5		1	A2320 B	12/11/07 18:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:19/sn
Bicarbonate as HCO3	588	mg/L		5		1	A2320 B	12/11/07 18:19/sn
Calcium	454	mg/L	D	1		10	E200.7	12/14/07 18:15/eli-c
Chloride	1780	mg/L	D	4		100	E300.0	11/30/07 02:31/jmh
Fluoride	0.1	mg/L		0.1		1	E300.0	11/29/07 05:37/jmh
Magnesium	395	mg/L		0.5		10	E200.7	12/14/07 18:15/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:11/sn
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	11/29/07 05:37/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 05:37/jmh
Potassium	11.0	mg/L		0.5		1	E200.7	12/14/07 13:13/eli-c
Silica	10	mg/L		0.5		1	E200.7	12/14/07 13:13/eli-c
Sodium	1880	mg/L	D	8		10	E200.7	12/14/07 18:15/eli-c
Sulfate	4590	mg/L	D	40		50	E300.0	11/29/07 05:22/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	10800	umhos/cm		5.0		1	A2510 B	12/02/07 13:30/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.14	s.u.		0.01		1	A4500-H B	12/02/07 13:52/jmh
Sodium Adsorption Ratio (SAR)	16	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	9700	mg/L		5		1	A2540 C	12/03/07 13:45/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 17:45/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 17:45/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 17:45/eli-c
Boron	0.8	mg/L		0.1		1	E200.7	12/14/07 13:13/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 17:45/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 17:45/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 17:45/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 13:13/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 17:45/eli-c
Manganese	2.55	mg/L		0.01		10	E200.8	12/07/07 17:45/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 17:45/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 17:45/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 17:45/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 16:00/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 17:45/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07110303-004  
Client Sample ID: DewBurdGW677

Report Date: 02/04/08  
Collection Date: 11/27/07 15:20  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 17:45/eli-c
Uranium	0.0443	mg/L		0.0003		10	E200.8	12/07/07 17:45/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 17:45/eli-c
Zinc	0.02	mg/L		0.01		10	E200.8	12/07/07 17:45/eli-c
METALS - SUSPENDED								
Uranium	0.0049	mg/L		0.0003		1	E200.8	12/13/07 01:50/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 21:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:29/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	38.7	pCi/L		1.0		1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	5.4	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	12/17/07 22:28/eli-c
Lead 210	1.1	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Lead 210 precision (±)	0.50	pCi/L				1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	2.5	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Polonium 210 precision (±)	0.93	pCi/L				1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	2.7	pCi/L		0.2		1	E903.0	12/17/07 18:37/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	12/17/07 18:37/eli-c
Thorium 230	2.2	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
Thorium 230 precision (±)	0.5	pCi/L				1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	892	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110303-004  
**Client Sample ID:** DewBurdGW677

**Report Date:** 02/04/08  
**Collection Date:** 11/27/07 15:20  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
Radon 222 precision (±)	64.6	pCi/L					1	D5072-92	11/30/07 07:34/eli-c
DATA QUALITY									
A/C Balance (± 5)	-3.76	%					1	A1030 E	01/16/08 16:45/sec
Anions	148	meq/L					1	A1030 E	01/16/08 16:45/sec
Cations	138	meq/L					1	A1030 E	01/16/08 16:45/sec
Solids, Total Dissolved Calculated	9070	mg/L					1	A1030 E	01/16/08 16:45/sec
TDS Balance (0.80 - 1.20)	1.07	dec. %					1	A1030 E	01/16/08 16:45/sec
- Ion Balance achieved using Sulfate from E200.7.									

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110303-005  
Client Sample ID: DewBurdGW08

Report Date: 02/04/08  
Collection Date: 11/27/07 16:30  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	178	mg/L		5			1	A2320 B	12/11/07 18:21/sn
Carbonate as CO3	ND	mg/L		5			1	A2320 B	12/11/07 18:21/sn
Bicarbonate as HCO3	217	mg/L		5			1	A2320 B	12/11/07 18:21/sn
Calcium	56.4	mg/L		0.5			1	E200.7	12/14/07 13:17/eli-c
Chloride	12	mg/L		1			1	E300.0	11/29/07 06:09/jmh
Fluoride	0.4	mg/L		0.1			1	E300.0	11/29/07 06:09/jmh
Magnesium	24.6	mg/L		0.5			1	E200.7	12/14/07 13:17/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1			1	A4500-NH3 G	12/04/07 16:12/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1			1	E300.0	11/29/07 06:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1			1	E300.0	11/29/07 06:09/jmh
Potassium	15.7	mg/L		0.5			1	E200.7	12/14/07 13:17/eli-c
Silica	6.7	mg/L		0.5			1	E200.7	12/14/07 13:17/eli-c
Sodium	199	mg/L	D	0.8			1	E200.7	12/14/07 13:17/eli-c
Sulfate	594	mg/L	D	40			50	E300.0	11/29/07 05:53/jmh
PHYSICAL PROPERTIES									
Conductivity @ 25 C	1420	umhos/cm		5.0			1	A2510 B	12/02/07 13:31/jmh
Oxidation-Reduction Potential	150	mV					1	A2580 B	11/29/07 00:00/sn
pH	7.95	s.u.		0.01			1	A4500-H B	12/02/07 13:53/jmh
Sodium Adsorption Ratio (SAR)	5.6	meq/L		0.10			1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5			1	A2540 C	12/03/07 13:46/jmh
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1			10	E200.8	12/07/07 18:12/eli-c
Arsenic	ND	mg/L		0.001			10	E200.8	12/07/07 18:12/eli-c
Barium	ND	mg/L		0.1			10	E200.8	12/07/07 18:12/eli-c
Boron	ND	mg/L		0.1			1	E200.7	12/14/07 13:17/eli-c
Cadmium	ND	mg/L		0.005			10	E200.8	12/07/07 18:12/eli-c
Chromium	ND	mg/L		0.05			10	E200.8	12/07/07 18:12/eli-c
Copper	ND	mg/L		0.01			10	E200.8	12/07/07 18:12/eli-c
Iron	ND	mg/L		0.03			1	E200.7	12/14/07 13:17/eli-c
Lead	ND	mg/L		0.001			10	E200.8	12/07/07 18:12/eli-c
Manganese	0.11	mg/L		0.01			10	E200.8	12/07/07 18:12/eli-c
Mercury	ND	mg/L		0.001			10	E200.8	12/07/07 18:12/eli-c
Molybdenum	ND	mg/L		0.1			10	E200.8	12/07/07 18:12/eli-c
Nickel	ND	mg/L		0.05			10	E200.8	12/07/07 18:12/eli-c
Selenium	ND	mg/L		0.001			1	A3114 B	12/18/07 16:02/eli-ca
Silver	ND	mg/L		0.005			10	E200.8	12/07/07 18:12/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: R07110303-005  
Client Sample ID: DewBurdGW08

Report Date: 02/04/08  
Collection Date: 11/27/07 16:30  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Thorium 232	ND	mg/L		0.005			10	E200.8	12/07/07 18:12/eli-c
Uranium	0.0003	mg/L		0.0003			10	E200.8	12/07/07 18:12/eli-c
Vanadium	ND	mg/L		0.1			10	E200.8	12/07/07 18:12/eli-c
Zinc	0.02	mg/L		0.01			10	E200.8	12/07/07 18:12/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	12/13/07 01:54/eli-c
METALS - TOTAL									
Mercury	ND	mg/L		0.001			10	E200.8	12/10/07 21:53/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	12/20/07 11:31/eli-ca
Selenium-VI	ND	mg/L		0.001			1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED									
Gross Alpha	8.7	pCi/L		1.0			1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	1.1	pCi/L					1	E900.0	12/17/07 22:28/eli-c
Gross Beta	25.0	pCi/L		2.0			1	E900.0	12/17/07 22:28/eli-c
Gross Beta precision (±)	2.7	pCi/L					1	E900.0	12/17/07 22:28/eli-c
Lead 210	4.0	pCi/L		1.0			1	E909.0M	12/10/07 07:15/eli-c
Lead 210 precision (±)	0.90	pCi/L					1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	2.7	pCi/L		0.2			1	E903.0	12/17/07 12:35/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	970	pCi/L		20			1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	180	pCi/L					1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/18/07 09:05/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	123	pCi/L		100			1	D5072-92	11/30/07 07:34/eli-c
Radon 222 precision (±)	54.5	pCi/L					1	D5072-92	11/30/07 07:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R07110303-005  
**Client Sample ID:** DewBurdGW08

**Report Date:** 02/04/08  
**Collection Date:** 11/27/07 16:30  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
A/C Balance (± 5)	-3.23	%					1	A1030 E	01/16/08 16:48/sec
Anions	14.8	meq/L					1	A1030 E	01/16/08 16:48/sec
Cations	13.9	meq/L					1	A1030 E	01/16/08 16:48/sec
Solids, Total Dissolved Calculated	939	mg/L					1	A1030 E	01/16/08 16:48/sec
TDS Balance (0.80 - 1.20)	1.12	dec. %					1	A1030 E	01/16/08 16:48/sec
- Ion Balance achieved using Sulfate from E200.7.									

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110303-006  
Client Sample ID: DewBurdGW08-2

Report Date: 02/04/08  
Collection Date: 11/27/07 16:40  
Date Received: 11/28/07  
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	12/11/07 18:23/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:23/sn
Bicarbonate as HCO3	190	mg/L		5		1	A2320 B	12/11/07 18:23/sn
Calcium	55.1	mg/L		0.5		1	E200.7	12/14/07 13:20/eli-c
Chloride	12	mg/L		1		1	E300.0	11/29/07 07:13/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/29/07 07:13/jmh
Magnesium	24.5	mg/L		0.5		1	E200.7	12/14/07 13:20/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:13/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/29/07 07:13/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 07:13/jmh
Potassium	15.2	mg/L		0.5		1	E200.7	12/14/07 13:20/eli-c
Silica	6.6	mg/L		0.5		1	E200.7	12/14/07 13:20/eli-c
Sodium	201	mg/L	D	0.8		1	E200.7	12/14/07 13:20/eli-c
Sulfate	570	mg/L	D	40		50	E300.0	11/29/07 06:25/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1420	umhos/cm		5.0		1	A2510 B	12/02/07 13:32/jmh
Oxidation-Reduction Potential	150	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.94	s.u.		0.01		1	A4500-H B	12/02/07 13:54/jmh
Sodium Adsorption Ratio (SAR)	5.7	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	12/03/07 13:47/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 18:19/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 18:19/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 18:19/eli-c
Boron	ND	mg/L		0.1		1	E200.7	12/14/07 13:20/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 18:19/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 18:19/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 18:19/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 13:20/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 18:19/eli-c
Manganese	0.11	mg/L		0.01		10	E200.8	12/07/07 18:19/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 18:19/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 18:19/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 18:19/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 16:04/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 18:19/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110303-006  
Client Sample ID: DewBurdGW08-2

Report Date: 02/04/08  
Collection Date: 11/27/07 16:40  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 18:19/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	12/07/07 18:19/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 18:19/eli-c
Zinc	0.01	mg/L		0.01		10	E200.8	12/07/07 18:19/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	12/13/07 01:58/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 22:00/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:33/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	9.0	pCi/L		1.0		1	E900.0	12/17/07 22:28/eli-c
Gross Alpha precision (±)	1.1	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Gross Beta	29.1	pCi/L		2.0		1	E900.0	12/17/07 22:28/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	12/17/07 22:28/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	1.9	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1200	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/18/07 09:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	197	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c
Radon 222 precision (±)	55.4	pCi/L				1	D5072-92	11/30/07 07:34/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110303-006  
Client Sample ID: DewBurdGW08-2

Report Date: 02/04/08  
Collection Date: 11/27/07 16:40  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
A/C Balance (± 5)	-4.83	%				1	A1030 E	01/16/08 16:48/sec
Anions	15.4	meq/L				1	A1030 E	01/16/08 16:48/sec
Cations	13.9	meq/L				1	A1030 E	01/16/08 16:48/sec
Solids, Total Dissolved Calculated	973	mg/L				1	A1030 E	01/16/08 16:48/sec
TDS Balance (0.80 - 1.20)	1.09	dec. %				1	A1030 E	01/16/08 16:48/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R07110303-007  
Client Sample ID: DewBurdGW675

Report Date: 02/04/08  
Collection Date: 11/27/07 17:34  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	352	mg/L		5		1	A2320 B	12/11/07 18:25/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:25/sn
Bicarbonate as HCO3	429	mg/L		5		1	A2320 B	12/11/07 18:25/sn
Calcium	410	mg/L	D	1		10	E200.7	12/14/07 18:25/eli-c
Chloride	60	mg/L	D	2		50	E300.0	11/29/07 07:29/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	11/29/07 08:17/jmh
Magnesium	362	mg/L		0.5		10	E200.7	12/14/07 18:25/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:15/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/29/07 08:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 08:17/jmh
Potassium	25.2	mg/L		0.5		1	E200.7	12/14/07 13:23/eli-c
Silica	14.9	mg/L		0.5		1	E200.7	12/14/07 13:23/eli-c
Sodium	713	mg/L	D	8		10	E200.7	12/14/07 18:25/eli-c
Sulfate	3420	mg/L	D	40		50	E300.0	11/29/07 07:29/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5830	umhos/cm		5.0		1	A2510 B	12/02/07 13:33/jmh
Oxidation-Reduction Potential	220	mV				1	A2580 B	11/29/07 00:00/sn
pH	7.32	s.u.		0.01		1	A4500-H B	12/02/07 13:54/jmh
Sodium Adsorption Ratio (SAR)	6.2	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	6100	mg/L		5		1	A2540 C	12/03/07 13:49/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 18:39/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 18:39/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 18:39/eli-c
Boron	0.3	mg/L		0.1		1	E200.7	12/14/07 13:23/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 18:39/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 18:39/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 18:39/eli-c
Iron	0.05	mg/L		0.03		1	E200.7	12/14/07 13:23/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 18:39/eli-c
Manganese	3.14	mg/L		0.01		10	E200.8	12/07/07 18:39/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 18:39/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 18:39/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 18:39/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 16:06/eli-ca
Silver	ND	mg/L		0.005		10	E200.8	12/07/07 18:39/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

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:** R07110303-007  
**Client Sample ID:** DewBurdGW675

**Report Date:** 02/04/08  
**Collection Date:** 11/27/07 17:34  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 18:39/eli-c
Uranium	0.0307	mg/L		0.0003		10	E200.8	12/07/07 18:39/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 18:39/eli-c
Zinc	0.02	mg/L		0.01		10	E200.8	12/07/07 18:39/eli-c
METALS - SUSPENDED								
Uranium	0.0030	mg/L		0.0003		1	E200.8	12/13/07 20:29/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 22:20/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:35/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.3	pCi/L		1.0		1	E900.0	12/19/07 02:27/eli-c
Gross Alpha precision (±)	5.3	pCi/L				1	E900.0	12/19/07 02:27/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	12/19/07 02:27/eli-c
Lead 210	6.0	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	0.5	pCi/L		0.2		1	E903.0	12/17/07 16:18/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/17/07 16:18/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/20/07 14:15/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	210	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/13/07 08:00/eli-c
Polonium 210	2.0	pCi/L		1.0		1	RMO-3008	12/18/07 12:00/eli-c
Polonium 210 precision (±)	0.89	pCi/L				1	RMO-3008	12/18/07 12:00/eli-c
Radium 226	1.7	pCi/L		0.2		1	E903.0	12/19/07 11:19/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	12/19/07 11:19/eli-c
Thorium 230	1.3	pCi/L		0.2		1	E907.0	12/12/07 16:10/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	12/12/07 16:10/eli-c

### RADIONUCLIDES - TOTAL

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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:** R07110303-007  
**Client Sample ID:** DewBurdGW675

**Report Date:** 02/04/08  
**Collection Date:** 11/27/07 17:34  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	712	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c
Radon 222 precision (±)	61.6	pCi/L				1	D5072-92	11/30/07 07:34/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.35	%				1	A1030 E	01/16/08 16:49/sec
Anions	80.0	meq/L				1	A1030 E	01/16/08 16:49/sec
Cations	82.2	meq/L				1	A1030 E	01/16/08 16:49/sec
Solids, Total Dissolved Calculated	5200	mg/L				1	A1030 E	01/16/08 16:49/sec
TDS Balance (0.80 - 1.20)	1.17	dec. %				1	A1030 E	01/16/08 16:49/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R07110303-008  
Client Sample ID: DewBurdGWBK02

Report Date: 02/04/08  
Collection Date: 11/28/07 11:00  
Date Received: 11/28/07  
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	12/11/07 18:27/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/11/07 18:27/sn
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	12/11/07 18:27/sn
Calcium	ND	mg/L		0.5		1	E200.7	12/14/07 16:57/eli-
Chloride	ND	mg/L		1		1	E300.0	11/29/07 08:33/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	11/29/07 08:33/jmh
Magnesium	ND	mg/L		0.5		1	E200.7	12/14/07 16:57/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/04/07 16:16/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/29/07 08:33/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/29/07 08:33/jmh
Potassium	ND	mg/L		0.5		1	E200.7	12/14/07 16:57/eli-c
Silica	ND	mg/L		0.5		1	E200.7	12/14/07 16:57/eli-c
Sodium	1.3	mg/L	D	0.8		1	E200.7	12/14/07 16:57/eli-c
Sulfate	2	mg/L		1		1	E300.0	11/29/07 08:33/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	12/02/07 13:34/jmh
Oxidation-Reduction Potential	340	mV				1	A2580 B	11/29/07 00:00/sn
pH	5.63	s.u.		0.01		1	A4500-H B	12/02/07 13:59/jmh
Sodium Adsorption Ratio (SAR)	0.22	meq/L		0.10		1	Calculation	01/16/08 16:12/sec
Solids, Total Dissolved TDS @ 180 C	24	mg/L		5		1	A2540 C	12/03/07 13:50/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		10	E200.8	12/07/07 18:46/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	12/07/07 18:46/eli-c
Barium	ND	mg/L		0.1		10	E200.8	12/07/07 18:46/eli-c
Boron	ND	mg/L		0.1		1	E200.7	12/14/07 16:57/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	12/07/07 18:46/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	12/07/07 18:46/eli-c
Copper	ND	mg/L		0.01		10	E200.8	12/07/07 18:46/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/14/07 16:57/eli-c
Lead	ND	mg/L		0.001		10	E200.8	12/07/07 18:46/eli-c
Manganese	ND	mg/L		0.01		10	E200.8	12/07/07 18:46/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	12/07/07 18:46/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	12/07/07 18:46/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	12/07/07 18:46/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	12/18/07 16:08/eli-ca
Silver	0.005	mg/L		0.005		10	E200.8	12/07/07 18:46/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110303-008  
Client Sample ID: DewBurdGWBK02

Report Date: 02/04/08  
Collection Date: 11/28/07 11:00  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Thorium 232	ND	mg/L		0.005		10	E200.8	12/07/07 18:46/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	12/07/07 18:46/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	12/07/07 18:46/eli-c
Zinc	0.02	mg/L		0.01		10	E200.8	12/07/07 18:46/eli-c
METALS - SUSPENDED								
Uranium	0.0006	mg/L		0.0003		1	E200.8	12/13/07 02:02/eli-c
METALS - TOTAL								
Mercury	ND	mg/L		0.001		10	E200.8	12/10/07 22:27/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/20/07 11:38/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/20/07 00:00/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	ND	pCi/L		1.0		1	E900.0	12/19/07 02:27/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	12/19/07 02:27/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/17/07 12:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/10/07 14:00/eli-c
Gross Gamma	1100	pCi/L		20		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	12/05/07 10:50/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/12/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/12/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/18/07 09:05/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/11/07 14:35/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	ND	pCi/L		100		1	D5072-92	11/30/07 07:34/eli-c
DATA QUALITY								
Anions	0.117	meq/L				1	A1030 E	01/16/08 16:50/sec
Cations	0.0574	meq/L				1	A1030 E	01/16/08 16:50/sec

- The Ion and TDS balances are not appropriate for near blank results.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 071211A-ALK-SEL-W							
Sample ID: MBLK1_071211A	Method Blank					Run: PH_COND1-R_071211A			12/11/07 17:56
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_071211A	Laboratory Control Sample					Run: PH_COND1-R_071211A			12/11/07 17:57
Alkalinity, Total as CaCO <sub>3</sub>	1010	mg/L	5.0	101	90	110			
Sample ID: R07110303-008AMS	Sample Matrix Spike					Run: PH_COND1-R_071211A			12/11/07 18:30
Alkalinity, Total as CaCO <sub>3</sub>	16.0	mg/L	5.0	11	80	120			S
- S=Surrogate recovery outside QC advisory limits due to sample matrix interference.									
Sample ID: R07110303-008AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_071211A			12/11/07 18:30
Alkalinity, Total as CaCO <sub>3</sub>	18.0	mg/L	5.0	13	80	120	12	10	SR
- S=Surrogate recovery outside QC advisory limits due to sample matrix interference.									
Method: A2510 B		Batch: 071202_1_COND-PROBE-W							
Sample ID: LCS1-1_071202	Laboratory Control Sample					Run: PH_COND2-R_071202A			12/02/07 13:11
Conductivity @ 25 C	152	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_071202	Laboratory Control Sample					Run: PH_COND2-R_071202A			12/02/07 13:12
Conductivity @ 25 C	5010	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_071202	Laboratory Control Sample					Run: PH_COND2-R_071202A			12/02/07 13:13
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_071202	Method Blank					Run: PH_COND2-R_071202A			12/02/07 13:13
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 071203A-SLDS-TDS-W							
Sample ID: MBLK1_071203A	Method Blank					Run: BAL-4-R_071203A			12/03/07 13:11
Solids, Total Dissolved TDS @ 180 C	4	mg/L	3						
Sample ID: LCS1_071203A	Laboratory Control Sample					Run: BAL-4-R_071203A			12/03/07 13:12
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	106	90	110			
Sample ID: R07110303-002AMS	Sample Matrix Spike					Run: BAL-4-R_071203A			12/03/07 13:42
Solids, Total Dissolved TDS @ 180 C	3100	mg/L	5.0	88	80	120			
Sample ID: R07110303-002AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_071203A			12/03/07 13:43
Solids, Total Dissolved TDS @ 180 C	3100	mg/L	5.0	102	80	120	0.9	10	

### 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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-071218A		
Sample ID: MBLK	Method Blank					Run: SUB-C94455			12/18/07 15:35
Selenium	ND	mg/L	0.0004						
Sample ID: 288-7-2	Laboratory Control Sample					Run: SUB-C94455			12/18/07 15:39
Selenium	0.051	mg/L	0.0010	101	90	110			
Sample ID: R07110303-008E	Sample Matrix Spike					Run: SUB-C94455			12/18/07 16:19
Selenium	0.047	mg/L	0.0010	94	85	115			
Sample ID: R07110303-008E	Sample Matrix Spike Duplicate					Run: SUB-C94455			12/18/07 16:21
Selenium	0.047	mg/L	0.0010	93	85	115	1.1	10	
Method: A3114 B							Batch: C_SEIV3114-071220		
Sample ID: MBLK	Method Blank					Run: SUB-C94561			12/20/07 11:19
Selenium-IV	0.0004	mg/L	0.0002						
Sample ID: 288-7-2	Laboratory Control Sample					Run: SUB-C94561			12/20/07 11:21
Selenium-IV	0.050	mg/L	0.0010	99	90	110			
Sample ID: R07110303-008E	Sample Matrix Spike					Run: SUB-C94561			12/20/07 11:40
Selenium-IV	0.050	mg/L	0.0010	101	85	115			
Sample ID: R07110303-008E	Sample Matrix Spike Duplicate					Run: SUB-C94561			12/20/07 11:42
Selenium-IV	0.050	mg/L	0.0010	101	85	115	0.4	10	
Method: A4500-H B							Batch: 071202_1_PH-W		
Sample ID: LCS_pH-1_071202	Laboratory Control Sample					Run: PH_COND2-R_071202A			12/02/07 13:42
pH	6.86	s.u.	0.010	100	98.55	101.45			
Sample ID: R07110302-003ADUP	Sample Duplicate					Run: PH_COND2-R_071202A			12/02/07 13:46
pH	6.47	s.u.	0.010				0.9	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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2007-12-04_2_NH3_01							
Sample ID: MBLK-1	Method Blank					Run: TECHAA2-R_071104A			12/04/07 15:47
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_071104A			12/04/07 15:50
Nitrogen, Ammonia as N	0.28	mg/L	0.10	112	90	110			S
Sample ID: LFB-5	Laboratory Fortified Blank					Run: TECHAA2-R_071104A			12/04/07 15:51
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	90	110			
Sample ID: R07110302-002BMS	Sample Matrix Spike					Run: TECHAA2-R_071104A			12/04/07 16:04
Nitrogen, Ammonia as N	5.6	mg/L	0.21	89	80	120			
Sample ID: R07110332-002BMS	Sample Matrix Spike					Run: TECHAA2-R_071104A			12/04/07 16:23
Nitrogen, Ammonia as N	0.23	mg/L	0.10	93	80	120			
Method: D5072-92		Batch: C_R93647							
Sample ID: R07110303-008G	Sample Duplicate					Run: SUB-C93647			11/30/07 07:34
Radon 222	ND	pCi/L	100				0.0		30
Sample ID: MB-R93647	Method Blank					Run: SUB-C93647			11/30/07 07:34
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R93647	Laboratory Control Sample					Run: SUB-C93647			11/30/07 07:34
Radon 222	303	pCi/L	100	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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R94332		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C94332			12/14/07 08:55		
Silica	1.9	mg/L	0.10	97	85	125			
Boron	1.9	mg/L	0.10	95	85	125			
Iron	1.9	mg/L	0.030	97	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C94332			12/14/07 08:58		
Calcium	24	mg/L	0.50	97	85	125			
Magnesium	24	mg/L	0.50	96	85	125			
Potassium	26	mg/L	0.50	106	85	125			
Sodium	24	mg/L	0.76	98	85	125			
Sample ID: C07120283-001EMS1	Sample Matrix Spike			Run: SUB-C94332			12/14/07 10:21		
Calcium	74.7	mg/L	0.50	83	70	130			
Magnesium	48.7	mg/L	0.50	86	70	130			
Potassium	117	mg/L	0.50	93	70	130			
Sodium	66.3	mg/L	0.76	85	70	130			
Sample ID: C07120283-001EMSD1	Sample Matrix Spike Duplicate			Run: SUB-C94332			12/14/07 10:24		
Calcium	74.9	mg/L	0.50	83	70	130	0.3	20	
Magnesium	49.7	mg/L	0.50	88	70	130	2.0	20	
Potassium	119	mg/L	0.50	94	70	130	1.5	20	
Sodium	67.7	mg/L	0.76	88	70	130	2.1	20	
Sample ID: C07120582-001BMS	Sample Matrix Spike			Run: SUB-C94332			12/14/07 11:58		
Boron	9.19	mg/L	0.10	91	70	130			
Iron	9.42	mg/L	0.046	92	70	130			
Calcium	456	mg/L	1.0	87	70	130			
Magnesium	453	mg/L	0.50	88	70	130			
Potassium	1130	mg/L	0.50	93	70	130			
Silica	48.9	mg/L	0.20		0	0			A
Sodium	453	mg/L	7.6	88	70	130			
- Matrix spike recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									
Sample ID: C07120582-001BMSD	Sample Matrix Spike Duplicate			Run: SUB-C94332			12/14/07 12:01		
Boron	9.39	mg/L	0.10	93	70	130	2.2	20	
Iron	9.49	mg/L	0.046	92	70	130	0.7	20	
Calcium	465	mg/L	1.0	89	70	130	1.8	20	
Magnesium	456	mg/L	0.50	88	70	130	0.7	20	
Potassium	1120	mg/L	0.50	93	70	130	0.7	20	
Silica	48.8	mg/L	0.20		70	130	0.3	20	A
Sodium	452	mg/L	7.6	88	70	130	0.3	20	
- Matrix spike duplicate recoveries outside the acceptance criteria of 70 to 130 percent are considered matrix related, not system related. Reported values are within method specifications. (EPA Method 200.8, par. 9.4.4)									

### 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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17091		
Sample ID: MB-17091	Method Blank					Run: SUB-C93999			12/10/07 20:59
Mercury	2E-05	mg/L	6E-06						
Sample ID: C07120311-007F MS4	Post Digestion Spike					Run: SUB-C93999			12/11/07 00:50
Mercury	0.025	mg/L	0.0010	101	70	130			
Sample ID: C07120311-007F MSD4	Post Digestion Spike Duplicate					Run: SUB-C93999			12/11/07 00:56
Mercury	0.025	mg/L	0.0010	101	70	130	0.7	20	
Method: E200.8							Batch: C_17098		
Sample ID: MB-17098	Method Blank					Run: SUB-C94180			12/13/07 01:04
Uranium	ND	mg/L	2E-05						
Sample ID: LCS1-17098	Laboratory Control Sample					Run: SUB-C94180			12/13/07 01:08
Uranium	0.0497	mg/L	0.00030	95	80	120			
Sample ID: C07111232-004BMS4	Post Digestion Spike					Run: SUB-C94180			12/13/07 02:23
Uranium	0.0285	mg/L	0.00030	97	70	130			
Sample ID: C07111232-004BMSD4	Post Digestion Spike Duplicate					Run: SUB-C94180			12/13/07 02:27
Uranium	0.0286	mg/L	0.00030	97	70	130	0.2	20	
Method: E200.8							Batch: C_17122		
Sample ID: MB-17122	Method Blank					Run: SUB-C94238			12/13/07 16:21
Uranium	5E-05	mg/L							
Sample ID: LCS1-17122	Laboratory Control Sample					Run: SUB-C94238			12/13/07 20:16
Uranium	0.0527	mg/L	0.00030	100	80	120			
Sample ID: R07110302-004K	Post Digestion Spike					Run: SUB-C94238			12/13/07 21:16
Uranium	0.0511	mg/L	0.00030	102	70	130			
Sample ID: R07110302-004K	Post Digestion Spike Duplicate					Run: SUB-C94238			12/13/07 21:23
Uranium	0.0518	mg/L	0.00030	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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R93947		
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C93947			12/07/07 11:38		
Aluminum	0.0492	mg/L	0.0010	98	85	115			
Arsenic	0.0514	mg/L	0.0010	103	85	115			
Barium	0.0501	mg/L	0.0010	100	85	115			
Cadmium	0.0497	mg/L	0.0010	99	85	115			
Chromium	0.0508	mg/L	0.0010	101	85	115			
Copper	0.0519	mg/L	0.0010	104	85	115			
Lead	0.0506	mg/L	0.0010	101	85	115			
Manganese	0.0505	mg/L	0.0010	100	85	115			
Mercury	0.00520	mg/L	0.0010	104	85	115			
Molybdenum	0.0495	mg/L	0.0010	99	85	115			
Nickel	0.0514	mg/L	0.0010	103	85	115			
Silver	0.0195	mg/L	0.0010	98	85	115			
Thorium 232	0.0501	mg/L	0.0010	100	85	115			
Uranium	0.0498	mg/L	0.00030	100	85	115			
Vanadium	0.0512	mg/L	0.0010	102	85	115			
Zinc	0.0537	mg/L	0.0010	107	85	115			
Sample ID: LRB	Method Blank			Run: SUB-C93947			12/07/07 13:13		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	6E-05	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	0.0004	mg/L	5E-05						
Mercury	ND	mg/L	8E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Silver	4E-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	ND	mg/L	0.0003						
Sample ID: R07110303-004C	Post Digestion Spike			Run: SUB-C93947			12/07/07 17:52		
Aluminum	0.499	mg/L	0.10	100	70	130			
Arsenic	0.517	mg/L	0.0010	103	70	130			
Barium	0.540	mg/L	0.10	103	70	130			
Cadmium	0.506	mg/L	0.010	101	70	130			
Chromium	0.496	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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R93947		
Sample ID: R07110303-004C	Post Digestion Spike			Run: SUB-C93947			12/07/07 17:52		
Copper	0.496	mg/L	0.010	98	70	130			
Lead	0.513	mg/L	0.050	103	70	130			
Manganese	2.98	mg/L	0.010		70	130			A
Mercury	0.0527	mg/L	0.0010	105	70	130			
Molybdenum	0.545	mg/L	0.10	109	70	130			
Nickel	0.502	mg/L	0.050	97	70	130			
Silver	0.171	mg/L	0.010	85	70	130			
Thorium 232	0.532	mg/L	0.0010	106	70	130			
Uranium	0.569	mg/L	0.00030	105	70	130			
Vanadium	0.510	mg/L	0.10	102	70	130			
Zinc	0.498	mg/L	0.010	96	70	130			
Sample ID: R07110303-004C	Post Digestion Spike Duplicate			Run: SUB-C93947			12/07/07 17:59		
Aluminum	0.488	mg/L	0.10	98	70	130	2.3	20	
Arsenic	0.509	mg/L	0.0010	102	70	130	1.6	20	
Barium	0.526	mg/L	0.10	100	70	130	2.6	20	
Cadmium	0.496	mg/L	0.010	99	70	130	2.1	20	
Chromium	0.491	mg/L	0.050	97	70	130	0.9	20	
Copper	0.487	mg/L	0.010	96	70	130	1.8	20	
Lead	0.511	mg/L	0.050	102	70	130	0.2	20	
Manganese	2.99	mg/L	0.010		70	130	0.5	20	A
Mercury	0.0537	mg/L	0.0010	107	70	130	1.9	20	
Molybdenum	0.532	mg/L	0.10	106	70	130	2.4	20	
Nickel	0.489	mg/L	0.050	95	70	130	2.7	20	
Silver	0.174	mg/L	0.010	87	70	130	1.9	20	
Thorium 232	0.530	mg/L	0.0010	106	70	130	0.4	20	
Uranium	0.567	mg/L	0.00030	105	70	130	0.4	20	
Vanadium	0.507	mg/L	0.10	101	70	130	0.6	20	
Zinc	0.494	mg/L	0.010	95	70	130	0.8	20	

### Qualifiers:

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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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R32405		
Sample ID: LFB0711284127-3	Laboratory Fortified Blank			Run: DIONEX_071128A			11/28/07 21:08		
Chloride	4.57	mg/L	0.50	91	90	110			
Fluoride	1.91	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N	2.36	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.31	mg/L	0.10	92	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
Sample ID: LFB0711284127-4	Laboratory Fortified Blank			Run: DIONEX_071128A			11/28/07 21:24		
Chloride	4.86	mg/L	0.50	97	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.35	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N	2.43	mg/L	0.10	97	90	110			
Sulfate	14.2	mg/L	1.0	94	90	110			
Sample ID: R07110302-002AMS	Sample Matrix Spike			Run: DIONEX_071128A			11/29/07 01:07		
Chloride	266	mg/L	2.0	98	80	120			
Fluoride	123	mg/L	3.2	109	80	120			
Nitrogen, Nitrate as N	128	mg/L	0.84	102	80	120			
Nitrogen, Nitrite as N	132	mg/L	1.1	106	80	120			
Sulfate	6060	mg/L	36		80	120			A
Sample ID: R07110302-002AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_071128A			11/29/07 01:23		
Chloride	248	mg/L	2.0	90	80	120	7.0	10	
Fluoride	115	mg/L	3.2	102	80	120	6.2	10	
Nitrogen, Nitrate as N	123	mg/L	0.84	98	80	120	4.0	10	
Nitrogen, Nitrite as N	123	mg/L	1.1	99	80	120	7.0	10	
Sulfate	6160	mg/L	36		80	120	1.6	10	A
Sample ID: R07110303-003AMS	Sample Matrix Spike			Run: DIONEX_071128A			11/29/07 04:34		
Chloride	295	mg/L	2.0	93	80	120			
Fluoride	103	mg/L	3.2	99	80	120			
Nitrogen, Nitrate as N	119	mg/L	0.84	95	80	120			
Nitrogen, Nitrite as N	123	mg/L	1.1	98	80	120			
Sulfate	4180	mg/L	36		80	120			A
Sample ID: R07110303-003AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_071128A			11/29/07 04:50		
Chloride	291	mg/L	2.0	92	80	120	1.4	10	
Fluoride	101	mg/L	3.2	98	80	120	1.5	10	
Nitrogen, Nitrate as N	121	mg/L	0.84	96	80	120	1.3	10	
Nitrogen, Nitrite as N	120	mg/L	1.1	96	80	120	2.3	10	
Sulfate	4150	mg/L	36		80	120	0.9	10	A

### Qualifiers:

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ND - Not detected at the reporting limit.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R32405		
Sample ID: R07110303-007AMS	Sample Matrix Spike			Run: DIONEX_071128A			11/29/07 07:45		
Chloride	299	mg/L	2.0	95	80	120			
Fluoride	97.8	mg/L	3.2	94	80	120			
Nitrogen, Nitrate as N	123	mg/L	0.84	98	80	120			
Nitrogen, Nitrite as N	123	mg/L	1.1	98	80	120			
Sulfate	4250	mg/L	36		80	120			A
Sample ID: R07110303-007AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_071128A			11/29/07 08:01		
Chloride	304	mg/L	2.0	98	80	120	1.8	10	
Fluoride	97.9	mg/L	3.2	94	80	120	0.1	10	
Nitrogen, Nitrate as N	120	mg/L	0.84	96	80	120	2.0	10	
Nitrogen, Nitrite as N	122	mg/L	1.1	97	80	120	0.9	10	
Sulfate	4240	mg/L	36		80	120	0.2	10	A
Method: E300.0							Batch: R32437		
Sample ID: LFB0711291936-3	Laboratory Fortified Blank			Run: DIONEX_071129A			11/29/07 20:57		
Chloride	4.94	mg/L	0.50	99	90	110			
Sample ID: LFB0711291936-4	Laboratory Fortified Blank			Run: DIONEX_071129A			11/29/07 21:13		
Chloride	4.87	mg/L	0.50	97	90	110			
Sample ID: R07110265-001BMS	Sample Matrix Spike			Run: DIONEX_071129A			11/30/07 00:56		
Chloride	32.5	mg/L	0.50	89	80	120			
Sample ID: R07110265-001BMDS	Sample Matrix Spike Duplicate			Run: DIONEX_071129A			11/30/07 01:12		
Chloride	32.9	mg/L	0.50	90	80	120	1.2	10	

### Qualifiers:

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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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0369		
<b>Sample ID: MB-GrAB-0369</b>	Method Blank				Run: SUB-C94568			12/17/07 22:28	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
<b>Sample ID: UNAT-GrAB-0369</b>	Laboratory Control Sample				Run: SUB-C94568			12/17/07 22:28	
Gross Alpha	300	pCi/L	1.0	104	70	130			
<b>Sample ID: Cs137-GrAB-0369</b>	Laboratory Control Sample				Run: SUB-C94568			12/17/07 22:28	
Gross Beta	90	pCi/L	2.0	96	70	130			
<b>Sample ID: R07110303-001H</b>	Sample Matrix Spike				Run: SUB-C94568			12/17/07 22:28	
Gross Alpha	560	pCi/L	1.0	68	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 low response is considered to be matrix related. The batch is approved.									
<b>Sample ID: R07110303-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C94568			12/17/07 22:28	
Gross Alpha	530	pCi/L	1.0	64	70	130	5.2	13.2	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 low response is considered to be matrix related. The batch is approved.									
<b>Sample ID: C07111231-001HMS</b>	Sample Matrix Spike				Run: SUB-C94568			12/17/07 22:28	
Gross Beta	280	pCi/L	2.0	85	70	130			
<b>Sample ID: C07111231-001HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C94568			12/17/07 22:28	
Gross Beta	280	pCi/L	2.0	85	70	130	0.2	15.9	
<b>Method: E901.1</b>							Batch: C_R94634		
<b>Sample ID: LCS-R94634</b>	Laboratory Control Sample				Run: SUB-C94634			12/05/07 10:50	
Cesium 137	1180	pCi/L	20	84	70	130			
Potassium 40	7170	pCi/L	20	107	70	130			
<b>Sample ID: MB-R94634</b>	Method Blank				Run: SUB-C94634			12/05/07 10:50	
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: C07110896-005ADUP</b>	Sample Duplicate				Run: SUB-C94634			12/05/07 10:50	
Gross Gamma		pCi/Filter	20				0.0	30	
<b>Sample ID: R07110303-008H</b>	Sample Duplicate				Run: SUB-C94634			12/05/07 10:50	
Gross Gamma	1200	pCi/L	20				10	30	
<b>Sample ID: C07121021-009ADUP</b>	Sample Duplicate				Run: SUB-C94634			12/05/07 10:50	
Gross Gamma	ND	pCi/L	20				0.0	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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_17098		
Sample ID: C07111215-001BMS	Sample Matrix Spike				Run: SUB-C94420		12/17/07 18:37		
Radium 226	57	pCi/L	0.20	94	70	130			
Sample ID: C07111215-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C94420		12/17/07 18:37		
Radium 226	60	pCi/L	0.20	97	70	130	5.3	29.2	
Sample ID: MB-17098	Method Blank				Run: SUB-C94420		12/18/07 10:09		
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-17098	Laboratory Control Sample				Run: SUB-C94420		12/18/07 10:09		
Radium 226	12	pCi/L	0.20	99	70	130			
Method: E903.0							Batch: C_17122		
Sample ID: C07111001-001AMS	Sample Matrix Spike				Run: SUB-C94513		12/19/07 11:19		
Radium 226	0.00013	uCi/kg	2.0E-07	79	70	130			
Sample ID: C07111001-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C94513		12/19/07 11:19		
Radium 226	0.00013	uCi/kg	2.0E-07	90	70	130	5.5	23.3	
Sample ID: MB-17122	Method Blank				Run: SUB-C94513		12/19/07 12:26		
Radium 226	ND	pCi/L	0.004						
Sample ID: LCS-17122	Laboratory Control Sample				Run: SUB-C94513		12/19/07 12:26		
Radium 226	13	pCi/L	0.20	103	70	130			
Method: E903.0							Batch: C_RA226-2483		
Sample ID: C07120239-006CMS	Sample Matrix Spike				Run: SUB-C94364		12/17/07 13:42		
Radium 226	990	pCi/L	0.20	-46	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: C07120239-006CMSD	Sample Matrix Spike Duplicate				Run: SUB-C94364		12/17/07 13:42		
Radium 226	1000	pCi/L	0.20	198	70	130	5.0	12.7	S
Sample ID: MB-RA226-2483	Method Blank				Run: SUB-C94364		12/17/07 13:42		
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2483	Laboratory Control Sample				Run: SUB-C94364		12/17/07 13:42		
Radium 226	13	pCi/L	0.20	101	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: 02/04/08

Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2490		
<b>Sample ID: R07110303-007H</b>	Sample Matrix Spike				Run: SUB-C94149				12/17/07 16:18
Radium 226	19	pCi/L	0.20	86	70	130			
<b>Sample ID: R07110303-007H</b>	Sample Matrix Spike Duplicate				Run: SUB-C94149				12/17/07 16:18
Radium 226	17	pCi/L	0.20	77	70	130	12	29.9	
<b>Sample ID: MB-RA226-2490</b>	Method Blank				Run: SUB-C94149				12/17/07 16:18
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2490</b>	Laboratory Control Sample				Run: SUB-C94149				12/17/07 17:26
Radium 226	12	pCi/L	0.20	96	70	130			
<b>Method: E907.0</b>							Batch: C_17098		
<b>Sample ID: C07120128-002AMS</b>	Sample Matrix Spike				Run: SUB-C94632				12/11/07 14:35
Thorium 230	54.2	pCi/Filter	0.20	97	70	130			
<b>Sample ID: C07120128-002AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C94632				12/11/07 14:35
Thorium 230	54.8	pCi/Filter	0.20	98	70	130	1.0	30	
<b>Sample ID: LCS-17098</b>	Laboratory Control Sample				Run: SUB-C94632				12/11/07 14:35
Thorium 230	61.3	pCi/L	0.21	107	70	130			
<b>Sample ID: MB-17098</b>	Method Blank				Run: SUB-C94632				12/11/07 14:35
Thorium 230	ND	pCi/L	0.2						
<b>Method: E907.0</b>							Batch: C_17122		
<b>Sample ID: C07120387-002AMS</b>	Sample Matrix Spike				Run: SUB-C94647				12/12/07 16:10
Thorium 230	51.5	pCi/Filter	0.20	92	70	130			
<b>Sample ID: C07120387-002AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C94647				12/12/07 16:10
Thorium 230	55.3	pCi/Filter	0.20	100	70	130	7.1	30	
<b>Sample ID: LCS-17122</b>	Laboratory Control Sample				Run: SUB-C94647				12/12/07 16:10
Thorium 230	52.8	pCi/Filter	0.20	94	70	130			
<b>Sample ID: MB-17122</b>	Method Blank				Run: SUB-C94647				12/12/07 16:10
Thorium 230	ND	pCi/Filter	0.004						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_R94214		
<b>Sample ID: LCS-R94214</b>	Laboratory Control Sample				Run: SUB-C94214		12/10/07 14:00		
Thorium 230	6.00	pCi/L	0.20	102	70	130			
<b>Sample ID: R07110303-001H</b>	Sample Matrix Spike				Run: SUB-C94214		12/10/07 14:00		
Thorium 230	19.8	pCi/L	0.20	102	70	130			
<b>Sample ID: R07110303-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C94214		12/10/07 14:00		
Thorium 230	16.2	pCi/L	0.20	83	70	130	20	30	
<b>Sample ID: MB-R94214</b>	Method Blank				Run: SUB-C94214		12/10/07 14:00		
Thorium 230	ND	pCi/L	0.2						
<b>Method: E907.0</b>							Batch: C_R94903		
<b>Sample ID: LCS-R94903</b>	Laboratory Control Sample				Run: SUB-C94903		12/20/07 14:15		
Thorium 230	5.00	pCi/L	0.20	85	70	130			
<b>Sample ID: C07111264-007AMS</b>	Sample Matrix Spike				Run: SUB-C94903		12/20/07 14:15		
Thorium 230	18.9	pCi/L	0.20	97	70	130			
<b>Sample ID: C07111264-007AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C94903		12/20/07 14:15		
Thorium 230	18.9	pCi/L	0.20	97	70	130	0.0	30	
<b>Sample ID: MB-R94903</b>	Method Blank				Run: SUB-C94903		12/20/07 14:15		
Thorium 230	ND	pCi/L	0.2						
<b>Method: E909.0M</b>							Batch: C_17098		
<b>Sample ID: R07110303-005I</b>	Sample Matrix Spike				Run: SUB-C94353		12/12/07 07:00		
Lead 210	710	pCi/L	1.0	89	70	130			
<b>Sample ID: R07110303-005I</b>	Sample Matrix Spike Duplicate				Run: SUB-C94353		12/12/07 07:00		
Lead 210	620	pCi/L	1.0	77	70	130	14	30	
<b>Sample ID: MB-R94353</b>	Method Blank				Run: SUB-C94353		12/12/07 07:00		
Lead 210	ND	pCi/L	1						
<b>Sample ID: LCS-R94353</b>	Laboratory Control Sample				Run: SUB-C94353		12/12/07 07:00		
Lead 210	95	pCi/L	1.0	118	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: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_17122		
Sample ID: R07110302-001K	Sample Matrix Spike				Run: SUB-C94571		12/13/07 08:00		
Lead 210	790	pCi/L	1.0	99	70	130			
Sample ID: R07110302-001K	Sample Matrix Spike Duplicate				Run: SUB-C94571		12/13/07 08:00		
Lead 210	780	pCi/L	1.0	98	70	130	1.5	30	
Method: E909.0M							Batch: C_R94265		
Sample ID: C07111231-004HMS	Sample Matrix Spike				Run: SUB-C94265		12/10/07 07:15		
Lead 210	470	pCi/L	1.0	116	70	130			
Sample ID: C07111231-004HMSD	Sample Matrix Spike Duplicate				Run: SUB-C94265		12/10/07 07:15		
Lead 210	420	pCi/L	1.0	104	70	130	11	30	
Sample ID: MB-R94265	Method Blank				Run: SUB-C94265		12/10/07 07:15		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R94265	Laboratory Control Sample				Run: SUB-C94265		12/10/07 07:15		
Lead 210	88	pCi/L	1.0	110	70	130			
Method: RMO-3008							Batch: C_17098		
Sample ID: R07110303-005I	Sample Matrix Spike				Run: SUB-C94443		12/12/07 12:00		
Polonium 210	350	pCi/L	1.0	79	70	130			
Sample ID: R07110303-005I	Sample Matrix Spike Duplicate				Run: SUB-C94443		12/12/07 12:00		
Polonium 210	370	pCi/L	1.0	83	70	130	5.2	30	
Sample ID: LCS-17098	Laboratory Control Sample				Run: SUB-C94443		12/12/07 12:00		
Polonium 210	19	pCi/L	1.1	83	70	130			
Sample ID: MB-17098	Method Blank				Run: SUB-C94443		12/12/07 12:00		
Polonium 210	ND	pCi/L	1						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 02/04/08  
Work Order: R07110303

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_17122		
Sample ID: R07110302-004K	Sample Matrix Spike				Run: SUB-C94630			12/18/07 12:00	
Polonium 210	400	pCi/L	1.0	90	70	130			
Sample ID: R07110302-004K	Sample Matrix Spike Duplicate				Run: SUB-C94630			12/18/07 12:00	
Polonium 210	330	pCi/L	1.0	73	70	130	20	30	
Sample ID: LCS-17122	Laboratory Control Sample				Run: SUB-C94630			12/18/07 12:00	
Polonium 210	18	pCi/L	1.0	80	70	130			
Sample ID: MB-17122	Method Blank				Run: SUB-C94630			12/18/07 12:00	
Polonium 210	ND	pCi/L	1						
Method: RMO-3008							Batch: C_R94217		
Sample ID: C07111231-008HMS	Sample Matrix Spike				Run: SUB-C94217			12/10/07 12:00	
Polonium 210	170	pCi/L	1.0	74	70	130			
Sample ID: C07111231-008HMSD	Sample Matrix Spike Duplicate				Run: SUB-C94217			12/10/07 12:00	
Polonium 210	170	pCi/L	1.0	76	70	130	2.4	30	
Sample ID: LCS-R94217	Laboratory Control Sample				Run: SUB-C94217			12/10/07 12:00	
Polonium 210	21	pCi/L	1.0	92	70	130			
Sample ID: MB-R94217	Method Blank				Run: SUB-C94217			12/10/07 12:00	
Polonium 210	ND	pCi/L	1						

### 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>RESPEC</b>		Project Name, FWS, Permit, Etc. <b>Dewey-Burdock</b>		Sample Origin State: _____ EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address:		Contact Name: <b>Colt Foreman</b>		Email: <b>Colt.Foreman@respec.com</b>	
Invoice Address:		Invoice Contact & Phone:		Purchase Order: <b>Quote/Bottle Order:</b>	
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: _____</div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)			Collection Date	Collection Time	MATRIX
1 Dew Burd Gw 635			11/27/07	8:25	W
2 Dew Burd Gw 676			11/27/07	12:20	W
3 Dew Burd Gw 678			11/27/07	13:40	W
4 Dew Burd Gw 677			11/27/07	15:20	W
5 Dew Burd Gw 08			11/27/07	16:30	W
6 Dew Burd Gw 08-2			11/27/07	16:40	W
7 Dew Burd Gw 175			11/27/07	17:34	W
8 Dew Burd Gw 175			11/27/07	17:35	W
9 Dew Burd Gw 175			11/27/07	17:35	W
10					
Custody Record Relinquished By (print): <b>Eric Foreman</b>		Date/Time: <b>11/28/07 08:10</b>		Signature: <b>Eric Foreman</b>	
Signed		Lab Disposal:		Received by Laboratory: <b>Eric Foreman</b>	
Sample Disposal:		Return to Client:		Date/Time: <b>11-27-07 8:10</b>	
Signature:		Signature:		Signature:	

SEE ATTACHED  
Normal Turnaround (TAT)

RUSH

Comments:  
**Sample Bottle set 1  
Sample Bottle set 2  
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Sample Bottle set 97  
Sample Bottle set 98  
Sample Bottle set 99  
Sample Bottle set 100**

On Ice: Yes ☐ No ☐  
Cooler ID(s):  
Receipt Temp: **3.4** °C  
Custody Seal: Y N  
Intact: Y N  
Signature: Y N  
Match: Y N

LABORATORY USE ONLY



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Gillette, WY 888-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-680-2218

## ANALYTICAL SUMMARY REPORT

May 23, 2011

RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701

Workorder No.: R08010296      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. Rapid City SD received the following 2 samples for RESPEC Inc on 1/31/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08010296-001	DewBurd GW680	01/30/08 13:50	01/31/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R08010296-002	DewBurd GW681	01/30/08 15:40	01/31/08	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. 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:

  
Branch Manager

Digitally signed by  
Linda Larson  
Date: 2011.05.23 14:43:25 -06:00



**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08010296

**Revised Date:** 05/23/11

**Report Date:** 02/26/08

## 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).





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Collection Date: 01/30/08 13:50

Lab ID: R08010296-001

Date Received: 01/31/08

Client Sample ID: DewBurd GW680

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>	258	mg/L		5		1	A2320 B	02/06/08 12:04/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	02/06/08 12:04/sn
Bicarbonate as HCO <sub>3</sub>	315	mg/L		5		1	A2320 B	02/06/08 12:04/sn
Calcium	343	mg/L		0.5		1	E200.7	02/14/08 19:21/eli-c
Chloride	15	mg/L		1		1	E300.0	01/31/08 20:32/sn
Fluoride	0.3	mg/L		0.1		1	E300.0	01/31/08 20:32/sn
Magnesium	113	mg/L		0.5		1	E200.7	02/14/08 19:21/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	02/04/08 16:33/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	01/31/08 20:32/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	01/31/08 20:32/sn
Potassium	20.7	mg/L		0.5		1	E200.7	02/14/08 19:21/eli-c
Silica	8.9	mg/L		0.5		1	E200.7	02/14/08 19:21/eli-c
Sodium	148	mg/L	D	0.8		1	E200.7	02/14/08 19:21/eli-c
Sulfate	1420	mg/L	D	3		50	E300.0	01/31/08 20:16/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2630	umhos/cm		5.0		1	A2510 B	02/01/08 14:21/jmh
Oxidation-Reduction Potential	0	mV				1	A2580 B	01/31/08 00:00/sn
pH	7.26	s.u.		0.01		1	A4500-H B	02/01/08 14:41/jmh
Sodium Adsorption Ratio (SAR)	1.8	unitless		0.10		1	Calculation	02/25/08 15:17/ADM
Solids, Total Dissolved TDS @ 180 C	2400	mg/L		5		1	A2540 C	01/31/08 14:50/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	02/12/08 23:57/eli-c
Arsenic	0.026	mg/L		0.001		1	E200.8	02/12/08 23:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/12/08 23:57/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	02/14/08 19:21/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/12/08 23:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/12/08 23:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/12/08 23:57/eli-c
Iron	0.43	mg/L		0.03		1	E200.7	02/14/08 19:21/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/12/08 23:57/eli-c
Manganese	0.43	mg/L		0.01		1	E200.8	02/12/08 23:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/12/08 23:57/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/12/08 23:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/12/08 23:57/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	02/05/08 17:03/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/12/08 23:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/12/08 23:57/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08010296-001  
**Client Sample ID:** DewBurd GW680

Prepared by Rapid City, SD Branch

**Revised Date:** 05/23/11  
**Report Date:** 02/26/08  
**Collection Date:** 01/30/08 13:50  
**Date Received:** 01/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.172	mg/L		0.0003		1	E200.8	02/12/08 23:57/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/12/08 23:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/12/08 23:57/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0008	mg/L		0.0003		1	E200.8	02/14/08 03:34/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	02/12/08 14:13/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/05/08 15:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/05/08 00:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	4090	pCi/L		1.0		1	E900.0	02/13/08 08:21/eli-c
Gross Alpha precision (±)	19.7	pCi/L				1	E900.0	02/13/08 08:21/eli-c
Gross Beta	1330	pCi/L		2.0		1	E900.0	02/13/08 08:21/eli-c
Gross Beta precision (±)	16.3	pCi/L				1	E900.0	02/13/08 08:21/eli-c
Lead 210	17	pCi/L		1.0		1	E909.0M	02/06/08 07:30/eli-c
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	02/06/08 07:30/eli-c
Polonium 210	1.7	pCi/L		1.0		1	RMO-3008	02/11/08 12:30/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	02/11/08 12:30/eli-c
Radium 226	1180	pCi/L		0.2		1	E903.0	02/10/08 12:04/eli-c
Radium 226 precision (±)	10.6	pCi/L				1	E903.0	02/10/08 12:04/eli-c
Gross Gamma	4700	pCi/L		20		1	E901.1	02/06/08 15:40/eli-c
Gross Gamma precision (±)	110	pCi/L				1	E901.1	02/06/08 15:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/08/08 09:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	12.7	pCi/L		0.2		1	E903.0	02/13/08 10:01/eli-c
Radium 226 precision (±)	2.7	pCi/L				1	E903.0	02/13/08 10:01/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	02/13/08 12:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	02/13/08 12:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	143000	pCi/L		100		1	D5072-92	02/01/08 16:58/eli-c
Radon 222 precision (±)	670	pCi/L				1	D5072-92	02/01/08 16:58/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08010296-001  
**Client Sample ID:** DewBurd GW680

Prepared by Rapid City, SD Branch

**Revised Date:** 05/23/11  
**Report Date:** 02/26/08  
**Collection Date:** 01/30/08 13:50  
**Date Received:** 01/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
DATA QUALITY									
A/C Balance (± 5)	-2.45						1	A1030 E	02/25/08 00:00/lkl
Anions	35.2	meq/L					1	A1030 E	02/25/08 00:00/lkl
Cations	33.5	meq/L					1	A1030 E	02/25/08 00:00/lkl
Solids, Total Dissolved Calculated	2210	mg/L					1	A1030 E	02/25/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.09						1	A1030 E	02/25/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Collection Date: 01/30/08 15:40

Lab ID: R08010296-002

Date Received: 01/31/08

Client Sample ID: DewBurd GW681

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	02/06/08 12:06/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	02/06/08 12:06/sn
Bicarbonate as HCO <sub>3</sub>	212	mg/L		5		1	A2320 B	02/06/08 12:06/sn
Calcium	60.3	mg/L		0.5		1	E200.7	02/14/08 19:25/eli-c
Chloride	13	mg/L		1		1	E300.0	01/31/08 21:02/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	01/31/08 21:02/sn
Magnesium	22.3	mg/L		0.5		1	E200.7	02/14/08 19:25/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	02/04/08 16:36/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	01/31/08 21:02/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	01/31/08 21:02/sn
Potassium	10.3	mg/L		0.5		1	E200.7	02/14/08 19:25/eli-c
Silica	8.1	mg/L		0.5		1	E200.7	02/14/08 19:25/eli-c
Sodium	192	mg/L	D	0.8		1	E200.7	02/14/08 19:25/eli-c
Sulfate	498	mg/L	D	3		50	E300.0	01/31/08 20:47/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1320	umhos/cm		5.0		1	A2510 B	02/01/08 14:22/jmh
Oxidation-Reduction Potential	0	mV				1	A2580 B	01/31/08 00:00/sn
pH	7.98	s.u.		0.01		1	A4500-H B	02/01/08 14:43/jmh
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.10		1	Calculation	02/25/08 15:17/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	01/31/08 14:50/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	02/13/08 00:04/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	02/13/08 00:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/13/08 00:04/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/14/08 19:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/13/08 00:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/13/08 00:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/13/08 00:04/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/14/08 19:25/eli-c
Lead	0.004	mg/L		0.001		1	E200.8	02/13/08 00:04/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	02/13/08 00:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/13/08 00:04/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/13/08 00:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/13/08 00:04/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	02/05/08 17:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/13/08 00:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/13/08 00:04/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix.



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Collection Date: 01/30/08 15:40

Lab ID: R08010296-002

Date Received: 01/31/08

Client Sample ID: DewBurd GW681

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0117	mg/L		0.0003		1	E200.8	02/13/08 00:04/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/13/08 00:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/13/08 00:04/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0010	mg/L		0.0003		1	E200.8	02/14/08 03:42/eli-c
<b>METALS - TOTAL</b>								
Mercury	ND	mg/L		0.001		1	E200.8	02/12/08 14:20/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/05/08 15:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/05/08 00:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	656	pCi/L		1.0		1	E900.0	02/13/08 08:21/eli-c
Gross Alpha precision (±)	4.7	pCi/L				1	E900.0	02/13/08 08:21/eli-c
Gross Beta	226	pCi/L		2.0		1	E900.0	02/13/08 08:21/eli-c
Gross Beta precision (±)	4.3	pCi/L				1	E900.0	02/13/08 08:21/eli-c
Lead 210	46	pCi/L		1.0		1	E909.0M	02/06/08 07:30/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	02/06/08 07:30/eli-c
Polonium 210	2.6	pCi/L		1.0		1	RMO-3008	02/11/08 12:30/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	02/11/08 12:30/eli-c
Radium 226	421	pCi/L		0.2		1	E903.0	02/10/08 12:04/eli-c
Radium 226 precision (±)	6.8	pCi/L				1	E903.0	02/10/08 12:04/eli-c
Gross Gamma	13000	pCi/L		20		1	E901.1	02/06/08 15:40/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	02/06/08 15:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1.7	pCi/L		1.0		1	E909.0M	02/08/08 09:30/eli-c
Lead 210 precision (±)	0.69	pCi/L				1	E909.0M	02/08/08 09:30/eli-c
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Polonium 210 precision (±)	0.86	pCi/L				1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	9.9	pCi/L		0.2		1	E903.0	02/13/08 10:01/eli-c
Radium 226 precision (±)	2.4	pCi/L				1	E903.0	02/13/08 10:01/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/13/08 12:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	462000	pCi/L		100		1	D5072-92	02/01/08 16:58/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



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## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 02/26/08

Collection Date: 01/30/08 15:40

Date Received: 01/31/08

Matrix: AQUEOUS

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08010296-002

Client Sample ID: DewBurd GW681

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222 precision (±)	1190	pCi/L				1	D5072-92	02/01/08 16:58/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.72					1	A1030 E	02/25/08 00:00/lkl
Anions	14.2	meq/L				1	A1030 E	02/25/08 00:00/lkl
Cations	13.5	meq/L				1	A1030 E	02/25/08 00:00/lkl
Solids, Total Dissolved Calculated	901	mg/L				1	A1030 E	02/25/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	02/25/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080206A-ALK-SEL-W		
Sample ID: MBLK1_080206A	Method Blank					Run: PH_COND1-R_080206A			02/06/08 12:00
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_080206A	Laboratory Control Sample					Run: PH_COND1-R_080206A			02/06/08 12:01
Alkalinity, Total as CaCO <sub>3</sub>	1000	mg/L	5.0	100	90	110			

### Qualifiers:

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2510 B</b>		Batch: 080201_1_COND-PROBE-W							
<b>Sample ID: LCS1-1_080201</b> Conductivity @ 25 C	Laboratory Control Sample 153	umhos/cm	5.0	102	90	110			02/01/08 14:13
<b>Sample ID: LCS2-1_080201</b> Conductivity @ 25 C	Laboratory Control Sample 4990	umhos/cm	5.0	100	90	110			02/01/08 14:14
<b>Sample ID: LCS_COND-1_080201</b> Conductivity @ 25 C	Laboratory Control Sample 1380	umhos/cm	5.0	98	90	110			02/01/08 14:15
<b>Sample ID: MBLK-1_080201</b> Conductivity @ 25 C	Method Blank ND	umhos/cm	5						02/01/08 14:17
<b>Sample ID: R08010273-001BDUP</b> Conductivity @ 25 C	Sample Duplicate 652	umhos/cm	5.0				0.3	10	02/01/08 14:18

### Qualifiers:

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 C</b>							Batch: 080131A-SLDS-TDS-W		
<b>Sample ID: MBLK1_080131A</b>	Method Blank					Run: BAL-4-R_080131B			01/31/08 14:46
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
<b>Sample ID: LCS1_080131A</b>	Laboratory Control Sample					Run: BAL-4-R_080131B			01/31/08 14:47
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	104	90	110			
<b>Sample ID: R08010262-001AMS</b>	Sample Matrix Spike					Run: BAL-4-R_080131B			01/31/08 14:48
Solids, Total Dissolved TDS @ 180 C	430	mg/L	5.0	100	80	120			
<b>Sample ID: R08010262-001AMSD</b>	Sample Matrix Spike Duplicate					Run: BAL-4-R_080131B			01/31/08 14:48
Solids, Total Dissolved TDS @ 180 C	440	mg/L	5.0	103	80	120	1.4	10	

### Qualifiers:

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: R33347		
Sample ID: LCS_013108							Run: PH_COND1-R_080131A		
Oxidation-Reduction Potential	480	mV	102	95	105				01/31/08 00:00

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SEIV3114-080205		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C96573			02/05/08 15:36
Selenium-IV	ND	mg/L	0.0002						
<b>Sample ID: 288-20-3</b>	Laboratory Control Sample					Run: SUB-C96573			02/05/08 15:38
Selenium-IV	0.050	mg/L	0.0010	99	90	110			
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike					Run: SUB-C96573			02/05/08 15:45
Selenium-IV	0.051	mg/L	0.0010	102	85	115			
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96573			02/05/08 15:47
Selenium-IV	0.054	mg/L	0.0010	106	85	115	4.4	10	
<b>Method: A3114 B</b>							Batch: C_R96577		
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike					Run: SUB-C96577			02/05/08 00:00
Selenium-VI	0.0017	mg/L	0.0010	3	85	115			S
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96577			02/05/08 00:00
Selenium-VI	0.0025	mg/L	0.0010	4	85	115	39	10	SR
<b>Method: A3114 B</b>							Batch: C_SE3114-080205		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C96580			02/05/08 16:36
Selenium	ND	mg/L	0.0004						
<b>Sample ID: 288-20-3</b>	Laboratory Control Sample					Run: SUB-C96580			02/05/08 16:44
Selenium	0.055	mg/L	0.0010	110	90	110			
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike					Run: SUB-C96580			02/05/08 17:11
Selenium	0.050	mg/L	0.0010	99	85	115			
<b>Sample ID: R08010296-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96580			02/05/08 17:13
Selenium	0.051	mg/L	0.0010	102	85	115	3.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

S - Spike recovery outside of advisory limits.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 02/26/08

Work Order: R08010296

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080201_1_PH-W		
Sample ID: LCS_pH-1_080201	Laboratory Control Sample				Run: PH_COND2-R_080201A				02/01/08 14:37
pH	6.94	s.u.	0.010	101	98.55	101.45			
Sample ID: R08010280-001ADUP	Sample Duplicate				Run: PH_COND2-R_080201A				02/01/08 14:39
pH	8.06	s.u.	0.010				0.1	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G					Batch: A2008-02-04_2_NH3_01				
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080204A				02/04/08 16:20
Nitrogen, Ammonia as N	0.26	mg/L	0.10	106	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080204A				02/04/08 16:22
Nitrogen, Ammonia as N	0.28	mg/L	0.10	111	90	110			S
Sample ID: MBLK-5	Method Blank				Run: TECHAA2-R_080204A				02/04/08 16:23
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08010296-001BDUP	Sample Duplicate				Run: TECHAA2-R_080204A				02/04/08 16:34
Nitrogen, Ammonia as N	0.24	mg/L	0.10				2.9	10	
Sample ID: R08010296-002BMS	Sample Matrix Spike				Run: TECHAA2-R_080204A				02/04/08 16:37
Nitrogen, Ammonia as N	0.30	mg/L	0.10	106	80	120			

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S - Spike recovery outside of advisory limits.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R96506		
Sample ID: C08020027-012CDUP	Sample Duplicate				Run: SUB-C96506			02/01/08 16:58	
Radon 222	365	pCi/L	100				47	30	R
- The RPD for the Dup is outside of the acceppable range.									
Sample ID: MB-R96506	Method Blank				Run: SUB-C96506			02/01/08 16:58	
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R96506	Laboratory Control Sample				Run: SUB-C96506			02/01/08 16:58	
Radon 222	317	pCi/L	100	104	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R96996		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C96996			02/14/08 12:48		
Silica	2.0	mg/L	0.10	100	85	125			
Boron	1.9	mg/L	0.10	97	85	125			
Iron	2.0	mg/L	0.030	100	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C96996			02/14/08 12:52		
Calcium	25	mg/L	0.50	102	85	125			
Magnesium	24	mg/L	0.50	97	85	125			
Potassium	24	mg/L	0.50	96	85	125			
Sodium	24	mg/L	0.76	95	85	125			
<b>Sample ID: C08020352-001CMS</b>	Sample Matrix Spike			Run: SUB-C96996			02/14/08 13:40		
Boron	10.2	mg/L	0.13	99	70	130			
Iron	9.56	mg/L	0.087	96	70	130			
Calcium	462	mg/L	0.79	92	70	130			
Magnesium	438	mg/L	0.80	88	70	130			
Potassium	1100	mg/L	0.50	92	70	130			
Silica	33.8	mg/L	0.11	85	70	130			
Sodium	693	mg/L	5.3	91	70	130			
<b>Sample ID: C08020352-001CMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C96996			02/14/08 13:43		
Boron	10.6	mg/L	0.13	104	70	130	4.3	20	
Iron	9.89	mg/L	0.087	99	70	130	3.4	20	
Calcium	475	mg/L	0.79	95	70	130	2.8	20	
Magnesium	460	mg/L	0.80	92	70	130	5.0	20	
Potassium	1100	mg/L	0.50	92	70	130	0.3	20	
Silica	34.6	mg/L	0.11	93	70	130	2.4	20	
Sodium	697	mg/L	5.3	92	70	130	0.6	20	
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C96996			02/15/08 02:45		
Silica	1.9	mg/L	0.10	97	85	125			
Boron	1.8	mg/L	0.10	91	85	125			
Iron	1.9	mg/L	0.030	95	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C96996			02/15/08 02:48		
Calcium	24	mg/L	0.50	94	85	125			
Magnesium	24	mg/L	0.50	95	85	125			
Potassium	24	mg/L	0.50	97	85	125			
Sodium	23	mg/L	0.76	93	85	125			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7_8</b>							Batch: C_R96996		
<b>Sample ID: C08011081-001CMS</b>	Sample Matrix Spike		Run: SUB-C96996				02/14/08 15:59		
Boron	103	mg/L	1.3	101	70	130			
Iron	98.9	mg/L	0.87	98	70	130			
Calcium	5700	mg/L	7.9	95	70	130			
Magnesium	4710	mg/L	8.0	93	70	130			
Potassium	11200	mg/L	4.4	93	70	130			
Silica	210	mg/L	1.1	99	70	130			
Sodium	5460	mg/L	53	93	70	130			
<b>Sample ID: C08011081-001CMSD</b>	Sample Matrix Spike Duplicate		Run: SUB-C96996				02/14/08 16:02		
Boron	106	mg/L	1.3	105	70	130	3.7	20	
Iron	101	mg/L	0.87	100	70	130	2.0	20	
Calcium	5810	mg/L	7.9	97	70	130	1.9	20	
Magnesium	4810	mg/L	8.0	95	70	130	2.1	20	
Potassium	11300	mg/L	4.4	94	70	130	0.7	20	
Silica	215	mg/L	1.1	105	70	130	2.7	20	
Sodium	5420	mg/L	53	92	70	130	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 02/26/08

Work Order: R08010296

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>									Batch: C_17699
<b>Sample ID: MB-17699</b>	Method Blank								Run: SUB-C96857 02/12/08 13:32
Mercury	ND	mg/L	6E-06						
<b>Sample ID: C08020069-001AMS4</b>	Post Digestion Spike								Run: SUB-C96857 02/12/08 16:21
Mercury	0.00620	mg/L	0.0010	89	70	130			
<b>Sample ID: C08020069-001AMSD4</b>	Post Digestion Spike Duplicate								Run: SUB-C96857 02/12/08 16:28
Mercury	0.00622	mg/L	0.0010	89	70	130	0.4	20	
<b>Method: E200.8</b>									Batch: C_R96857
<b>Sample ID: LRB</b>	Method Blank								Run: SUB-C96857 02/12/08 12:31
Aluminum	ND	mg/L	0.0001						
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						
Silver	0.001	mg/L	3E-05						
Thorium 232	5E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	ND	mg/L	0.0003						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank								Run: SUB-C96857 02/12/08 12:38
Aluminum	0.0514	mg/L	0.0010	103	85	115			
Arsenic	0.0510	mg/L	0.0010	102	85	115			
Barium	0.0511	mg/L	0.0010	102	85	115			
Cadmium	0.0505	mg/L	0.0010	101	85	115			
Chromium	0.0507	mg/L	0.0010	101	85	115			
Copper	0.0502	mg/L	0.0010	100	85	115			
Lead	0.0505	mg/L	0.0010	101	85	115			
Manganese	0.0505	mg/L	0.0010	101	85	115			
Mercury	0.00512	mg/L	0.0010	102	85	115			
Molybdenum	0.0512	mg/L	0.0010	102	85	115			
Nickel	0.0511	mg/L	0.0010	102	85	115			
Silver	0.0203	mg/L	0.0010	96	85	115			
Thorium 232	0.0503	mg/L	0.0010	101	85	115			
Uranium	0.0504	mg/L	0.00030	101	85	115			
Vanadium	0.0507	mg/L	0.0010	101	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R96857		
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C96857		02/12/08 12:38		
Zinc	0.0520	mg/L	0.0010	104	85	115			
<b>Sample ID: C08020018-001DMS4</b>	Post Digestion Spike				Run: SUB-C96857		02/12/08 13:12		
Aluminum	0.108	mg/L	0.10	95	70	130			
Arsenic	0.0544	mg/L	0.0010	108	70	130			
Barium	0.178	mg/L	0.10	93	70	130			
Cadmium	0.0523	mg/L	0.010	105	70	130			
Chromium	0.0531	mg/L	0.050	102	70	130			
Copper	0.0577	mg/L	0.010	102	70	130			
Lead	0.0541	mg/L	0.050	106	70	130			
Manganese	0.0551	mg/L	0.010	102	70	130			
Mercury	0.00527	mg/L	0.0010	105	70	130			
Molybdenum	0.0561	mg/L	0.10	109	70	130			
Nickel	0.0525	mg/L	0.050	103	70	130			
Silver	0.0181	mg/L	0.010	91	70	130			
Thorium 232	0.0522	mg/L	0.0010	104	70	130			
Uranium	0.0538	mg/L	0.00030	105	70	130			
Vanadium	0.0522	mg/L	0.10	103	70	130			
Zinc	0.103	mg/L	0.010	107	70	130			
<b>Sample ID: C08020018-001DMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C96857		02/12/08 13:19		
Aluminum	0.114	mg/L	0.10	107	70	130	5.3	20	
Arsenic	0.0534	mg/L	0.0010	105	70	130	2.0	20	
Barium	0.178	mg/L	0.10	94	70	130	0.2	20	
Cadmium	0.0523	mg/L	0.010	105	70	130	0.1	20	
Chromium	0.0524	mg/L	0.050	101	70	130	1.3	20	
Copper	0.0572	mg/L	0.010	101	70	130	0.8	20	
Lead	0.0535	mg/L	0.050	105	70	130	1.2	20	
Manganese	0.0545	mg/L	0.010	101	70	130	1.0	20	
Mercury	0.00528	mg/L	0.0010	106	70	130	0.2	20	
Molybdenum	0.0557	mg/L	0.10	108	70	130	0.0	20	
Nickel	0.0519	mg/L	0.050	101	70	130	1.2	20	
Silver	0.0203	mg/L	0.010	102	70	130	11	20	
Thorium 232	0.0519	mg/L	0.0010	104	70	130	0.5	20	
Uranium	0.0531	mg/L	0.00030	103	70	130	1.3	20	
Vanadium	0.0517	mg/L	0.10	102	70	130	0.0	20	
Zinc	0.100	mg/L	0.010	102	70	130	2.3	20	
<b>Sample ID: C08020114-003BMS4</b>	Post Digestion Spike				Run: SUB-C96857		02/13/08 00:31		
Aluminum	0.0512	mg/L	0.10	100	70	130			
Arsenic	0.0540	mg/L	0.0010	107	70	130			
Barium	0.0822	mg/L	0.10	105	70	130			
Cadmium	0.0531	mg/L	0.010	106	70	130			
Chromium	0.0512	mg/L	0.050	101	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R96857		
<b>Sample ID: C08020114-003BMS4</b>	Post Digestion Spike			Run: SUB-C96857			02/13/08 00:31		
Copper	0.0515	mg/L	0.010	102	70	130			
Lead	0.0543	mg/L	0.050	106	70	130			
Manganese	0.0546	mg/L	0.010	102	70	130			
Mercury	0.00516	mg/L	0.0010	103	70	130			
Molybdenum	0.0567	mg/L	0.10	103	70	130			
Nickel	0.0504	mg/L	0.050	101	70	130			
Silver	0.0172	mg/L	0.010	86	70	130			
Thorium 232	0.0562	mg/L	0.0010	112	70	130			
Uranium	0.160	mg/L	0.00030	104	70	130			
Vanadium	0.0518	mg/L	0.10	103	70	130			
Zinc	0.0882	mg/L	0.010	106	70	130			
<b>Sample ID: C08020114-003BMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C96857			02/13/08 00:37		
Aluminum	0.0502	mg/L	0.10	98	70	130	0.0	20	
Arsenic	0.0534	mg/L	0.0010	106	70	130	1.2	20	
Barium	0.0820	mg/L	0.10	105	70	130	0.0	20	
Cadmium	0.0527	mg/L	0.010	105	70	130	0.8	20	
Chromium	0.0501	mg/L	0.050	99	70	130	2.3	20	
Copper	0.0513	mg/L	0.010	101	70	130	0.4	20	
Lead	0.0540	mg/L	0.050	105	70	130	0.5	20	
Manganese	0.0539	mg/L	0.010	100	70	130	1.4	20	
Mercury	0.00518	mg/L	0.0010	104	70	130	0.3	20	
Molybdenum	0.0564	mg/L	0.10	103	70	130	0.0	20	
Nickel	0.0502	mg/L	0.050	100	70	130	0.3	20	
Silver	0.0184	mg/L	0.010	92	70	130	6.8	20	
Thorium 232	0.0558	mg/L	0.0010	112	70	130	0.9	20	
Uranium	0.156	mg/L	0.00030	97	70	130	2.2	20	
Vanadium	0.0510	mg/L	0.10	101	70	130	0.0	20	
Zinc	0.0886	mg/L	0.010	107	70	130	0.5	20	

### Qualifiers:

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ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>									Batch: C_17699
<b>Sample ID: MB-17699</b>	Method Blank					Run: SUB-C96944			02/13/08 17:26
Mercury	3E-05	mg/L	3E-05						
<b>Sample ID: C08020038-001DMS</b>	Sample Matrix Spike					Run: SUB-C96944			02/13/08 18:12
Mercury	0.0056	mg/L	0.0010	111	70	130			
<b>Sample ID: C08020038-001DMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C96944			02/13/08 18:19
Mercury	0.0055	mg/L	0.0010	110	70	130	1.0	20	
<b>Method: E200.8</b>									Batch: C_R96944
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C96944			02/13/08 15:42
Uranium	ND	mg/L	4E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C96944			02/13/08 15:49
Uranium	0.0475	mg/L	0.00030	95	85	115			
<b>Sample ID: LCS1-17696</b>	Laboratory Control Sample					Run: SUB-C96944			02/14/08 03:19
Uranium	0.0511	mg/L	0.00030	102	80	120			
<b>Sample ID: R08010296-002I</b>	Post Digestion Spike					Run: SUB-C96944			02/14/08 03:49
Uranium	0.0539	mg/L	0.00030	106	70	130			
<b>Sample ID: R08010296-002I</b>	Post Digestion Spike Duplicate					Run: SUB-C96944			02/14/08 03:57
Uranium	0.0539	mg/L	0.00030	106	70	130	0.1	20	

### Qualifiers:

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ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R33354		
<b>Sample ID: LFB0801311244-1</b>	Laboratory Fortified Blank			Run: DIONEX_080131A			01/31/08 18:13		
Chloride	4.84	mg/L	0.50	97	90	110			
Fluoride	2.10	mg/L	0.10	105	90	110			
Nitrogen, Nitrate as N	2.49	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	90	110			
Sulfate	14.4	mg/L	1.0	96	90	110			
<b>Sample ID: LFB0801311244-1</b>	Laboratory Fortified Blank			Run: DIONEX_080131A			01/31/08 18:28		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	1.98	mg/L	0.10	99	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
<b>Sample ID: R08010278-0011 MS</b>	Sample Matrix Spike			Run: DIONEX_080131A			01/31/08 18:59		
Chloride	7.66	mg/L	0.50	85	80	120			
Fluoride	2.11	mg/L	0.10	93	80	120			
Nitrogen, Nitrate as N	2.71	mg/L	0.10	95	80	120			
Nitrogen, Nitrite as N	2.56	mg/L	0.10	102	80	120			
Sulfate	60.5	mg/L	1.0	75	80	120			S
<b>Sample ID: R08010278-0011 MSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080131A			01/31/08 19:15		
Chloride	7.42	mg/L	0.50	80	80	120	3.2	10	
Fluoride	2.08	mg/L	0.10	91	80	120	1.4	10	
Nitrogen, Nitrate as N	2.71	mg/L	0.10	95	80	120	0.0	10	
Nitrogen, Nitrite as N	2.53	mg/L	0.10	101	80	120	1.2	10	
Sulfate	60.5	mg/L	1.0	75	80	120	0.0	10	S

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



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Gillette, WY 888-886-7175 • Rapid City, SD 888-872-1225 • College Station, TX 888-680-2218

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0		Batch: C_GrAB-0394							
Sample ID: MB-GrAB-0394	Method Blank				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
Sample ID: UNAT-GrAB-0394	Laboratory Control Sample				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	200	pCi/L	1.0	99	70	130			
Sample ID: Cs137-GrAB-0394	Laboratory Control Sample				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	90	pCi/L	2.0	99	70	130			
Sample ID: C08020114-001AMS	Sample Matrix Spike				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	300	pCi/L	1.0	101	70	130			
Sample ID: C08020114-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	290	pCi/L	1.0	95	70	130	5.1	12.5	
Sample ID: C08020114-001AMS	Sample Matrix Spike				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	110	pCi/L	2.0	96	70	130			
Sample ID: C08020114-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	110	pCi/L	2.0	97	70	130	1.3	15.3	
Sample ID: R08010296-002H	Sample Duplicate				Run: SUB-C97004		02/13/08 08:21		
Gross Alpha	650	pCi/L	1.0				0.7	11.4	
Gross Beta	220	pCi/L	2.0				2.2	13.9	
Sample ID: RB-GrAB-0394	Method Blank				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 02/26/08

Client: RESPEC Inc

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_17696		
Sample ID: R08010296-002H	Sample Duplicate		Run: SUB-C96781				02/06/08 15:40		
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	5600	pCi/L	20				20	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	5200	pCi/L	20				15	30	
Manganese 54	ND	pCi/L	20				0.0	30	
Potassium 40	ND	pCi/L	20				0.0	30	
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	11000	pCi/L	20				18	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 02/26/08

Project: Edgemont

Work Order: R08010296

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2608		
<b>Sample ID: C08020055-004AMS</b>	Sample Matrix Spike				Run: SUB-C96760			02/10/08 13:30	
Radium 226	10	pCi/L	0.20	80	70	130			
<b>Sample ID: C08020055-004AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C96760			02/10/08 13:30	
Radium 226	11	pCi/L	0.20	89	70	130	11	31.3	
<b>Sample ID: LCS-RA226-2608</b>	Laboratory Control Sample				Run: SUB-C96760			02/10/08 15:03	
Radium 226	12	pCi/L	0.20	91	70	130			
<b>Sample ID: MB-RA226-2608</b>	Method Blank				Run: SUB-C96760			02/10/08 15:03	
Radium 226	ND	pCi/L	0.2						
<b>Method: E903.0</b>							Batch: C_R96882		
<b>Sample ID: C08020054-003CMS</b>	Sample Matrix Spike				Run: SUB-C96882			02/13/08 11:10	
Radium 226	2.5	pCi/L	0.20	70	70	130			
<b>Sample ID: C08020054-003CMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C96882			02/13/08 11:10	
Radium 226	2.7	pCi/L	0.20	81	70	130	7.2	28.8	
<b>Sample ID: LCS-17696</b>	Laboratory Control Sample				Run: SUB-C96882			02/13/08 11:10	
Radium 226	52	pCi/L	0.20	83	70	130			
<b>Sample ID: MB-17696</b>	Method Blank				Run: SUB-C96882			02/13/08 11:10	
Radium 226	ND	pCi/L	4E-06						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



# Energy Laboratories Inc.

2821 Plant St  
Rapid City, SD 57702-  
(605) 342-1225

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1  
31-Jan-08

### Subcontractor:

ELI - Casper  
PO Box 3258  
Casper, WY 82602  
TEL:  
Acct #:

FAX:

Subcontractor's Client: RESPEC Inc

Shipped By:

Custody Seal: Y N  
Intacted: Y N  
Signature Match: Y N

Shipped By:

Receipt Temp:

### Requested Tests

Sample ID	Matrix	Collection Date	Bottle Type	200_7_8-W-D	200_7_8-W-SUS	200_7_8-W-T	CVAA-SE-3114-W-D	CVAA-SEIV-3114-W	CVAA-SEVI-3114-W	RAD-G-ALPHABET	RAD-G-GAMMA-W	RAD-PB210-W-D	RAD-PB210-W-SUS	RAD-PO210-W-D	RAD-PO210-W-SUS	RAD-RA226-W-D	RAD-RA226-W-SUS	RAD-RN222-W	RAD-TH4SO-W-D	RAD-TH4SO-W-SU
R08010296-001C	Aqueous	01/30/08 01:50 P	500ML-P-F-HNO3	1																
R08010296-001D	Aqueous	01/30/08 01:50 P	500ML-P-NF-HNO3		1															
R08010296-001E	Aqueous	01/30/08 01:50 P	500ML-P-F-HNO3			1														
R08010296-001G	Aqueous	01/30/08 01:50 P	40ML-CG-VOA				1													
R08010296-001H	Aqueous	01/30/08 01:50 P	1GAL-CUBE-F-HNO3					1												
R08010296-001I	Aqueous	01/30/08 01:50 P	ZIPLOCK		1															
R08010296-002C	Aqueous	01/30/08 03:40 P	500ML-P-F-HNO3	1																
R08010296-002D	Aqueous	01/30/08 03:40 P	500ML-P-NF-HNO3		1															
R08010296-002E	Aqueous	01/30/08 03:40 P	500ML-P-F-HNO3			1														
R08010296-002G	Aqueous	01/30/08 03:40 P	40ML-CG-VOA				1													
R08010296-002H	Aqueous	01/30/08 03:40 P	1GAL-CUBE-F-HNO3					1												
R08010296-002I	Aqueous	01/30/08 03:40 P	ZIPLOCK		1															

### Comments:

QC Level:

Date/Time

Date/Time

Relinquished by:

Received by:

Relinquished by:

Received by:



# Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT- Provide as much information as possible.

Company Name: <b>DESPEC</b>		Project Name, PWS, Permit, Etc. <b>PowerTel Derry Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>DESPEC</b>		Contact Name: <b>Corey Foreman</b>		Phone/Fax: <b>605.394.6509</b>	Email: <b>corey.foreman@despec.com</b>
Invoice Address: <b>DESPEC</b>		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"/> 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.)		Collection Date	Collection Time	MATRIX	Number of Containers Sample Type: AWS VBO Air Water Soils/Solids Vegetation Bioassay Other
1 <b>Dew Burd GW 680</b>		<b>01/30/08</b>	<b>13:50</b>	<b>W</b>	<b>W</b>
2 <b>Dew Burd GW 681</b>		<b>01/30/08</b>	<b>15:40</b>	<b>W</b>	<b>W</b>
3					
4					
5					
6					
7					
8					
9					
10					
<b>ANALYSIS REQUESTED</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>Both samples for analysis</b>					
Shipped by: _____					
Cooler ID(s): _____					
Receipt Temp: <b>1.2 °C</b>					
On Use: <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>					
Custody Seal: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/>					
Intact: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/>					
Signature: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/>					
Match: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/>					
<b>LABORATORY USE ONLY</b>					
Relinquished by (print): <b>E. K. Kowre</b>		Date/Time: <b>01/30/08 08:15</b>		Signature: <b>[Signature]</b>	
Relinquished by (print):		Date/Time:		Signature:	
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 notated on your analytical report. Visit our web site at [www.enertelab.com](http://www.enertelab.com) for additional information, downloadable fee schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

March 13, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08020006

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 2/4/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08020006-001	DewBurd GW679	02/03/08 16:25	02/04/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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:** R08020006-001  
**Client Sample ID:** DewBurd GW679

**Report Date:** 03/13/08  
**Collection Date:** 02/03/08 16:25  
**Date Received:** 02/04/08  
**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	02/06/08 14:11/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/06/08 14:11/sn
Bicarbonate as HCO3	176	mg/L		5		1	A2320 B	02/06/08 14:11/sn
Calcium	440	mg/L	D	1		10	E200.7	02/19/08 19:17/eli-c
Chloride	13	mg/L		1		1	E300.0	02/05/08 01:48/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/05/08 01:48/sn
Magnesium	100	mg/L		0.5		1	E200.7	02/19/08 22:44/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/05/08 11:42/sn
Nitrogen, Nitrate as N	1.3	mg/L		0.1		1	E300.0	02/05/08 01:48/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/05/08 01:48/sn
Potassium	11.8	mg/L		0.5		1	E200.7	02/19/08 22:44/eli-c
Silica	12.7	mg/L		0.5		1	E200.7	02/19/08 22:44/eli-c
Sodium	77.6	mg/L	D	0.8		1	E200.7	02/19/08 22:44/eli-c
Sulfate	1420	mg/L	D	3		50	E300.0	02/05/08 01:17/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1970	umhos/cm		5.0		1	A2510 B	02/08/08 15:45/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/04/08 00:00/sn
pH	7.66	s.u.		0.01		1	A4500-H B	02/09/08 13:58/jmh
Sodium Adsorption Ratio (SAR)	0.87	unitless		0.10		1	Calculation	03/10/08 18:32/sec
Solids, Total Dissolved TDS @ 180 C	2500	mg/L		5		1	A2540 C	02/05/08 14:50/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/19/08 22:44/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/10/08 02:18/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/10/08 02:18/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	02/19/08 22:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/10/08 02:18/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/10/08 02:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/10/08 02:18/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/19/08 22:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/10/08 02:18/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	02/10/08 02:18/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/10/08 02:18/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/10/08 02:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/10/08 02:18/eli-c
Selenium	0.013	mg/L		0.005		1	A3114 B	02/08/08 10:40/eli-cs
Silver	ND	mg/L		0.005		1	E200.8	02/10/08 02:18/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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

Page 1 of 3



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020006-001  
Client Sample ID: DewBurd GW679

Report Date: 03/13/08  
Collection Date: 02/03/08 16:25  
Date Received: 02/04/08  
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	02/10/08 02:18/eli-c
Uranium	0.0139	mg/L		0.0003		1	E200.8	02/10/08 02:18/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/10/08 02:18/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/10/08 02:18/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0007	mg/L		0.0003		1	E200.8	02/15/08 22:35/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/08/08 09:12/eli-c
Selenium-VI	0.012	mg/L		0.001		1	A3114 B	02/08/08 11:01/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	18.4	pCi/L		1.0		1	E900.0	02/14/08 02:25/eli-c
Gross Alpha precision (±)	2.3	pCi/L				1	E900.0	02/14/08 02:25/eli-c
Gross Beta	7.2	pCi/L		2.0		1	E900.0	02/14/08 02:25/eli-c
Gross Beta precision (±)	5.1	pCi/L				1	E900.0	02/14/08 02:25/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/07/08 09:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/11/08 12:30/eli-c
Radium 226	0.9	pCi/L		0.2		1	E903.0	02/12/08 07:52/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	02/12/08 07:52/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/06/08 16:00/eli-c
Gross Gamma	86	pCi/L		20		1	E901.1	02/06/08 15:40/eli-c
Gross Gamma precision (±)	27	pCi/L				1	E901.1	02/06/08 15:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	9.0	pCi/L		0.2		1	E903.0	02/24/08 18:05/eli-c
Radium 226 precision (±)	2.0	pCi/L				1	E903.0	02/24/08 18:05/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	02/19/08 15:45/eli-c
- Thorium was detected in the associated blank.								
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	2170	pCi/L		100		1	D5072-92	02/07/08 10:18/eli-c
Radon 222 precision (±)	137	pCi/L				1	D5072-92	02/07/08 10:18/eli-c

### TOTAL METALS ANALYSES

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020006-001  
Client Sample ID: DewBurd GW679

Report Date: 03/13/08  
Collection Date: 02/03/08 16:25  
Date Received: 02/04/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/12/08 23:37/eli-c
Arsenic	0.007	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Barium	0.2	mg/L		0.1		1	E200.8	02/12/08 23:37/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/19/08 22:47/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/12/08 23:37/eli-c
Copper	0.02	mg/L		0.01		1	E200.8	02/12/08 23:37/eli-c
Iron	14.9	mg/L	D	0.09		10	E200.7	02/19/08 19:20/eli-c
Lead	0.015	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Manganese	0.35	mg/L		0.01		1	E200.8	02/12/08 23:37/eli-c
Mercury	0.00002	mg/L		6.0E-06		1	E200.8	02/12/08 23:37/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8	02/12/08 23:37/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/12/08 23:37/eli-c
Selenium	0.014	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/12/08 23:37/eli-c
Strontium	7.3	mg/L		0.1		1	E200.8	02/12/08 23:37/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/12/08 23:37/eli-c
Uranium	0.0154	mg/L		0.0003		1	E200.8	02/12/08 23:37/eli-c
Zinc	0.06	mg/L		0.01		1	E200.8	02/12/08 23:37/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.37	%				1	A1030 E	03/10/08 18:35/sec
Anions	33.0	meq/L				1	A1030 E	03/10/08 18:35/sec
Cations	33.9	meq/L				1	A1030 E	03/10/08 18:35/sec
Solids, Total Dissolved Calculated	2160	mg/L				1	A1030 E	03/10/08 18:35/sec
TDS Balance (0.80 - 1.20)	1.18	dec. %				1	A1030 E	03/10/08 18:35/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080206A-ALK-W		
Sample ID: R08020047-006AMS	Sample Matrix Spike				Run: PH_COND1-R_080206A		02/06/08 14:58		
Alkalinity, Total as CaCO <sub>3</sub>	292	mg/L	5.0	106	80	120			
Sample ID: R08020047-006AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080206A		02/06/08 15:00		
Alkalinity, Total as CaCO <sub>3</sub>	286	mg/L	5.0	100	80	120	2.1	10	
Method: A2510 B							Batch: 080208_1_COND-PROBE-W		
Sample ID: LCS1-1_080208	Laboratory Control Sample				Run: PH_COND2-R_080208A		02/08/08 15:42		
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080208	Laboratory Control Sample				Run: PH_COND2-R_080208A		02/08/08 15:43		
Conductivity @ 25 C	4950	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080208	Laboratory Control Sample				Run: PH_COND2-R_080208A		02/08/08 15:43		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080208	Method Blank				Run: PH_COND2-R_080208A		02/08/08 15:44		
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08020006-001ADUP	Sample Duplicate				Run: PH_COND2-R_080208A		02/08/08 15:46		
Conductivity @ 25 C	1950	umhos/cm	5.0				1.0	10	
Method: A2540 C							Batch: 080205A-SLDS-TDS-W		
Sample ID: MBLK1_080205A	Method Blank				Run: BAL-4-R_080205A		02/05/08 14:46		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080205A	Laboratory Control Sample				Run: BAL-4-R_080205A		02/05/08 14:46		
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	105	90	110			
Sample ID: R08010303-002BMS	Sample Matrix Spike				Run: BAL-4-R_080205A		02/05/08 14:48		
Solids, Total Dissolved TDS @ 180 C	780	mg/L	5.0	102	80	120			
Sample ID: R08010303-002BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080205A		02/05/08 14:48		
Solids, Total Dissolved TDS @ 180 C	770	mg/L	5.0	100	80	120	0.5	10	
Method: A2580 B							Batch: R33453		
Sample ID: LCS_020408	Laboratory Control Sample				Run: PH_COND1-R_080204A		02/04/08 00:00		
Oxidation-Reduction Potential	490	mV		102	95	105			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 03/13/08

Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_R96705		
Sample ID: R08020006-001E	Sample Matrix Spike				Run: SUB-C96705			02/08/08 11:01	
Selenium-VI	0.058	mg/L	0.0010	91	85	115			
Sample ID: R08020006-001E	Sample Matrix Spike Duplicate				Run: SUB-C96705			02/08/08 11:01	
Selenium-VI	0.057	mg/L	0.0010	89	85	115	1.8	10	
Method: A3114 B							Batch: C_SE3114-080208		
Sample ID: MBLK	Method Blank				Run: SUB-C96704			02/08/08 09:58	
Selenium	ND	mg/L	0.0004						
Sample ID: 288-20-3	Laboratory Control Sample				Run: SUB-C96704			02/08/08 10:05	
Selenium	0.052	mg/L	0.0010	104	90	110			
Sample ID: R08020006-001E	Sample Matrix Spike				Run: SUB-C96704			02/08/08 10:47	
Selenium	0.064	mg/L	0.0010	103	85	115			
Sample ID: R08020006-001E	Sample Matrix Spike Duplicate				Run: SUB-C96704			02/08/08 10:49	
Selenium	0.062	mg/L	0.0010	99	85	115	3.1	10	
Method: A3114 B							Batch: C_SEIV3114-080208		
Sample ID: MBLK	Method Blank				Run: SUB-C96693			02/08/08 09:08	
Selenium-IV	0.0004	mg/L	0.0002						
Sample ID: 288-20-3	Laboratory Control Sample				Run: SUB-C96693			02/08/08 09:10	
Selenium-IV	0.050	mg/L	0.0010	98	90	110			
Sample ID: R08020006-001E	Sample Matrix Spike				Run: SUB-C96693			02/08/08 09:14	
Selenium-IV	0.051	mg/L	0.0010	101	85	115			
Sample ID: R08020006-001E	Sample Matrix Spike Duplicate				Run: SUB-C96693			02/08/08 09:16	
Selenium-IV	0.051	mg/L	0.0010	101	85	115	0.2	10	
Method: A4500-H B							Batch: 080209_1_PH-W		
Sample ID: LCS_pH-1_080209	Laboratory Control Sample				Run: PH_COND2-R_080209A			02/09/08 13:57	
pH	6.96	s.u.	0.010	101	98.55	101.45			
Sample ID: R08020006-001ADUP	Sample Duplicate				Run: PH_COND2-R_080209A			02/09/08 13:59	
pH	7.68	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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G					Batch: A2008-02-05_2_NH3_02				
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080205A				02/05/08 11:01
Nitrogen, Ammonia as N	0.23	mg/L	0.10	94	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080205A				02/05/08 11:03
Nitrogen, Ammonia as N	0.23	mg/L	0.10	93	90	110			
Sample ID: MBLK-5	Method Blank				Run: TECHAA2-R_080205A				02/05/08 11:04
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08010298-001BDUP	Sample Duplicate				Run: TECHAA2-R_080205A				02/05/08 11:33
Nitrogen, Ammonia as N	0.10	mg/L	0.10				17	10	R
Sample ID: R08010298-002BMS	Sample Matrix Spike				Run: TECHAA2-R_080205A				02/05/08 11:35
Nitrogen, Ammonia as N	0.24	mg/L	0.10	96	80	120			
Method: D5072-92					Batch: C_R96700				
Sample ID: C08020146-002ADUP	Sample Duplicate				Run: SUB-C96700				02/07/08 10:18
Radon 222	557	pCi/L	100				9.5	30	
Sample ID: MB-R96700	Method Blank				Run: SUB-C96700				02/07/08 10:18
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R96700	Laboratory Control Sample				Run: SUB-C96700				02/07/08 10:18
Radon 222	320	pCi/L	100	105	70	130			
Method: E200.7					Batch: C_17707				
Sample ID: MB-17707	Method Blank				Run: SUB-C97058				02/15/08 14:08
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS-17707	Laboratory Control Sample				Run: SUB-C97126				02/19/08 12:52
Boron	0.517	mg/L	0.10	103	85	115			
Iron	0.528	mg/L	0.030	106	85	115			
Sample ID: R08020006-001D	Sample Matrix Spike				Run: SUB-C97126				02/19/08 22:51
Boron	ND	mg/L	0.10		70	130			S
Iron	15.1	mg/L	0.030		70	130			A
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
Sample ID: R08020006-001D	Sample Matrix Spike Duplicate				Run: SUB-C97126				02/19/08 22:54
Boron	ND	mg/L	0.10		70	130	0.0	20	S
Iron	16.0	mg/L	0.030		70	130	5.5	20	A
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

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

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R97126		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C97126			02/19/08 11:34		
Silica	1.9	mg/L	0.10	97	85	125			
Aluminum	2.0	mg/L	0.10	98	85	125			
Boron	1.9	mg/L	0.10	94	85	125			
Iron	2.0	mg/L	0.030	99	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C97126			02/19/08 11:37		
Calcium	25	mg/L	0.50	98	85	125			
Magnesium	24	mg/L	0.50	97	85	125			
Potassium	25	mg/L	0.50	100	85	125			
Sodium	25	mg/L	0.76	99	85	125			
Sample ID: C08010814-001CMS	Sample Matrix Spike			Run: SUB-C97126			02/19/08 17:12		
Aluminum	9.43	mg/L	0.10	94	70	130			
Boron	9.59	mg/L	0.10	96	70	130			
Iron	9.16	mg/L	0.046	92	70	130			
Calcium	668	mg/L	1.0	86	70	130			
Magnesium	445	mg/L	0.50	89	70	130			
Potassium	1110	mg/L	0.50	91	70	130			
Silica	11.5	mg/L	0.20		0	0			
Sodium	737	mg/L	7.6	88	70	130			
Sample ID: C08010814-001CMSD	Sample Matrix Spike Duplicate			Run: SUB-C97126			02/19/08 17:15		
Aluminum	9.70	mg/L	0.10	97	70	130	2.8	20	
Boron	10.2	mg/L	0.10	102	70	130	6.3	20	
Iron	9.59	mg/L	0.046	96	70	130	4.6	20	
Calcium	670	mg/L	1.0	87	70	130	0.3	20	
Magnesium	448	mg/L	0.50	90	70	130	0.6	20	
Potassium	1090	mg/L	0.50	89	70	130	2.0	20	
Silica	11.8	mg/L	0.20	96	70	130	2.4	20	
Sodium	723	mg/L	7.6	85	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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17707		
Sample ID: R08020006-001D	Post Digestion Spike			Run: SUB-C96857			02/12/08 23:43		
Antimony	0.0615	mg/L	0.050	87	70	130			
Arsenic	0.0770	mg/L	0.0010	100	70	130			
Barium	0.300	mg/L	0.10	89	70	130			
Beryllium	0.0580	mg/L	0.010	82	70	130			
Cadmium	0.0696	mg/L	0.010	99	70	130			
Chromium	0.0717	mg/L	0.050	85	70	130			
Copper	0.0850	mg/L	0.010	93	70	130			
Lead	0.0846	mg/L	0.050	100	70	130			
Manganese	0.411	mg/L	0.010		70	130			A
Mercury	0.00552	mg/L	0.0010	79	70	130			
Molybdenum	0.0781	mg/L	0.10	97	70	130			
Nickel	0.0864	mg/L	0.050	91	70	130			
Selenium	0.155	mg/L	0.0010	94	70	130			
Silver	0.0306	mg/L	0.010	76	70	130			
Strontium	7.40	mg/L	0.10		70	130			A
Thallium	0.0703	mg/L	0.10	100	70	130			
Uranium	0.0909	mg/L	0.00030	108	70	130			
Zinc	0.135	mg/L	0.010	106	70	130			

- Matrix spike recoveries outside the acceptance range are considered matrix-related.

Sample ID: R08020006-001D	Post Digestion Spike Duplicate			Run: SUB-C96857			02/12/08 23:50		
Antimony	0.0431	mg/L	0.050	61	70	130	0.0	20	S
Arsenic	0.0799	mg/L	0.0010	104	70	130	3.7	20	
Barium	0.317	mg/L	0.10	113	70	130	5.5	20	
Beryllium	0.0587	mg/L	0.010	83	70	130	1.1	20	
Cadmium	0.0702	mg/L	0.010	100	70	130	1.0	20	
Chromium	0.0733	mg/L	0.050	87	70	130	2.2	20	
Copper	0.0875	mg/L	0.010	96	70	130	2.8	20	
Lead	0.0882	mg/L	0.050	105	70	130	4.2	20	
Manganese	0.426	mg/L	0.010		70	130	3.5	20	A
Mercury	0.00586	mg/L	0.0010	83	70	130	5.9	20	
Molybdenum	0.0788	mg/L	0.10	98	70	130	0.0	20	
Nickel	0.0900	mg/L	0.050	96	70	130	4.0	20	
Selenium	0.163	mg/L	0.0010	99	70	130	5.2	20	
Silver	0.0277	mg/L	0.010	69	70	130	10.0	20	S
Strontium	8.08	mg/L	0.10		70	130	8.8	20	A
Thallium	0.0727	mg/L	0.10	104	70	130	0.0	20	
Uranium	0.0974	mg/L	0.00030	117	70	130	6.9	20	
Zinc	0.137	mg/L	0.010	110	70	130	2.1	20	

- Matrix spike recoveries outside the acceptance range are considered matrix-related.

### 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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17707		
Sample ID: MB-17707	Method Blank		Run: SUB-C97005				02/14/08 16:01		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	0.0001	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0004						
Chromium	0.0003	mg/L	0.0003						
Copper	ND	mg/L	8E-05						
Lead	ND	mg/L	0.0001						
Manganese	ND	mg/L	5E-05						
Mercury	5E-05	mg/L	3E-05						
Molybdenum	0.0004	mg/L	0.0002						
Nickel	9E-05	mg/L	6E-05						
Selenium	0.0003	mg/L	0.0002						
Silver	ND	mg/L	0.0002						
Strontium	ND	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	4E-05						
Sample ID: LCS1-17707	Laboratory Control Sample		Run: SUB-C97005				02/14/08 16:08		
Antimony	0.0195	mg/L	0.050	98	80	120			
Arsenic	0.0197	mg/L	0.0010	99	80	120			
Barium	0.0211	mg/L	0.10	105	80	120			
Beryllium	0.0166	mg/L	0.010	83	80	120			
Cadmium	0.0200	mg/L	0.010	100	80	120			
Chromium	0.0152	mg/L	0.050	74	80	120			S
Copper	0.0206	mg/L	0.010	103	80	120			
Lead	0.0200	mg/L	0.050	100	80	120			
Manganese	0.0166	mg/L	0.010	83	80	120			
Molybdenum	0.0202	mg/L	0.10	99	80	120			
Nickel	0.0210	mg/L	0.050	105	80	120			
Selenium	0.0954	mg/L	0.0010	95	80	120			
Silver	0.0193	mg/L	0.010	97	80	120			
Strontium	0.0102	mg/L	0.10	102	80	120			
Thallium	0.0199	mg/L	0.10	99	80	120			
Uranium	0.0180	mg/L	0.00030	90	80	120			
Sample ID: LCS-17707	Laboratory Control Sample		Run: SUB-C97005				02/14/08 16:16		
Antimony	0.510	mg/L	0.050	102	85	115			
Arsenic	0.515	mg/L	0.0013	103	85	115			
Barium	0.542	mg/L	0.10	108	85	115			
Beryllium	0.548	mg/L	0.010	110	85	115			

### 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: 03/13/08

Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17707		
Sample ID: LCS-17707	Laboratory Control Sample			Run: SUB-C97005			02/14/08 16:16		
Cadmium	0.503	mg/L	0.010	101	85	115			
Chromium	0.548	mg/L	0.050	110	85	115			
Copper	0.522	mg/L	0.010	104	85	115			
Lead	0.514	mg/L	0.050	103	85	115			
Manganese	0.535	mg/L	0.010	107	85	115			
Molybdenum	0.516	mg/L	0.10	103	85	115			
Nickel	0.537	mg/L	0.050	107	85	115			
Selenium	0.493	mg/L	0.0022	99	85	115			
Silver	0.200	mg/L	0.010	100	85	115			
Strontium	0.509	mg/L	0.10	102	85	115			
Thallium	0.517	mg/L	0.10	103	85	115			
Uranium	0.472	mg/L	0.00038	94	85	115			
Method: E200.8							Batch: C_17774		
Sample ID: MB-17774	Method Blank			Run: SUB-C97045			02/15/08 22:25		
Uranium	8E-05	mg/L	4E-05						
Sample ID: LCS1-17774	Laboratory Control Sample			Run: SUB-C97045			02/15/08 22:30		
Uranium	0.0445	mg/L	0.00030	89	80	120			
Sample ID: C08020336-005IMS	Sample Matrix Spike			Run: SUB-C97169			02/21/08 00:10		
Uranium	0.0115	mg/L	0.00030	89	70	130			
Sample ID: C08020336-005IMSD	Sample Matrix Spike Duplicate			Run: SUB-C97169			02/21/08 00:15		
Uranium	0.0113	mg/L	0.00030	87	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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R96757		
Sample ID: LRB	Method Blank		Run: SUB-C96757				02/09/08 10:21		
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						
Silver	0.0005	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0006	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C96757				02/09/08 10:28		
Arsenic	0.0505	mg/L	0.0010	101	85	115			
Barium	0.0517	mg/L	0.0010	103	85	115			
Cadmium	0.0515	mg/L	0.0010	103	85	115			
Chromium	0.0484	mg/L	0.0010	97	85	115			
Copper	0.0487	mg/L	0.0010	97	85	115			
Lead	0.0515	mg/L	0.0010	103	85	115			
Manganese	0.0491	mg/L	0.0010	98	85	115			
Mercury	0.00534	mg/L	0.0010	107	85	115			
Molybdenum	0.0508	mg/L	0.0010	102	85	115			
Nickel	0.0465	mg/L	0.0010	93	85	115			
Silver	0.0199	mg/L	0.0010	97	85	115			
Thorium 232	0.0503	mg/L	0.0010	101	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			
Vanadium	0.0481	mg/L	0.0010	96	85	115			
Zinc	0.0522	mg/L	0.0010	103	85	115			
Sample ID: R08020006-001C	Sample Matrix Spike		Run: SUB-C96757				02/10/08 02:25		
Arsenic	0.0531	mg/L	0.0010	105	70	130			
Barium	0.0686	mg/L	0.10	104	70	130			
Cadmium	0.0462	mg/L	0.010	92	70	130			
Chromium	0.0464	mg/L	0.050	90	70	130			
Copper	0.0495	mg/L	0.010	95	70	130			
Lead	0.0520	mg/L	0.050	104	70	130			
Manganese	0.0751	mg/L	0.010	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: 03/13/08

Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R96757		
Sample ID: R08020006-001C	Sample Matrix Spike		Run: SUB-C96757				02/10/08 02:25		
Mercury	0.00504	mg/L	0.0010	101	70	130			
Molybdenum	0.0646	mg/L	0.10	107	70	130			
Nickel	0.0588	mg/L	0.050	106	70	130			
Silver	0.0145	mg/L	0.010	72	70	130			
Thorium 232	0.0543	mg/L	0.0010	109	70	130			
Uranium	0.0695	mg/L	0.00030	111	70	130			
Vanadium	0.0462	mg/L	0.10	91	70	130			
Zinc	0.0465	mg/L	0.010	86	70	130			
Sample ID: R08020006-001C	Sample Matrix Spike Duplicate		Run: SUB-C96757				02/10/08 02:32		
Arsenic	0.0525	mg/L	0.0010	104	70	130	1.1	20	
Barium	0.0680	mg/L	0.10	103	70	130	0.0	20	
Cadmium	0.0458	mg/L	0.010	91	70	130	1.0	20	
Chromium	0.0462	mg/L	0.050	90	70	130	0.0	20	
Copper	0.0484	mg/L	0.010	93	70	130	2.3	20	
Lead	0.0513	mg/L	0.050	102	70	130	1.5	20	
Manganese	0.0757	mg/L	0.010	96	70	130	0.9	20	
Mercury	0.00510	mg/L	0.0010	102	70	130	1.1	20	
Molybdenum	0.0633	mg/L	0.10	105	70	130	0.0	20	
Nickel	0.0560	mg/L	0.050	101	70	130	4.9	20	
Silver	0.0145	mg/L	0.010	73	70	130	0.3	20	
Thorium 232	0.0537	mg/L	0.0010	107	70	130	1.2	20	
Uranium	0.0677	mg/L	0.00030	108	70	130	2.5	20	
Vanadium	0.0454	mg/L	0.10	90	70	130	0.0	20	
Zinc	0.0453	mg/L	0.010	83	70	130	2.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R33367		
Sample ID: LFB0802013903-1	Laboratory Fortified Blank				Run: DIONEX_080204A		02/04/08 18:52		
Chloride	4.87	mg/L	0.50	97	90	110			
Fluoride	1.93	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N	2.45	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	14.1	mg/L	1.0	94	90	110			
Sample ID: LFB0802013903-1	Laboratory Fortified Blank				Run: DIONEX_080204A		02/04/08 19:07		
Chloride	4.89	mg/L	0.50	98	90	110			
Fluoride	1.93	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N	2.44	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	90	110			
Sulfate	14.9	mg/L	1.0	99	90	110			
Sample ID: R08010278-001JMS	Sample Matrix Spike				Run: DIONEX_080204A		02/04/08 22:12		
Fluoride	2.1	mg/L	0.10	86	80	120			
Sample ID: R08010278-001JMSD	Sample Matrix Spike Duplicate				Run: DIONEX_080204A		02/04/08 22:27		
Fluoride	2.1	mg/L	0.10	85	80	120	1.0	10	
Method: E900.0							Batch: C_GrAB-0394		
Sample ID: UNAT-GrAB-0394	Laboratory Control Sample				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	200	pCi/L	1.0	99	70	130			
Sample ID: Cs137-GrAB-0394	Laboratory Control Sample				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	90	pCi/L	2.0	99	70	130			
Sample ID: C08020114-001AMS	Sample Matrix Spike				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	300	pCi/L	1.0	101	70	130			
Sample ID: C08020114-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	290	pCi/L	1.0	95	70	130	5.1	12.5	
Sample ID: C08020114-001AMS	Sample Matrix Spike				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	110	pCi/L	2.0	96	70	130			
Sample ID: C08020114-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97004		02/12/08 04:24		
Gross Beta	110	pCi/L	2.0	97	70	130	1.3	15.3	
Sample ID: RB-GrAB-0394	Method Blank				Run: SUB-C97004		02/12/08 04:24		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_17696		
Sample ID: MB-R96781	Method Blank					Run: SUB-C96781			02/06/08 15:40
Gross Gamma		pCi/Filter	20						
Sample ID: LCS-R96781	Laboratory Control Sample					Run: SUB-C96781			02/06/08 15:40
Cesium 137	1200	pCi/Filter	20	85	70	130			
Potassium 40	7320	pCi/Filter	20	110	70	130			
Sample ID: C08010969-005ADUP	Sample Duplicate					Run: SUB-C96781			02/06/08 15:40
Gross Gamma	996	pCi/Filter	20				1.8	30	
Method: E903.0							Batch: C_17774		
Sample ID: C08020336-001IMS	Sample Matrix Spike					Run: SUB-C97404			02/25/08 03:07
Radium 226	60	pCi/L	0.20	91	70	130			
Sample ID: C08020336-001IMSD	Sample Matrix Spike Duplicate					Run: SUB-C97404			02/25/08 04:38
Radium 226	64	pCi/L	0.20	97	70	130	6.3	26	
Sample ID: MB-17774	Method Blank					Run: SUB-C97404			02/25/08 18:12
Radium 226	ND	pCi/L	0.004						
Sample ID: LCS-17774	Laboratory Control Sample					Run: SUB-C97404			02/25/08 21:12
Radium 226	12	pCi/L	0.20	95	70	130			
Method: E903.0							Batch: C_RA226-2616		
Sample ID: C08020114-001AMS	Sample Matrix Spike					Run: SUB-C96856			02/12/08 07:52
Radium 226	16	pCi/L	0.20	124	70	130			
Sample ID: C08020114-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C96856			02/12/08 07:52
Radium 226	15	pCi/L	0.20	123	70	130	0.9	29.2	
Sample ID: MB-RA226-2616	Method Blank					Run: SUB-C96856			02/12/08 08:57
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2616	Laboratory Control Sample					Run: SUB-C96856			02/12/08 08:57
Radium 226	15	pCi/L	0.20	115	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: 03/13/08

Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_17774		
Sample ID: C08020466-003AMS	Sample Matrix Spike				Run: SUB-C97709		02/19/08 15:45		
Thorium 230	3.53	pCi/g-dry	0.10	96	70	130			
Sample ID: C08020466-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97709		02/19/08 15:45		
Thorium 230	3.45	pCi/g-dry	0.10	109	70	130	2.3	30	
Sample ID: LCS-17774	Laboratory Control Sample				Run: SUB-C97709		02/19/08 15:45		
Thorium 230	48.7	pCi/g-dry	0.10	101	70	130			
Sample ID: MB-17774	Method Blank				Run: SUB-C97709		02/19/08 15:45		
Thorium 230	0.3	pCi/g-dry							
Method: E907.0							Batch: C_R96860		
Sample ID: LCS-R96860	Laboratory Control Sample				Run: SUB-C96860		02/06/08 16:00		
Thorium 230	4.50	pCi/L	0.20	92	70	130			
Sample ID: C08020065-004AMS	Sample Matrix Spike				Run: SUB-C96860		02/06/08 16:00		
Thorium 230	16.4	pCi/L	0.20	101	70	130			
Sample ID: C08020065-004AMSD	Sample Matrix Spike Duplicate				Run: SUB-C96860		02/06/08 16:00		
Thorium 230	15.5	pCi/L	0.20	95	70	130	5.6	30	
Sample ID: MB-R96860	Method Blank				Run: SUB-C96860		02/06/08 16:00		
Thorium 230	ND	pCi/L	0.2						
Method: E909.0M							Batch: C_17774		
Sample ID: C08020466-003AMS	Sample Matrix Spike				Run: SUB-C97325		02/19/08 07:00		
Lead 210	470	pCi/g-dry	0.10	79	70	130			
Sample ID: C08020466-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97325		02/19/08 07:00		
Lead 210	460	pCi/g-dry	0.10	77	70	130	2.1	30	
Sample ID: MB-R97325	Method Blank				Run: SUB-C97325		02/19/08 07:00		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R97325	Laboratory Control Sample				Run: SUB-C97325		02/19/08 07:00		
Lead 210	130	pCi/L	1.0	112	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: 03/13/08  
Work Order: R08020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R97080		
<b>Sample ID: C08011127-043BMS</b>	Sample Matrix Spike				Run: SUB-C97080		02/07/08 09:30		
Lead 210	516	pCi/g-dry	0.10	87	70	130			
<b>Sample ID: C08011127-043BMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97080		02/07/08 09:30		
Lead 210	668	pCi/g-dry	0.10	112	70	130	26	30	
<b>Sample ID: MB-R97080</b>	Method Blank				Run: SUB-C97080		02/07/08 09:30		
Lead 210	ND	pCi/L	1						
<b>Sample ID: LCS-R97080</b>	Laboratory Control Sample				Run: SUB-C97080		02/07/08 09:30		
Lead 210	110	pCi/L	1.0	96	70	130			
<b>Method: RMO-3008</b>							Batch: C_17774		
<b>Sample ID: C08020336-008IMS</b>	Sample Matrix Spike				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	86	pCi/L	1.0	79	70	130			
<b>Sample ID: C08020336-008IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	81	pCi/L	1.0	74	70	130	6.0	30	
<b>Sample ID: LCS-17774</b>	Laboratory Control Sample				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	19	pCi/L	1.0	83	70	130			
<b>Sample ID: MB-17774</b>	Method Blank				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	ND	pCi/L	0.02						
<b>Method: RMO-3008</b>							Batch: C_R97013		
<b>Sample ID: R08020006-001H</b>	Sample Matrix Spike				Run: SUB-C97013		02/11/08 12:30		
Polonium 210	89	pCi/L	1.0	79	70	130			
<b>Sample ID: R08020006-001H</b>	Sample Matrix Spike Duplicate				Run: SUB-C97013		02/11/08 12:30		
Polonium 210	90	pCi/L	1.0	81	70	130	1.8	30	
<b>Sample ID: LCS-R97013</b>	Laboratory Control Sample				Run: SUB-C97013		02/11/08 12:30		
Polonium 210	19	pCi/L	1.0	85	70	130			
<b>Sample ID: MB-R97013</b>	Method Blank				Run: SUB-C97013		02/11/08 12:30		
Polonium 210	ND	pCi/L	1						

### 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>RESER</b>		Project Name, PWS, Permit, Etc. <b>Power Tech Dewey Burdock</b>		Sample Origin State: _____	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>LEREL</b>		Contact Name: <b>Larry Foreman</b>		Phone/Fax: <b>605-200-0011</b>	Email: <b>LEREL</b>
Invoice Address: <b>RESER</b>		Invoice Contact & Phone:		Purchase Order:	Quote/Bottle Order: <b>Eric Korte</b>
Special Report/Formats – ELL 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"/> NEIAC</div>				Number of Containers Sample Type: AWSVB0 Air Water Soils/Solids Vegetation Bioassay Other	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) <b>DeWey Burdock SW 679</b>		Collection Date <b>02/09/08</b>	Collection Time <b>16:25</b>	MATRIX <b>W</b>	
1 <b>SW 679</b>				ANALYSIS REQUESTED <b>As Quoted</b>	
2 <b>DeWey Burdock SW 679</b>				SEE ATTACHED Normal Turnaround (TAT)	
3				RUSH Contact ELL prior to RUSH sample submittal for charges and scheduling – See Instruction Page	
4				Comments:	
5				Receipt Temp On Ice: <b>4.6</b> °C Cooler Dry: _____	
6				Custody Seal: Y N Initialed: Y N Signature: Y N	
7				Shipped By:	
8				Cooler Dry:	
9				Receipt Temp	
10				On Ice: <b>Yes</b> No	
Custody Record Must be Signed		Requested by (print): <b>Eric Korte</b>		Date/Time: <b>02/09/08 07:50</b>	
Requested by (print): <b>Eric Korte</b>		Signature: <b>[Signature]</b>		Received by (print): <b>Steve Treiland</b>	
Sample Disposal: Return to Client:		Lab Disposal:		Received by Laboratory:	
Date/Time:		Signature:		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.



## ANALYTICAL SUMMARY REPORT

May 23, 2011

RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701

Workorder No.: R08020052      Quote ID: R286  
Project Name: Edgemont

Energy Laboratories Inc. Rapid City SD received the following 8 samples for RESPEC Inc on 2/6/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08020052-001	DewBurd GW8	02/05/08 10:20	02/06/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R08020052-002	DewBurd GW675	02/05/08 12:05	02/06/08	Aqueous	Same As Above
R08020052-003	DewBurd GW677	02/05/08 13:39	02/06/08	Aqueous	Same As Above
R08020052-004	DewBurd GW42	02/05/08 14:10	02/06/08	Aqueous	Same As Above
R08020052-005	DewBurd GW678	02/05/08 15:39	02/06/08	Aqueous	Same As Above
R08020052-006	DewBurd GW678	02/05/08 15:45	02/06/08	Aqueous	Same As Above
R08020052-007	DewBurd GW676	02/05/08 16:57	02/06/08	Aqueous	Same As Above
R08020052-008	DewBurd BLK01	02/06/08 08:30	02/06/08	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. 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.



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Gillette, WY 888-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-680-2218

## ANALYTICAL SUMMARY REPORT

Report Approved By:

*Linda K. Larson*  
Branch Manager

Digitally signed by  
Linda Larson  
Date: 2011.05.23 14:49:19 -06:00



**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08020052

**Revised Date:** 05/23/11

**Report Date:** 05/13/08

## 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).



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	02/19/08 15:11/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:11/sn
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	02/19/08 15:11/sn
Calcium	52.6	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Chloride	12	mg/L		1		1	E300.0	02/07/08 03:44/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Magnesium	22.6	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:30/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Potassium	14.7	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Silica	7.3	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Sodium	222	mg/L	D	8		10	E200.7	02/20/08 15:47/eli-c
Sulfate	455	mg/L	D	3		50	E300.0	02/07/08 02:58/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1430	umhos/cm		5.0		1	A2510 B	02/08/08 15:52/jmh
Oxidation-Reduction Potential	220	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.94	s.u.		0.01		1	A4500-H B	02/09/08 14:06/jmh
Sodium Adsorption Ratio (SAR)	6.4	Unitless		0.10		1	Calculation	02/20/08 19:04/krs
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	02/11/08 14:28/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:04/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/19/08 13:19/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	02/20/08 19:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 13:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 13:19/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/19/08 13:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 13:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 13:19/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/14/08 10:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

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	02/19/08 13:19/eli-c
Vanadium	ND	mg/L		0.1			1	E200.8	02/19/08 13:19/eli-c
Zinc	0.02	mg/L		0.01			1	E200.7	02/20/08 19:04/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	02/15/08 22:40/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	02/14/08 09:05/eli-c
Selenium-VI	0.001	mg/L		0.001			1	A3114 B	02/14/08 12:14/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	5.4	pCi/L		1.0			1	E900.0	02/21/08 08:44/eli-c
Gross Alpha precision (±)	1.6	pCi/L					1	E900.0	02/21/08 08:44/eli-c
Gross Beta	21.0	pCi/L		2.0			1	E900.0	02/21/08 08:44/eli-c
Gross Beta precision (±)	3.0	pCi/L					1	E900.0	02/21/08 08:44/eli-c
Lead 210	3.0	pCi/L		1.0			1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.80	pCi/L					1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	1.6	pCi/L		1.0			1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	1.5	pCi/L		0.2			1	E903.0	02/22/08 06:36/eli-c
Radium 226 precision (±)	0.4	pCi/L					1	E903.0	02/22/08 06:36/eli-c
Gross Gamma	ND	pCi/L		20			1	E901.1	02/12/08 18:40/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	1.9	pCi/L		1.0			1	E909.0M	02/19/08 07:00/eli-c
Lead 210 precision (±)	0.91	pCi/L					1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	2.8	pCi/L		0.2			1	E903.0	02/25/08 01:37/eli-c
Radium 226 precision (±)	1.4	pCi/L					1	E903.0	02/25/08 01:37/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	02/19/08 15:45/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	329	pCi/L	H	100			1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	104	pCi/L	H				1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.									
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	02/19/08 16:05/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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Gilllette, WY 800-888-7175 • Rapid City, SD 888-672-1225 • College Station, TX 800-680-2218

## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL METALS ANALYSES								
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 18:58/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 18:58/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 19:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:05/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Iron	0.21	mg/L		0.03		1	E200.7	02/20/08 19:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:05/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:05/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	02/19/08 16:05/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/19/08 16:05/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:50/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.03	%				1	A1030 E	05/01/08 12:51/krs
Anions	13.1	meq/L				1	A1030 E	05/01/08 12:51/krs
Cations	14.5	meq/L				1	A1030 E	05/01/08 12:51/krs
Solids, Total Dissolved Calculated	879	mg/L				1	A1030 E	05/01/08 12:51/krs
TDS Balance (0.80 - 1.20)	1.15	dec. %				1	A1030 E	05/01/08 12:51/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

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	02/19/08 15:11/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:11/sn
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	02/19/08 15:11/sn
Calcium	52.6	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Chloride	12	mg/L		1		1	E300.0	02/07/08 03:44/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Magnesium	22.6	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:30/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 03:44/sn
Potassium	14.7	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Silica	7.3	mg/L		0.5		1	E200.7	02/20/08 19:04/eli-c
Sodium	222	mg/L	D	8		10	E200.7	02/20/08 15:47/eli-c
Sulfate	455	mg/L	D	3		50	E300.0	02/07/08 02:58/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1430	umhos/cm		5.0		1	A2510 B	02/08/08 15:52/jmh
Oxidation-Reduction Potential	220	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.94	s.u.		0.01		1	A4500-H B	02/09/08 14:06/jmh
Sodium Adsorption Ratio (SAR)	6.4	Unitless		0.10		1	Calculation	02/20/08 19:04/krs
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	02/11/08 14:28/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:04/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/19/08 13:19/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	02/20/08 19:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 13:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 13:19/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/19/08 13:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 13:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 13:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 13:19/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/14/08 10:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 13:19/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

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	02/19/08 13:19/eli-c	
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 13:19/eli-c	
Zinc	0.02	mg/L		0.01		1	E200.7	02/20/08 19:04/eli-c	
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003		1	E200.8	02/15/08 22:40/eli-c	
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:05/eli-c	
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c	
RADIONUCLIDES - DISSOLVED									
Gross Alpha	5.4	pCi/L		1.0		1	E900.0	02/21/08 08:44/eli-c	
Gross Alpha precision (±)	1.6	pCi/L				1	E900.0	02/21/08 08:44/eli-c	
Gross Beta	21.0	pCi/L		2.0		1	E900.0	02/21/08 08:44/eli-c	
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	02/21/08 08:44/eli-c	
Lead 210	3.0	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c	
Lead 210 precision (±)	0.80	pCi/L				1	E909.0M	02/13/08 11:30/eli-c	
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c	
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c	
Radium 226	1.5	pCi/L		0.2		1	E903.0	02/22/08 06:36/eli-c	
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	02/22/08 06:36/eli-c	
Gross Gamma	ND	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c	
RADIONUCLIDES - SUSPENDED									
Lead 210	1.9	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c	
Lead 210 precision (±)	0.91	pCi/L				1	E909.0M	02/19/08 07:00/eli-c	
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c	
Radium 226	2.8	pCi/L		0.2		1	E903.0	02/25/08 01:37/eli-c	
Radium 226 precision (±)	1.4	pCi/L				1	E903.0	02/25/08 01:37/eli-c	
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c	
RADIONUCLIDES - TOTAL									
Radon 222	329	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c	
Radon 222 precision (±)	104	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c	
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.									
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:05/eli-c	

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 10:20

Lab ID: R08020052-001

Date Received: 02/06/08

Client Sample ID: DewBurd GW8

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 18:58/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 18:58/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 19:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:05/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Iron	0.21	mg/L		0.03		1	E200.7	02/20/08 19:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/19/08 16:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:05/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:05/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	02/19/08 16:05/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:05/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/19/08 16:05/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:50/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.03	%				1	A1030 E	05/01/08 12:51/krs
Anions	13.1	meq/L				1	A1030 E	05/01/08 12:51/krs
Cations	14.5	meq/L				1	A1030 E	05/01/08 12:51/krs
Solids, Total Dissolved Calculated	879	mg/L				1	A1030 E	05/01/08 12:51/krs
TDS Balance (0.80 - 1.20)	1.15	dec. %				1	A1030 E	05/01/08 12:51/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 12:05

Lab ID: R08020052-002

Date Received: 02/06/08

Client Sample ID: DewBurd GW675

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	388	mg/L		5		1	A2320 B	02/19/08 15:13/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:13/sn
Bicarbonate as HCO3	473	mg/L		5		1	A2320 B	02/19/08 15:13/sn
Calcium	439	mg/L	D	1		10	E200.7	02/20/08 16:03/eli-c
Chloride	75	mg/L	D	5		50	E300.0	02/07/08 03:59/sn
Fluoride	0.6	mg/L		0.1		1	E300.0	02/07/08 04:15/sn
Magnesium	376	mg/L		0.5		10	E200.7	02/20/08 16:03/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:32/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 04:15/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 04:15/sn
Potassium	24.5	mg/L		0.5		1	E200.7	02/20/08 19:07/eli-c
Silica	14.4	mg/L		0.5		1	E200.7	02/20/08 19:07/eli-c
Sodium	769	mg/L	D	8		10	E200.7	02/20/08 16:03/eli-c
Sulfate	3260	mg/L	D	3		50	E300.0	02/07/08 03:59/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6340	umhos/cm		5.0		1	A2510 B	02/08/08 15:53/jmh
Oxidation-Reduction Potential	180	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.29	s.u.		0.01		1	A4500-H B	02/09/08 14:06/jmh
Sodium Adsorption Ratio (SAR)	6.5	Unitless		0.10		1	Calculation	02/20/08 16:03/krs
Solids, Total Dissolved TDS @ 180 C	6100	mg/L		5		1	A2540 C	02/11/08 14:30/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:07/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 13:27/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/19/08 13:27/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	02/20/08 19:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 13:27/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 13:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 13:27/eli-c
Iron	0.15	mg/L		0.03		1	E200.7	02/20/08 19:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 13:27/eli-c
Manganese	3.39	mg/L		0.01		1	E200.8	02/19/08 13:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 13:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 13:27/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 13:27/eli-c
Selenium	0.001	mg/L		0.001		1	A3114 B	02/14/08 10:44/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 13:27/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 13:27/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020052-002  
**Client Sample ID:** DewBurd GW675

Prepared by Rapid City, SD Branch

**Revised Date:** 05/23/11  
**Report Date:** 05/13/08  
**Collection Date:** 02/05/08 12:05  
**Date Received:** 02/06/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Uranium	0.0387	mg/L		0.0003		1	E200.8		02/19/08 13:27/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8		02/19/08 13:27/eli-c
Zinc	ND	mg/L		0.01		1	E200.7		02/20/08 19:07/eli-c
METALS - SUSPENDED									
Uranium	0.0005	mg/L		0.0003		1	E200.8		02/15/08 22:45/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001		1	A3114 B		02/14/08 09:07/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B		02/14/08 12:14/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	29.3	pCi/L		1.0		1	E900.0		02/21/08 08:44/eli-c
Gross Alpha precision (±)	9.2	pCi/L				1	E900.0		02/21/08 08:44/eli-c
Gross Beta	25.3	pCi/L		2.0		1	E900.0		02/21/08 08:44/eli-c
Gross Beta precision (±)	16.3	pCi/L				1	E900.0		02/21/08 08:44/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M		02/13/08 11:30/eli-c
Polonium 210	2.1	pCi/L		1.0		1	RMO-3008		02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008		02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0		02/22/08 08:06/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1		02/12/08 18:40/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	ND	pCi/L		1.0		1	E909.0M		02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008		02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0		02/25/08 06:08/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0		02/19/08 15:45/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	783	pCi/L	H	100		1	D5072-92		02/11/08 13:20/eli-c
Radon 222 precision (±)	109	pCi/L	H			1	D5072-92		02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.									
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003		1	E200.8		02/19/08 16:12/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8		02/19/08 16:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8		02/20/08 19:06/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8		02/20/08 19:06/eli-c
Boron	ND	mg/L		0.1		1	E200.7		02/20/08 19:53/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
H - Analysis performed past recommended holding time.

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



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## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 12:05

Lab ID: R08020052-002

Date Received: 02/06/08

Client Sample ID: DewBurd GW675

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:12/eli-c
Iron	3.48	mg/L		0.03		1	E200.7	02/20/08 19:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:12/eli-c
Manganese	3.40	mg/L		0.01		1	E200.8	02/19/08 16:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:12/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/19/08 16:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:12/eli-c
Selenium	0.004	mg/L		0.001		1	E200.8	02/19/08 16:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:12/eli-c
Strontium	8.3	mg/L		0.1		1	E200.8	02/19/08 16:12/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:12/eli-c
Uranium	0.0387	mg/L		0.0003		1	E200.8	02/19/08 16:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:53/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.71	%				1	A1030 E	05/01/08 13:08/krs
Anions	77.8	meq/L				1	A1030 E	05/01/08 13:08/krs
Cations	87.2	meq/L				1	A1030 E	05/01/08 13:08/krs
Solids, Total Dissolved Calculated	5180	mg/L				1	A1030 E	05/01/08 13:08/krs
TDS Balance (0.80 - 1.20)	1.18	dec. %				1	A1030 E	05/01/08 13:08/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 13:39

Lab ID: R08020052-003

Date Received: 02/06/08

Client Sample ID: DewBurd GW677

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	494	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Bicarbonate as HCO3	602	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Calcium	478	mg/L	D	1		10	E200.7	02/20/08 16:07/eli-c
Chloride	1290	mg/L	D	10		100	E300.0	02/07/08 23:00/sn
Fluoride	ND	mg/L		0.1		1	E300.0	02/07/08 04:46/sn
Magnesium	414	mg/L		0.5		10	E200.7	02/20/08 16:07/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:34/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 04:46/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 04:46/sn
Potassium	11.3	mg/L		0.5		1	E200.7	02/20/08 19:11/eli-c
Silica	9.4	mg/L		0.5		1	E200.7	02/20/08 19:11/eli-c
Sodium	2030	mg/L	D	8		10	E200.7	02/20/08 16:07/eli-c
Sulfate	4310	mg/L	D	3		50	E300.0	02/07/08 04:30/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	11600	umhos/cm		5.0		1	A2510 B	02/08/08 15:53/jmh
Oxidation-Reduction Potential	170	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.13	s.u.		0.01		1	A4500-H B	02/09/08 14:06/jmh
Sodium Adsorption Ratio (SAR)	16	Unitless		0.10		1	Calculation	02/20/08 16:07/krs
Solids, Total Dissolved TDS @ 180 C	9600	mg/L		5		1	A2540 C	02/11/08 14:34/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:11/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 13:57/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:11/eli-c
Boron	0.8	mg/L		0.1		1	E200.7	02/20/08 19:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 13:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 13:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 13:57/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 13:57/eli-c
Manganese	2.59	mg/L		0.01		1	E200.8	02/19/08 13:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 13:57/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 13:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 13:57/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/14/08 10:46/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 13:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 13:57/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 13:39

Lab ID: R08020052-003

Date Received: 02/06/08

Client Sample ID: DewBurd GW677

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0402	mg/L		0.0003		1	E200.8	02/19/08 13:57/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 13:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:11/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/15/08 22:50/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:09/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	129	pCi/L		27.6		1	E900.0	04/27/08 03:01/eli-c
Gross Alpha precision (±)	26.8	pCi/L				1	E900.0	04/27/08 03:01/eli-c
Gross Beta	ND	pCi/L		26.7		1	E900.0	04/27/08 03:01/eli-c
Gross Beta precision (±)	15.9	pCi/L				1	E900.0	04/27/08 03:01/eli-c
Lead 210	2.1	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.70	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	2.2	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 09:36/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 09:09/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
Thorium 230 precision (±)	0.01	pCi/L				1	E907.0	02/29/08 14:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	808	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	108	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:20/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 16:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:14/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 13:39

Lab ID: R08020052-003

Date Received: 02/06/08

Client Sample ID: DewBurd GW677

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>TOTAL METALS ANALYSES</b>								
Beryllium	ND	mg/L		0.001		1	E200.8	04/18/08 16:47/eli-c
Boron	0.7	mg/L		0.1		1	E200.7	02/20/08 19:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:20/eli-c
Iron	0.12	mg/L		0.03		1	E200.7	02/20/08 19:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:20/eli-c
Manganese	2.65	mg/L		0.01		1	E200.8	02/19/08 16:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:20/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/19/08 16:20/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:20/eli-c
Selenium	0.006	mg/L		0.001		1	E200.8	02/19/08 16:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:20/eli-c
Strontium	10.0	mg/L		0.1		1	E200.8	02/19/08 16:20/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:20/eli-c
Uranium	0.0414	mg/L		0.0003		1	E200.8	02/19/08 16:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:57/eli-c
<b>DATA QUALITY</b>								
A/C Balance ( $\pm 5$ )	3.88	%				1	A1030 E	05/01/08 13:13/krs
Anions	136	meq/L				1	A1030 E	05/01/08 13:13/krs
Cations	147	meq/L				1	A1030 E	05/01/08 13:13/krs
Solids, Total Dissolved Calculated	8830	mg/L				1	A1030 E	05/01/08 13:13/krs
TDS Balance (0.80 - 1.20)	1.09	dec. %				1	A1030 E	05/01/08 13:13/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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

**LABORATORY ANALYTICAL REPORT**

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 14:10

Lab ID: R08020052-004

Date Received: 02/06/08

Client Sample ID: DewBurd GW42

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	180	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Bicarbonate as HCO3	219	mg/L		5		1	A2320 B	02/19/08 15:19/sn
Calcium	35.3	mg/L		0.5		1	E200.7	02/20/08 19:14/eli-c
Chloride	12	mg/L		1		1	E300.0	02/07/08 05:16/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/07/08 05:16/sn
Magnesium	12.3	mg/L		0.5		1	E200.7	02/20/08 19:14/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:35/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 05:16/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 05:16/sn
Potassium	7.8	mg/L		0.5		1	E200.7	02/20/08 19:14/eli-c
Silica	7.4	mg/L		0.5		1	E200.7	02/20/08 19:14/eli-c
Sodium	289	mg/L	L	0.8		1	E200.7	02/20/08 19:14/eli-c
Sulfate	505	mg/L	D	3		50	E300.0	02/07/08 05:01/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1420	umhos/cm		5.0		1	A2510 B	02/08/08 15:54/jmh
Oxidation-Reduction Potential	170	mV				1	A2580 B	02/07/08 00:00/sn
pH	8.08	s.u.		0.01		1	A4500-H B	02/09/08 14:07/jmh
Sodium Adsorption Ratio (SAR)	11	Unitless		0.10		1	Calculation	02/20/08 19:14/krs
Solids, Total Dissolved TDS @ 180 C	980	mg/L		5		1	A2540 C	02/11/08 14:36/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:14/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 14:05/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:14/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	02/20/08 19:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:05/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:05/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:05/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	02/19/08 14:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:05/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:05/eli-c
Selenium	0.001	mg/L		0.001		1	A3114 B	02/14/08 10:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:05/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:05/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

L - Lowest available reporting limit for the analytical method us



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 14:10

Lab ID: R08020052-004

Date Received: 02/06/08

Client Sample ID: DewBurd GW42

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0194	mg/L		0.0003		1	E200.8	02/19/08 14:05/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:05/eli-c
Zinc	0.02	mg/L		0.01		1	E200.7	02/20/08 19:14/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:02/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:11/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	526	pCi/L		1.0		1	E900.0	02/21/08 08:44/eli-c
Gross Alpha precision (±)	5.9	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Gross Beta	93.5	pCi/L		2.0		1	E900.0	02/21/08 08:44/eli-c
Gross Beta precision (±)	3.5	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Lead 210	15	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	5.5	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	2.1	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	100	pCi/L		0.2		1	E903.0	02/22/08 10:22/eli-c
Radium 226 precision (±)	3.6	pCi/L				1	E903.0	02/22/08 10:22/eli-c
Gross Gamma	2800	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
Gross Gamma precision (±)	89	pCi/L				1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	17	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Lead 210 precision (±)	2.0	pCi/L				1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	2.0	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Polonium 210 precision (±)	0.98	pCi/L				1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	5.1	pCi/L		0.2		1	E903.0	02/25/08 10:40/eli-c
Radium 226 precision (±)	1.6	pCi/L				1	E903.0	02/25/08 10:40/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	175000	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	705	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c

- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Collection Date: 02/05/08 14:10

Date Received: 02/06/08

Matrix: AQUEOUS

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08020052-004

Client Sample ID: DewBurd GW42

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:28/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	02/19/08 16:28/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:21/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 19:21/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 20:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:28/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:28/eli-c
Iron	0.15	mg/L		0.03		1	E200.7	02/20/08 20:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:28/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/19/08 16:28/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:28/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/19/08 16:28/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:28/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/19/08 16:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:28/eli-c
Strontium	0.7	mg/L		0.1		1	E200.8	02/19/08 16:28/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:28/eli-c
Uranium	0.0198	mg/L		0.0003		1	E200.8	02/19/08 16:28/eli-c
Zinc	0.03	mg/L		0.01		1	E200.7	02/20/08 20:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.65	%				1	A1030 E	05/01/08 13:17/krs
Anions	14.5	meq/L				1	A1030 E	05/01/08 13:17/krs
Cations	15.6	meq/L				1	A1030 E	05/01/08 13:17/krs
Solids, Total Dissolved Calculated	971	mg/L				1	A1030 E	05/01/08 13:17/krs
TDS Balance (0.80 - 1.20)	1.01	dec. %				1	A1030 E	05/01/08 13:17/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	468	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Bicarbonate as HCO3	570	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Calcium	428	mg/L	D	1		10	E200.7	02/20/08 16:13/eli-c
Chloride	96	mg/L	D	5		50	E300.0	02/07/08 05:32/sn
Fluoride	ND	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Magnesium	434	mg/L		0.5		10	E200.7	02/20/08 16:13/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:37/sn
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Potassium	20.2	mg/L		0.5		1	E200.7	02/20/08 19:17/eli-c
Silica	16.3	mg/L		0.5		1	E200.7	02/20/08 19:17/eli-c
Sodium	634	mg/L	D	8		10	E200.7	02/20/08 16:13/eli-c
Sulfate	3540	mg/L	D	3		50	E300.0	02/07/08 05:32/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6020	umhos/cm		5.0		1	A2510 B	02/08/08 15:55/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.34	s.u.		0.01		1	A4500-H B	02/09/08 14:08/jmh
Sodium Adsorption Ratio (SAR)	5.2	Unitless		0.10		1	Calculation	02/20/08 16:13/krs
Solids, Total Dissolved TDS @ 180 C	6000	mg/L		5		1	A2540 C	02/11/08 14:37/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:12/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Manganese	2.39	mg/L		0.01		1	E200.8	02/19/08 14:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:12/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/14/08 10:51/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0368	mg/L		0.0003		1	E200.8	02/19/08 14:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:17/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:06/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:14/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	41.5	pCi/L		1.0		1	E900.0	02/21/08 08:44/eli-c
Gross Alpha precision (±)	9.6	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Gross Beta	16.0	pCi/L		2.0		1	E900.0	02/21/08 08:44/eli-c
Gross Beta precision (±)	16.2	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Lead 210	3.3	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.90	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	2.4	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 11:52/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 12:10/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	487	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	103	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:35/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:29/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 19:29/eli-c

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
TOTAL METALS ANALYSES									
Boron	1.6	mg/L		0.1		1	E200.7		02/20/08 20:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8		02/19/08 16:35/eli-c
Chromium	ND	mg/L		0.05		1	E200.8		02/19/08 16:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8		02/19/08 16:35/eli-c
Iron	0.04	mg/L		0.03		1	E200.7		02/20/08 20:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8		02/19/08 16:35/eli-c
Manganese	2.72	mg/L		0.01		1	E200.8		02/19/08 16:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8		02/19/08 16:35/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8		02/19/08 16:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8		02/19/08 16:35/eli-c
Selenium	0.005	mg/L		0.001		1	E200.8		02/19/08 16:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8		02/19/08 16:35/eli-c
Strontium	10.2	mg/L		0.1		1	E200.8		02/19/08 16:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8		02/19/08 16:35/eli-c
Uranium	0.0379	mg/L		0.0003		1	E200.8		02/19/08 16:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.7		02/20/08 20:03/eli-c
DATA QUALITY									
A/C Balance (± 5)	-0.31	%				1	A1030 E		05/01/08 14:03/krs
Anions	85.9	meq/L				1	A1030 E		05/01/08 14:03/krs
Cations	85.3	meq/L				1	A1030 E		05/01/08 14:03/krs
Solids, Total Dissolved Calculated	5440	mg/L				1	A1030 E		05/01/08 14:03/krs
TDS Balance (0.80 - 1.20)	1.10	dec. %				1	A1030 E		05/01/08 14:03/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	468	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Bicarbonate as HCO3	570	mg/L		5		1	A2320 B	02/19/08 15:43/sn
Calcium	428	mg/L	D	1		10	E200.7	02/20/08 16:13/eli-c
Chloride	96	mg/L	D	5		50	E300.0	02/07/08 05:32/sn
Fluoride	ND	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Magnesium	434	mg/L		0.5		10	E200.7	02/20/08 16:13/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:37/sn
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 05:47/sn
Potassium	20.2	mg/L		0.5		1	E200.7	02/20/08 19:17/eli-c
Silica	16.3	mg/L		0.5		1	E200.7	02/20/08 19:17/eli-c
Sodium	634	mg/L	D	8		10	E200.7	02/20/08 16:13/eli-c
Sulfate	3540	mg/L	D	3		50	E300.0	02/07/08 05:32/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6020	umhos/cm		5.0		1	A2510 B	02/08/08 15:55/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.34	s.u.		0.01		1	A4500-H B	02/09/08 14:08/jmh
Sodium Adsorption Ratio (SAR)	5.2	Unitless		0.10		1	Calculation	02/20/08 16:13/krs
Solids, Total Dissolved TDS @ 180 C	6000	mg/L		5		1	A2540 C	02/11/08 14:37/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 19:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:12/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Manganese	2.39	mg/L		0.01		1	E200.8	02/19/08 14:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:12/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/14/08 10:51/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:12/eli-c

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix.



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0368	mg/L		0.0003		1	E200.8	02/19/08 14:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:17/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:06/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:14/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	41.5	pCi/L		1.0		1	E900.0	02/21/08 08:44/eli-c
Gross Alpha precision (±)	9.6	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Gross Beta	16.0	pCi/L		2.0		1	E900.0	02/21/08 08:44/eli-c
Gross Beta precision (±)	16.2	pCi/L				1	E900.0	02/21/08 08:44/eli-c
Lead 210	3.3	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.90	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	2.4	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 11:52/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 12:10/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	487	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	103	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:35/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:29/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 19:29/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:39

Lab ID: R08020052-005

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 20:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:35/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:35/eli-c
Iron	0.04	mg/L		0.03		1	E200.7	02/20/08 20:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Manganese	2.72	mg/L		0.01		1	E200.8	02/19/08 16:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8	02/19/08 16:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:35/eli-c
Selenium	0.005	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:35/eli-c
Strontium	10.2	mg/L		0.1		1	E200.8	02/19/08 16:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:35/eli-c
Uranium	0.0379	mg/L		0.0003		1	E200.8	02/19/08 16:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 20:03/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.31	%				1	A1030 E	05/01/08 14:03/krs
Anions	85.9	meq/L				1	A1030 E	05/01/08 14:03/krs
Cations	85.3	meq/L				1	A1030 E	05/01/08 14:03/krs
Solids, Total Dissolved Calculated	5440	mg/L				1	A1030 E	05/01/08 14:03/krs
TDS Balance (0.80 - 1.20)	1.10	dec. %				1	A1030 E	05/01/08 14:03/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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



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Gillette, WY 800-806-7175 • Rapid City, SD 800-672-1225 • College Station, TX 800-680-2218

# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:45

Lab ID: R08020052-006

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	472	mg/L		5		1	A2320 B	02/19/08 15:48/sn	
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:48/sn	
Bicarbonate as HCO3	575	mg/L		5		1	A2320 B	02/19/08 15:48/sn	
Calcium	412	mg/L	D	1		10	E200.7	02/20/08 16:17/eli-c	
Chloride	94	mg/L	D	5		50	E300.0	02/07/08 06:03/sn	
Fluoride	0.9	mg/L		0.1		1	E300.0	02/07/08 06:18/sn	
Magnesium	438	mg/L		0.5		10	E200.7	02/20/08 16:17/eli-c	
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:38/sn	
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	02/07/08 06:18/sn	
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 06:18/sn	
Potassium	20.0	mg/L		0.5		1	E200.7	02/20/08 19:40/eli-c	
Silica	16.3	mg/L		0.5		1	E200.7	02/20/08 19:40/eli-c	
Sodium	628	mg/L	D	8		10	E200.7	02/20/08 16:17/eli-c	
Sulfate	3620	mg/L	D	3		50	E300.0	02/07/08 06:03/sn	
PHYSICAL PROPERTIES									
Conductivity @ 25 C	5990	umhos/cm		5.0		1	A2510 B	02/08/08 15:56/jmh	
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/07/08 00:00/sn	
pH	7.36	s.u.		0.01		1	A4500-H B	02/09/08 14:09/jmh	
Sodium Adsorption Ratio (SAR)	5.1	Unitless		0.10		1	Calculation	02/20/08 16:17/krs	
Solids, Total Dissolved TDS @ 180 C	6000	mg/L		5		1	A2540 C	02/11/08 14:38/jmh	
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c	
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c	
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c	
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c	
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c	
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:35/eli-c	
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:35/eli-c	
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:40/eli-c	
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c	
Manganese	2.79	mg/L		0.01		1	E200.8	02/19/08 14:35/eli-c	
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c	
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:35/eli-c	
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:35/eli-c	
Selenium	ND	mg/L		0.001		1	A3114 B	02/14/08 10:53/eli-c	
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c	
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c	

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:45

Lab ID: R08020052-006

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0368	mg/L		0.0003		1	E200.8	02/19/08 14:35/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:40/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:19/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:16/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	30.2	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Alpha precision (±)	9.3	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 13:23/eli-c
Gross Gamma	100	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
Gross Gamma precision (±)	28	pCi/L				1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 13:40/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	418	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	102	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:59/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 19:59/eli-c
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 20:07/eli-c

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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Gillette, WY 888-886-7175 • Rapid City, SD 888-872-1225 • College Station, TX 888-680-2218

# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:45

Lab ID: R08020052-006

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Iron	0.04	mg/L		0.03		1	E200.7	02/20/08 20:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Manganese	2.61	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:43/eli-c
Selenium	0.004	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:43/eli-c
Strontium	9.7	mg/L		0.1		1	E200.8	02/19/08 16:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Uranium	0.0352	mg/L		0.0003		1	E200.8	02/19/08 16:43/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 20:07/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.70	%				1	A1030 E	05/01/08 14:14/krs
Anions	87.6	meq/L				1	A1030 E	05/01/08 14:14/krs
Cations	84.6	meq/L				1	A1030 E	05/01/08 14:14/krs
Solids, Total Dissolved Calculated	5500	mg/L				1	A1030 E	05/01/08 14:14/krs
TDS Balance (0.80 - 1.20)	1.10	dec. %				1	A1030 E	05/01/08 14:14/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:45

Lab ID: R08020052-006

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	472	mg/L		5		1	A2320 B	02/19/08 15:48/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:48/sn
Bicarbonate as HCO3	575	mg/L		5		1	A2320 B	02/19/08 15:48/sn
Calcium	412	mg/L	D	1		10	E200.7	02/20/08 16:17/eli-c
Chloride	94	mg/L	D	5		50	E300.0	02/07/08 06:03/sn
Fluoride	0.9	mg/L		0.1		1	E300.0	02/07/08 06:18/sn
Magnesium	438	mg/L		0.5		10	E200.7	02/20/08 16:17/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:38/sn
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	02/07/08 06:18/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 06:18/sn
Potassium	20.0	mg/L		0.5		1	E200.7	02/20/08 19:40/eli-c
Silica	16.3	mg/L		0.5		1	E200.7	02/20/08 19:40/eli-c
Sodium	628	mg/L	D	8		10	E200.7	02/20/08 16:17/eli-c
Sulfate	3620	mg/L	D	3		50	E300.0	02/07/08 06:03/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5990	umhos/cm		5.0		1	A2510 B	02/08/08 15:56/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.36	s.u.		0.01		1	A4500-H B	02/09/08 14:09/jmh
Sodium Adsorption Ratio (SAR)	5.1	Unitless		0.10		1	Calculation	02/20/08 16:17/krs
Solids, Total Dissolved TDS @ 180 C	6000	mg/L		5		1	A2540 C	02/11/08 14:38/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 19:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:35/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c
Manganese	2.79	mg/L		0.01		1	E200.8	02/19/08 14:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:35/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:35/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/14/08 10:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:35/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020052-006  
**Client Sample ID:** DewBurd GW678

Prepared by Rapid City, SD Branch

**Revised Date:** 05/23/11  
**Report Date:** 05/13/08  
**Collection Date:** 02/05/08 15:45  
**Date Received:** 02/06/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0368	mg/L		0.0003		1	E200.8	02/19/08 14:35/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:40/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:19/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:16/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	30.2	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Alpha precision (±)	9.3	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 13:23/eli-c
Gross Gamma	100	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
Gross Gamma precision (±)	28	pCi/L				1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 13:40/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	418	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	102	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 16:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 19:59/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 19:59/eli-c
Boron	1.6	mg/L		0.1		1	E200.7	02/20/08 20:07/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
H - Analysis performed past recommended holding time.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 15:45

Lab ID: R08020052-006

Date Received: 02/06/08

Client Sample ID: DewBurd GW678

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>TOTAL METALS ANALYSES</b>								
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 16:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 16:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Iron	0.04	mg/L		0.03		1	E200.7	02/20/08 20:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Manganese	2.61	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8	02/19/08 16:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 16:43/eli-c
Selenium	0.004	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 16:43/eli-c
Strontium	9.7	mg/L		0.1		1	E200.8	02/19/08 16:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 16:43/eli-c
Uranium	0.0352	mg/L		0.0003		1	E200.8	02/19/08 16:43/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 20:07/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.70	%				1	A1030 E	05/01/08 14:14/krs
Anions	87.6	meq/L				1	A1030 E	05/01/08 14:14/krs
Cations	84.6	meq/L				1	A1030 E	05/01/08 14:14/krs
Solids, Total Dissolved Calculated	5500	mg/L				1	A1030 E	05/01/08 14:14/krs
TDS Balance (0.80 - 1.20)	1.10	dec. %				1	A1030 E	05/01/08 14:14/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 16:57

Lab ID: R08020052-007

Date Received: 02/06/08

Client Sample ID: DewBurd GW676

Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	208	mg/L		5		1	A2320 B	02/19/08 15:50/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:50/sn
Bicarbonate as HCO3	254	mg/L		5		1	A2320 B	02/19/08 15:50/sn
Calcium	518	mg/L	D	1		10	E200.7	02/20/08 16:20/eli-c
Chloride	14	mg/L		1		1	E300.0	02/07/08 06:49/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/07/08 06:49/sn
Magnesium	114	mg/L		0.5		10	E200.7	02/20/08 16:20/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:39/sn
Nitrogen, Nitrate as N	0.7	mg/L		0.1		1	E300.0	02/07/08 06:49/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 06:49/sn
Potassium	12.7	mg/L		0.5		1	E200.7	02/20/08 19:44/eli-c
Silica	14.3	mg/L		0.5		1	E200.7	02/20/08 19:44/eli-c
Sodium	92.2	mg/L	L	0.8		1	E200.7	02/20/08 19:44/eli-c
Sulfate	1670	mg/L	D	3		50	E300.0	02/07/08 06:33/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	3010	umhos/cm		5.0		1	A2510 B	02/08/08 15:58/jmh
Oxidation-Reduction Potential	230	mV				1	A2580 B	02/07/08 00:00/sn
pH	7.20	s.u.		0.01		1	A4500-H B	02/09/08 14:10/jmh
Sodium Adsorption Ratio (SAR)	0.96	Unitless		0.10		1	Calculation	02/20/08 19:44/krs
Solids, Total Dissolved TDS @ 180 C	2500	mg/L		5		1	A2540 C	02/11/08 14:40/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:44/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 14:42/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:44/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/20/08 19:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:42/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:42/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:42/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:42/eli-c
Manganese	0.02	mg/L		0.01		1	E200.8	02/19/08 14:42/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:42/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:42/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:42/eli-c
Selenium	0.012	mg/L		0.001		1	A3114 B	02/14/08 10:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:42/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:42/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
L - Lowest available reporting limit for the analytical method us



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 16:57

Lab ID: R08020052-007

Date Received: 02/06/08

Client Sample ID: DewBurd GW676

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0586	mg/L		0.0003		1	E200.8	02/19/08 14:42/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:42/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:44/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0702	mg/L		0.0003		1	E200.8	02/21/08 00:23/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:18/eli-c
Selenium-VI	0.012	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	95.5	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Alpha precision (±)	4.5	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Gross Beta	22.1	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Gross Beta precision (±)	5.7	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Lead 210	4.1	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	2.9	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Polonium 210 precision (±)	1.6	pCi/L				1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 14:53/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	3.8	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Lead 210 precision (±)	1.1	pCi/L				1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	2.2	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Polonium 210 precision (±)	0.96	pCi/L				1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	11.4	pCi/L		0.2		1	E903.0	02/25/08 15:11/eli-c
Radium 226 precision (±)	2.2	pCi/L				1	E903.0	02/25/08 15:11/eli-c
Thorium 230	4.2	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
Thorium 230 precision (±)	1.1	pCi/L				1	E907.0	02/19/08 15:45/eli-c
-The laboratory is confirming the Ra226 result for this sample.								
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	686	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	104	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								

## TOTAL METALS ANALYSES

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/05/08 16:57

Lab ID: R08020052-007

Date Received: 02/06/08

Client Sample ID: DewBurd GW676

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		5	E200.8	02/20/08 20:06/eli-c
Arsenic	0.021	mg/L		0.001		5	E200.8	02/20/08 20:06/eli-c
Barium	0.5	mg/L		0.1		1	E200.7	02/20/08 20:10/eli-c
Beryllium	0.003	mg/L		0.001		5	E200.8	02/20/08 20:06/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/20/08 20:10/eli-c
Cadmium	ND	mg/L		0.005		5	E200.8	02/20/08 20:06/eli-c
Chromium	0.05	mg/L		0.05		1	E200.8	02/19/08 17:13/eli-c
Copper	0.12	mg/L		0.01		1	E200.7	02/20/08 20:10/eli-c
Iron	66.0	mg/L	D	0.1		1	E200.7	02/20/08 20:10/eli-c
Lead	0.060	mg/L		0.001		1	E200.8	02/19/08 17:13/eli-c
Manganese	2.52	mg/L		0.01		1	E200.8	02/19/08 17:13/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 17:13/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.7	02/20/08 20:10/eli-c
Nickel	0.10	mg/L		0.05		1	E200.7	02/20/08 20:10/eli-c
Selenium	0.013	mg/L		0.001		5	E200.8	02/20/08 20:06/eli-c
Silver	ND	mg/L		0.005		5	E200.8	02/20/08 20:06/eli-c
Strontium	9.2	mg/L		0.1		1	E200.7	02/20/08 20:10/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 17:13/eli-c
Uranium	0.0687	mg/L		0.0003		1	E200.8	02/19/08 17:13/eli-c
Zinc	0.28	mg/L		0.01		1	E200.7	02/20/08 20:10/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.0941	%				1	A1030 E	05/01/08 14:32/krs
Anions	39.5	meq/L				1	A1030 E	05/01/08 14:32/krs
Cations	39.5	meq/L				1	A1030 E	05/01/08 14:32/krs
Solids, Total Dissolved Calculated	2550	mg/L				1	A1030 E	05/01/08 14:32/krs
TDS Balance (0.80 - 1.20)	0.980	dec. %				1	A1030 E	05/01/08 14:32/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/06/08 08:30

Lab ID: R08020052-008

Date Received: 02/06/08

Client Sample ID: DewBurd BLK01

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	02/19/08 15:51/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/19/08 15:51/sn
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	02/19/08 15:51/sn
Calcium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Chloride	ND	mg/L		2		1	E300.0	02/07/08 07:20/sn
Fluoride	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Magnesium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:40/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Potassium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Silica	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Sodium	ND	mg/L	L	0.8		1	E200.7	02/20/08 19:47/eli-c
Sulfate	ND	mg/L		2		1	E300.0	02/07/08 07:20/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	02/08/08 15:58/jmh
Oxidation-Reduction Potential	310	mV				1	A2580 B	02/07/08 00:00/sn
pH	5.95	s.u.		0.01		1	A4500-H B	02/09/08 14:14/jmh
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	05/01/08 14:40/krs
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C	02/11/08 14:41/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:50/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/19/08 14:50/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:50/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/14/08 10:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

L - Lowest available reporting limit for the analytical method used.



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/06/08 08:30

Lab ID: R08020052-008

Date Received: 02/06/08

Client Sample ID: DewBurd BLK01

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	02/19/08 14:50/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:47/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:43/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:20/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	ND	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Lead 210	3.1	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.80	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 16:23/eli-c
Gross Gamma	110	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
Gross Gamma precision (±)	26	pCi/L				1	E901.1	02/12/08 18:40/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	3.0	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 16:41/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	216	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	87.1	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 17:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 20:14/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 20:14/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 20:33/eli-c

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

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

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



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## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/06/08 08:30

Lab ID: R08020052-008

Date Received: 02/06/08

Client Sample ID: DewBurd BLK01

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 17:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 17:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 17:20/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 20:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/19/08 17:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/20/08 20:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 17:20/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 17:20/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	02/19/08 17:20/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/19/08 17:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 20:33/eli-c
DATA QUALITY								
A/C Balance (± 5)	100	%				1	A1030 E	05/01/08 14:40/krs
Anions	ND	meq/L				1	A1030 E	05/01/08 14:40/krs
Cations	0.00403	meq/L				1	A1030 E	05/01/08 14:40/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/06/08 08:30

Lab ID: R08020052-008

Date Received: 02/06/08

Client Sample ID: DewBurd BLK01

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	02/19/08 15:51/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	02/19/08 15:51/sn
Bicarbonate as HCO <sub>3</sub>	ND	mg/L		5		1	A2320 B	02/19/08 15:51/sn
Calcium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Chloride	ND	mg/L		2		1	E300.0	02/07/08 07:20/sn
Fluoride	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Magnesium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	02/11/08 17:40/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/07/08 07:20/sn
Potassium	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Silica	ND	mg/L		0.5		1	E200.7	02/20/08 19:47/eli-c
Sodium	ND	mg/L	L	0.8		1	E200.7	02/20/08 19:47/eli-c
Sulfate	ND	mg/L		2		1	E300.0	02/07/08 07:20/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	02/08/08 15:58/jmh
Oxidation-Reduction Potential	310	mV				1	A2580 B	02/07/08 00:00/sn
pH	5.95	s.u.		0.01		1	A4500-H B	02/09/08 14:14/jmh
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	05/01/08 14:40/krs
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C	02/11/08 14:41/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Barium	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 19:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 14:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 14:50/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 19:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/19/08 14:50/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 14:50/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/19/08 14:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 14:50/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/14/08 10:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/19/08 14:50/eli-c

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

L - Lowest available reporting limit for the analytical method used.



# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020052-008  
Client Sample ID: DewBurd BLK01

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11  
Report Date: 05/13/08  
Collection Date: 02/06/08 08:30  
Date Received: 02/06/08  
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	02/19/08 14:50/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/19/08 14:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 19:47/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 00:43/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/14/08 09:20/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/14/08 12:14/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	ND	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Lead 210	3.1	pCi/L		1.0		1	E909.0M	02/13/08 11:30/eli-c
Lead 210 precision (±)	0.80	pCi/L				1	E909.0M	02/13/08 11:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/14/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/22/08 16:23/eli-c
Gross Gamma	110	pCi/L		20		1	E901.1	02/12/08 18:40/eli-c
Gross Gamma precision (±)	26	pCi/L				1	E901.1	02/12/08 18:40/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	3.0	pCi/L		1.0		1	E909.0M	02/19/08 07:00/eli-c
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	02/19/08 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 16:41/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/19/08 15:45/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	216	pCi/L	H	100		1	D5072-92	02/11/08 13:20/eli-c
Radon 222 precision (±)	87.1	pCi/L	H			1	D5072-92	02/11/08 13:20/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 17:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 20:14/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 20:14/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 20:33/eli-c

- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.

## TOTAL METALS ANALYSES

Antimony	ND	mg/L		0.003		1	E200.8	02/19/08 17:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/20/08 20:14/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/20/08 20:14/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/20/08 20:33/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
H - Analysis performed past recommended holding time.

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



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## LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Collection Date: 02/06/08 08:30

Lab ID: R08020052-008

Date Received: 02/06/08

Client Sample ID: DewBurd BLK01

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Cadmium	ND	mg/L		0.005		1	E200.8	02/19/08 17:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/19/08 17:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/19/08 17:20/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/20/08 20:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/19/08 17:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Molybdenum	ND	mg/L		0.01		1	E200.8	02/20/08 20:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/19/08 17:20/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/19/08 17:20/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	02/19/08 17:20/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/19/08 17:20/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/19/08 17:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/20/08 20:33/eli-c
DATA QUALITY								
A/C Balance (± 5)	100	%				1	A1030 E	05/01/08 14:40/krs
Anions	ND	meq/L				1	A1030 E	05/01/08 14:40/krs
Cations	0.00403	meq/L				1	A1030 E	05/01/08 14:40/krs

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2320 B</b>							Batch: 080219A-ALK-SEL-W		
<b>Sample ID: MBLK1_080219A</b>	Method Blank					Run: PH_COND1-R_080219A			02/19/08 15:07
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
<b>Sample ID: LCS1_080219A</b>	Laboratory Control Sample					Run: PH_COND1-R_080219A			02/19/08 15:09
Alkalinity, Total as CaCO <sub>3</sub>	1010	mg/L	5.0	101	90	110			
<b>Sample ID: R08020064-001BMS</b>	Sample Matrix Spike					Run: PH_COND1-R_080219A			02/19/08 15:57
Alkalinity, Total as CaCO <sub>3</sub>	280	mg/L	5.0	91	80	120			
<b>Sample ID: R08020064-001BMSD</b>	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080219A			02/19/08 15:58
Alkalinity, Total as CaCO <sub>3</sub>	270	mg/L	5.0	89	80	120	0.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2510 B</b>		Batch: 080208_1_COND-PROBE-W							
<b>Sample ID: LCS1-1_080208</b> Conductivity @ 25 C	Laboratory Control Sample 156	umhos/cm	5.0	104	90	110			02/08/08 15:42
<b>Sample ID: LCS2-1_080208</b> Conductivity @ 25 C	Laboratory Control Sample 4950	umhos/cm	5.0	99	90	110			02/08/08 15:43
<b>Sample ID: LCS_COND-1_080208</b> Conductivity @ 25 C	Laboratory Control Sample 1410	umhos/cm	5.0	100	90	110			02/08/08 15:43
<b>Sample ID: MBLK-1_080208</b> Conductivity @ 25 C	Method Blank ND	umhos/cm	5						02/08/08 15:44
<b>Sample ID: R08020052-006ADUP</b> Conductivity @ 25 C	Sample Duplicate 5990	umhos/cm	5.0				0.0	10	02/08/08 15:57

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C							Batch: 080211A-SLDS-TDS-W		
Sample ID: MBLK1_080211A	Method Blank					Run: BAL-4-R_080211A			02/11/08 14:08
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080211A	Laboratory Control Sample					Run: BAL-4-R_080211A			02/11/08 14:09
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	104	90	110			
Sample ID: R08020052-002AMS	Sample Matrix Spike					Run: BAL-4-R_080211A			02/11/08 14:32
Solids, Total Dissolved TDS @ 180 C	6300	mg/L	5.0	107	80	120			
Sample ID: R08020052-002AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080211A			02/11/08 14:33
Solids, Total Dissolved TDS @ 180 C	6300	mg/L	5.0	103	80	120	0.1	10	
Sample ID: R08020065-001AMS	Sample Matrix Spike					Run: BAL-4-R_080211A			02/11/08 14:47
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	101	80	120			
Sample ID: R08020065-001AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080211A			02/11/08 14:48
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	112	80	120	2.1	10	

### Qualifiers:

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ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: R33453
Sample ID: LCS_020408	Laboratory Control Sample					Run: PH_COND1-R_080204A			02/04/08 00:00
Oxidation-Reduction Potential	490	mV		102	95	105			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SE-3114-021408		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C96943			02/14/08 09:01
Selenium-IV	ND	mg/L	0.0002						
<b>Sample ID: 288-30-5</b>	Laboratory Control Sample					Run: SUB-C96943			02/14/08 09:03
Selenium-IV	0.049	mg/L	0.0010	98	90	110			
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96943			02/14/08 09:25
Selenium-IV	0.045	mg/L	0.0010	90	85	115	2.5	10	
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike					Run: SUB-C96943			02/14/08 09:27
Selenium-IV	0.047	mg/L	0.0010	92	85	115			
<b>Method: A3114 B</b>							Batch: C_SE-3114-021408B		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C96956			02/14/08 10:30
Selenium	ND	mg/L	0.0003						
<b>Sample ID: 288-30-5</b>	Laboratory Control Sample					Run: SUB-C96956			02/14/08 10:36
Selenium	0.050	mg/L	0.0010	100	90	110			
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike					Run: SUB-C96956			02/14/08 11:03
Selenium	0.050	mg/L	0.0010	97	85	115			
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96956			02/14/08 11:05
Selenium	0.049	mg/L	0.0010	95	85	115	2.0	10	
<b>Method: A3114 B</b>							Batch: C_R96957		
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike					Run: SUB-C96957			02/14/08 12:14
Selenium-VI	0.048	mg/L	0.0010	95	85	115			
<b>Sample ID: R08020052-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C96957			02/14/08 12:14
Selenium-VI	0.047	mg/L	0.0010	92	85	115	0.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080209_1_PH-W		
Sample ID: LCS_pH-1_080209	Laboratory Control Sample				Run: PH_COND2-R_080209A		02/09/08 13:57		
pH	6.96	s.u.	0.010	101	98.55	101.45			
Sample ID: R08020052-005ADUP	Sample Duplicate				Run: PH_COND2-R_080209A		02/09/08 14:08		
pH	7.34	s.u.	0.010				0.0	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2008-02-11_2_NH3_01							
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080211A			02/11/08 15:32
Nitrogen, Ammonia as N	0.26	mg/L	0.10	102	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080211A			02/11/08 15:33
Nitrogen, Ammonia as N	0.25	mg/L	0.10	99	90	110			
Sample ID: MBLK-5	Method Blank					Run: TECHAA2-R_080211A			02/11/08 15:34
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08020052-001BDUP	Sample Duplicate					Run: TECHAA2-R_080211A			02/11/08 17:31
Nitrogen, Ammonia as N	0.27	mg/L	0.10				0.7	10	
Sample ID: R08020052-002BMS	Sample Matrix Spike					Run: TECHAA2-R_080211A			02/11/08 17:33
Nitrogen, Ammonia as N	0.54	mg/L	0.10	108	80	120			
Sample ID: R08020074-002CMS	Sample Matrix Spike					Run: TECHAA2-R_080211A			02/11/08 17:47
Nitrogen, Ammonia as N	0.69	mg/L	0.10	94	80	120			

### Qualifiers:

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R96832		
Sample ID: C08020237-001CDUP	Sample Duplicate				Run: SUB-C96832			02/11/08 13:20	
Radon 222	531	pCi/L	100				20	30	
Sample ID: MB-R96832	Method Blank				Run: SUB-C96832			02/11/08 13:20	
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R96832	Laboratory Control Sample				Run: SUB-C96832			02/11/08 13:20	
Radon 222	301	pCi/L	100	99	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_17769		
<b>Sample ID: MB-17769</b>	Method Blank			Run: SUB-C97172			02/20/08 13:20		
Barium	ND	mg/L	0.006						
Beryllium	ND	mg/L	0.002						
Boron	ND	mg/L	0.01						
Copper	0.007	mg/L	0.005						
Iron	ND	mg/L	0.009						
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: LCS-17769</b>	Laboratory Control Sample			Run: SUB-C97172			02/20/08 13:30		
Barium	0.518	mg/L	0.10	104	85	115			
Beryllium	0.527	mg/L	0.010	105	85	115			
Boron	0.480	mg/L	0.10	96	85	115			
Copper	0.487	mg/L	0.010	97	85	115			
Iron	0.549	mg/L	0.030	110	85	115			
Molybdenum	0.503	mg/L	0.10	101	85	115			
Nickel	0.510	mg/L	0.050	102	85	115			
Strontium	0.518	mg/L	0.10	104	85	115			
Zinc	0.504	mg/L	0.010	101	85	115			
<b>Sample ID: R08020052-001D</b>	Sample Matrix Spike			Run: SUB-C97172			02/20/08 16:49		
Barium	9.60	mg/L	0.10	96	70	130			
Beryllium	9.84	mg/L	0.016	98	70	130			
Boron	9.79	mg/L	0.13	98	70	130			
Copper	9.21	mg/L	0.046	92	70	130			
Iron	9.70	mg/L	0.087	95	70	130			
Molybdenum	9.65	mg/L	0.10	97	70	130			
Nickel	9.54	mg/L	0.053	95	70	130			
Strontium	11.3	mg/L	0.10	98	70	130			
Zinc	9.58	mg/L	0.014	96	70	130			
<b>Sample ID: R08020052-001D</b>	Sample Matrix Spike Duplicate			Run: SUB-C97172			02/20/08 16:53		
Barium	9.86	mg/L	0.10	99	70	130	2.7	20	
Beryllium	9.95	mg/L	0.016	99	70	130	1.1	20	
Boron	10.3	mg/L	0.13	103	70	130	4.8	20	
Copper	9.51	mg/L	0.046	95	70	130	3.2	20	
Iron	9.87	mg/L	0.087	97	70	130	1.7	20	
Molybdenum	10.0	mg/L	0.10	100	70	130	3.7	20	
Nickel	9.69	mg/L	0.053	97	70	130	1.6	20	
Strontium	11.4	mg/L	0.10	99	70	130	0.6	20	
Zinc	9.83	mg/L	0.014	98	70	130	2.6	20	

Method: E200.7

Batch: C\_R97172

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R97172		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C97172			02/20/08 12:35		
Silica	2.0	mg/L	0.10	101	85	125			
Aluminum	2.0	mg/L	0.10	101	85	125			
Barium	2.0	mg/L	0.10	102	85	125			
Boron	1.9	mg/L	0.10	97	85	125			
Iron	2.0	mg/L	0.030	100	85	125			
Zinc	2.0	mg/L	0.010	99	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C97172			02/20/08 12:38		
Calcium	25	mg/L	0.50	100	85	125			
Magnesium	25	mg/L	0.50	99	85	125			
Potassium	25	mg/L	0.50	100	85	125			
Sodium	24	mg/L	0.76	96	85	125			
<b>Sample ID: LRB</b>	Laboratory Reagent Blank			Run: SUB-C97172			02/20/08 12:45		
Silica	ND	mg/L	0.10		0	0			
Aluminum	ND	mg/L	0.10		0	0			
Barium	ND	mg/L	0.10		0	0			
Boron	0.023	mg/L	0.10		0	0			
Calcium	ND	mg/L	0.50		0	0			
Iron	0.0056	mg/L	0.030		0	0			
Magnesium	ND	mg/L	0.50		0	0			
Potassium	0.031	mg/L	0.50		0	0			
Sodium	ND	mg/L	0.76		0	0			
Zinc	ND	mg/L	0.010		0	0			
<b>Sample ID: R08020052-001C</b>	Sample Matrix Spike			Run: SUB-C97172			02/20/08 15:50		
Aluminum	9.63	mg/L	0.10	95	70	130			
Barium	9.50	mg/L	0.10	95	70	130			
Boron	9.57	mg/L	0.10	96	70	130			
Iron	9.25	mg/L	0.046	93	70	130			
Zinc	9.45	mg/L	0.022	95	70	130			
Calcium	500	mg/L	1.0	90	70	130			
Magnesium	468	mg/L	0.50	89	70	130			
Potassium	1110	mg/L	0.50	91	70	130			
Silica	15.9	mg/L	0.20	89	70	130			
Sodium	676	mg/L	7.6	91	70	130			
<b>Sample ID: R08020052-001C</b>	Sample Matrix Spike Duplicate			Run: SUB-C97172			02/20/08 15:54		
Aluminum	9.79	mg/L	0.10	97	70	130	1.6	20	
Barium	9.72	mg/L	0.10	97	70	130	2.3	20	
Boron	10.1	mg/L	0.10	101	70	130	5.4	20	
Iron	9.55	mg/L	0.046	95	70	130	3.2	20	
Zinc	9.73	mg/L	0.022	97	70	130	2.9	20	
Calcium	524	mg/L	1.0	95	70	130	4.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R97172		
Sample ID: R08020052-001C	Sample Matrix Spike Duplicate			Run: SUB-C97172			02/20/08 15:54		
Magnesium	486	mg/L	0.50	93	70	130	3.8	20	
Potassium	1110	mg/L	0.50	91	70	130	0.3	20	
Silica	16.3	mg/L	0.20	93	70	130	2.2	20	
Sodium	690	mg/L	7.6	94	70	130	2.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17769		
<b>Sample ID: MB-17769</b>	Method Blank		Run: SUB-C97099				02/19/08 15:42		
Antimony	0.0003	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	0.0004						
Chromium	ND	mg/L	0.0002						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	0.0001						
Manganese	0.0002	mg/L	5E-05						
Molybdenum	0.0003	mg/L	0.0002						
Nickel	ND	mg/L	0.0006						
Selenium	0.0004	mg/L	0.0002						
Silver	ND	mg/L	0.0001						
Strontium	9E-05	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	4E-05						
<b>Sample ID: LCS1-17769</b>	Laboratory Control Sample		Run: SUB-C97099				02/19/08 15:50		
Antimony	0.0210	mg/L	0.050	103	80	120			
Arsenic	0.0189	mg/L	0.0010	95	80	120			
Barium	0.0221	mg/L	0.10	110	80	120			
Beryllium	0.0221	mg/L	0.010	110	80	120			
Cadmium	0.0195	mg/L	0.010	98	80	120			
Chromium	0.0196	mg/L	0.050	98	80	120			
Copper	0.0192	mg/L	0.010	96	80	120			
Lead	0.0198	mg/L	0.050	99	80	120			
Manganese	0.0198	mg/L	0.010	98	80	120			
Molybdenum	0.0171	mg/L	0.10	84	80	120			
Nickel	0.0190	mg/L	0.050	95	80	120			
Selenium	0.0967	mg/L	0.0010	96	80	120			
Silver	0.0184	mg/L	0.010	92	80	120			
Strontium	0.0106	mg/L	0.10	105	80	120			
Thallium	0.0196	mg/L	0.10	98	80	120			
Uranium	0.0190	mg/L	0.00030	95	80	120			
<b>Sample ID: C08020433-002HMS4</b>	Post Digestion Spike		Run: SUB-C97099				02/19/08 19:51		
Antimony	0.0776	mg/L	0.050	111	70	130			
Arsenic	0.0736	mg/L	0.0010	103	70	130			
Barium	0.0940	mg/L	0.10	107	70	130			
Beryllium	0.0746	mg/L	0.010	107	70	130			
Cadmium	0.0677	mg/L	0.010	97	70	130			
Chromium	0.0660	mg/L	0.050	94	70	130			
Copper	0.0649	mg/L	0.010	90	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17769		
Sample ID: C08020433-002HMS4	Post Digestion Spike			Run: SUB-C97099			02/19/08 19:51		
Lead	0.0708	mg/L	0.050	100	70	130			
Manganese	0.0873	mg/L	0.010	91	70	130			
Molybdenum	0.0878	mg/L	0.10	101	70	130			
Nickel	0.0649	mg/L	0.050	93	70	130			
Selenium	0.169	mg/L	0.0010	100	70	130			
Silver	0.0207	mg/L	0.010	52	70	130			S
Strontium	1.14	mg/L	0.10		70	130			A
Thallium	0.0714	mg/L	0.10	102	70	130			
Uranium	0.0766	mg/L	0.00030	97	70	130			
Sample ID: C08020433-002HMSD4	Post Digestion Spike Duplicate			Run: SUB-C97099			02/19/08 19:58		
Antimony	0.0775	mg/L	0.050	111	70	130	0.2	20	
Arsenic	0.0732	mg/L	0.0010	103	70	130	0.4	20	
Barium	0.0953	mg/L	0.10	109	70	130	0.0	20	
Beryllium	0.0737	mg/L	0.010	105	70	130	1.3	20	
Cadmium	0.0684	mg/L	0.010	98	70	130	1.1	20	
Chromium	0.0673	mg/L	0.050	96	70	130	1.9	20	
Copper	0.0647	mg/L	0.010	90	70	130	0.3	20	
Lead	0.0706	mg/L	0.050	100	70	130	0.3	20	
Manganese	0.0870	mg/L	0.010	90	70	130	0.3	20	
Molybdenum	0.0854	mg/L	0.10	97	70	130	0.0	20	
Nickel	0.0640	mg/L	0.050	91	70	130	1.3	20	
Selenium	0.170	mg/L	0.0010	101	70	130	0.4	20	
Silver	0.0212	mg/L	0.010	53	70	130	2.3	20	S
Strontium	1.15	mg/L	0.10		70	130	1.1	20	A
Thallium	0.0705	mg/L	0.10	101	70	130	0.0	20	
Uranium	0.0752	mg/L	0.00030	95	70	130	1.8	20	
Method: E200.8							Batch: C_R97099		
Sample ID: LRB	Method Blank			Run: SUB-C97099			02/19/08 12:20		
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	0.0002						
Chromium	0.0001	mg/L	0.0001						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	3E-05						
Mercury	5E-05	mg/L	6E-06						
Molybdenum	0.0006	mg/L	7E-05						
Nickel	0.0002	mg/L	8E-05						
Silver	ND	mg/L	3E-05						
Thorium 232	6E-05	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						

### Qualifiers:

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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.





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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97099		
Sample ID: LRB	Method Blank		Run: SUB-C97099				02/19/08 12:20		
Vanadium	ND	mg/L	9E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C97099				02/19/08 12:27		
Arsenic	0.0510	mg/L	0.0010	102	85	115			
Barium	0.0507	mg/L	0.0010	101	85	115			
Cadmium	0.0502	mg/L	0.0010	100	85	115			
Chromium	0.0518	mg/L	0.0010	103	85	115			
Copper	0.0508	mg/L	0.0010	102	85	115			
Lead	0.0509	mg/L	0.0010	102	85	115			
Manganese	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00508	mg/L	0.0010	101	85	115			
Molybdenum	0.0514	mg/L	0.0010	102	85	115			
Nickel	0.0521	mg/L	0.0010	104	85	115			
Silver	0.0228	mg/L	0.0010	114	85	115			
Thorium 232	0.0508	mg/L	0.0010	101	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			
Vanadium	0.0512	mg/L	0.0010	102	85	115			
Sample ID: R08020052-005C	Post Digestion Spike		Run: SUB-C97099				02/19/08 14:20		
Arsenic	0.0558	mg/L	0.0010	109	70	130			
Cadmium	0.0474	mg/L	0.010	95	70	130			
Chromium	0.0558	mg/L	0.050	110	70	130			
Copper	0.0512	mg/L	0.010	91	70	130			
Lead	0.0521	mg/L	0.050	104	70	130			
Manganese	2.38	mg/L	0.010		70	130			A
Mercury	0.00521	mg/L	0.0010	104	70	130			
Molybdenum	0.0670	mg/L	0.10	107	70	130			
Nickel	0.0565	mg/L	0.050	94	70	130			
Silver	0.0124	mg/L	0.010	62	70	130			S
Thorium 232	0.0556	mg/L	0.0010	111	70	130			
Uranium	0.0939	mg/L	0.00030	114	70	130			
Vanadium	0.0553	mg/L	0.10	104	70	130			
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
Sample ID: R08020052-005C	Post Digestion Spike Duplicate		Run: SUB-C97099				02/19/08 14:27		
Arsenic	0.0560	mg/L	0.0010	109	70	130	0.3	20	
Cadmium	0.0484	mg/L	0.010	97	70	130	2.0	20	
Chromium	0.0582	mg/L	0.050	115	70	130	4.2	20	
Copper	0.0508	mg/L	0.010	90	70	130	0.7	20	
Lead	0.0524	mg/L	0.050	105	70	130	0.4	20	
Manganese	2.61	mg/L	0.010		70	130	9.5	20	A
Mercury	0.00524	mg/L	0.0010	105	70	130	0.7	20	
Molybdenum	0.0692	mg/L	0.10	111	70	130	0.0	20	
Nickel	0.0561	mg/L	0.050	93	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.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R97099		
<b>Sample ID: R08020052-005C</b>	Post Digestion Spike Duplicate			Run: SUB-C97099			02/19/08 14:27		
Silver	0.0122	mg/L	0.010	61	70	130	2.0	20	S
Thorium 232	0.0564	mg/L	0.0010	113	70	130	1.4	20	
Uranium	0.0945	mg/L	0.00030	115	70	130	0.6	20	
Vanadium	0.0564	mg/L	0.10	106	70	130	0.0	20	
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
<b>Sample ID: C08020504-006AMS4</b>	Post Digestion Spike			Run: SUB-C97099			02/19/08 21:21		
Arsenic	0.511	mg/L	0.0016	102	70	130			
Barium	9.87	mg/L	0.10		70	130			A
Cadmium	0.494	mg/L	0.010	99	70	130			
Chromium	0.498	mg/L	0.050	95	70	130			
Copper	0.469	mg/L	0.010	94	70	130			
Lead	0.516	mg/L	0.050	102	70	130			
Manganese	0.523	mg/L	0.010	95	70	130			
Mercury	0.0523	mg/L	0.0010	105	70	130			
Molybdenum	0.522	mg/L	0.10	104	70	130			
Nickel	0.469	mg/L	0.050	94	70	130			
Silver	0.113	mg/L	0.010	57	70	130			S
Thorium 232	0.519	mg/L	0.0010	104	70	130			
Uranium	0.520	mg/L	0.00035	104	70	130			
Vanadium	0.645	mg/L	0.10	100	70	130			
<b>Sample ID: C08020504-006AMSD4</b>	Post Digestion Spike Duplicate			Run: SUB-C97099			02/19/08 21:28		
Arsenic	0.505	mg/L	0.0016	100	70	130	1.2	20	
Barium	9.79	mg/L	0.10		70	130	0.8	20	A
Cadmium	0.471	mg/L	0.010	94	70	130	4.9	20	
Chromium	0.509	mg/L	0.050	98	70	130	2.1	20	
Copper	0.461	mg/L	0.010	92	70	130	1.8	20	
Lead	0.513	mg/L	0.050	102	70	130	0.6	20	
Manganese	0.528	mg/L	0.010	96	70	130	1.0	20	
Mercury	0.0537	mg/L	0.0010	107	70	130	2.7	20	
Molybdenum	0.525	mg/L	0.10	105	70	130	0.5	20	
Nickel	0.462	mg/L	0.050	92	70	130	1.5	20	
Silver	0.106	mg/L	0.010	53	70	130	7.0	20	S
Thorium 232	0.519	mg/L	0.0010	104	70	130	0.1	20	
Uranium	0.521	mg/L	0.00035	104	70	130	0.2	20	
Vanadium	0.642	mg/L	0.10	100	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.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17774		
<b>Sample ID: R08020052-005I</b>	Sample Matrix Spike				Run: SUB-C97169		02/21/08 00:10		
Uranium	0.0115	mg/L	0.00030	89	70	130			
<b>Sample ID: R08020052-005I</b>	Sample Matrix Spike Duplicate				Run: SUB-C97169		02/21/08 00:15		
Uranium	0.0113	mg/L	0.00030	87	70	130	1.7	20	
<b>Sample ID: MB-17774</b>	Method Blank				Run: SUB-C97169		02/20/08 23:54		
Uranium	6E-05	mg/L							
<b>Sample ID: LCS1-17774</b>	Laboratory Control Sample				Run: SUB-C97169		02/20/08 23:58		
Uranium	0.0527	mg/L	0.00030	105	80	120			
<b>Method: E200.8</b>							Batch: C_R97169		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C97169		02/20/08 12:50		
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C97169		02/20/08 12:54		
Uranium	0.0529	mg/L	0.00030	106	85	115			
<b>Sample ID: C08020056-001BMS</b>	Sample Matrix Spike				Run: SUB-C97169		02/20/08 14:57		
Uranium	0.059	mg/L	0.00030	113	70	130			
<b>Sample ID: C08020056-001BMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97169		02/20/08 15:01		
Uranium	0.057	mg/L	0.00030	109	70	130	4.0	20	

### Qualifiers:

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ND - Not detected at the reporting limit.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17769		
<b>Sample ID: LCS-17769</b>	Laboratory Control Sample			Run: SUB-C99837			04/18/08 16:41		
Antimony	0.500	mg/L	0.050	100	85	115			
Arsenic	0.521	mg/L	0.0010	104	85	115			
Barium	0.490	mg/L	0.10	98	85	115			
Beryllium	0.531	mg/L	0.010	106	85	115			
Cadmium	0.523	mg/L	0.010	105	85	115			
Chromium	0.513	mg/L	0.050	103	85	115			
Copper	0.510	mg/L	0.010	102	85	115			
Lead	0.507	mg/L	0.050	101	85	115			
Manganese	0.509	mg/L	0.010	102	85	115			
Molybdenum	0.506	mg/L	0.10	101	85	115			
Nickel	0.518	mg/L	0.050	104	85	115			
Selenium	0.535	mg/L	0.0020	107	85	115			
Silver	0.200	mg/L	0.010	100	85	115			
Strontium	0.518	mg/L	0.10	104	85	115			
Thallium	0.514	mg/L	0.10	103	85	115			
Uranium	0.517	mg/L	0.00032	103	85	115			
<b>Sample ID: C08020433-002HMS</b>	Sample Matrix Spike			Run: SUB-C99837			04/18/08 17:21		
Antimony	0.517	mg/L	0.050	103	70	130			
Arsenic	0.535	mg/L	0.0010	107	70	130			
Barium	0.516	mg/L	0.10	99	70	130			
Beryllium	0.508	mg/L	0.010	102	70	130			
Cadmium	0.523	mg/L	0.010	105	70	130			
Chromium	0.531	mg/L	0.050	106	70	130			
Copper	0.517	mg/L	0.010	103	70	130			
Lead	0.510	mg/L	0.050	102	70	130			
Manganese	0.553	mg/L	0.010	105	70	130			
Molybdenum	0.531	mg/L	0.10	103	70	130			
Nickel	0.524	mg/L	0.050	104	70	130			
Selenium	0.545	mg/L	0.0020	105	70	130			
Strontium	1.59	mg/L	0.10	107	70	130			
Thallium	0.510	mg/L	0.10	102	70	130			
Uranium	0.525	mg/L	0.00032	103	70	130			
<b>Sample ID: C08020433-002HMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C99837			04/18/08 17:28		
Antimony	0.518	mg/L	0.050	103	70	130	0.1	20	
Arsenic	0.533	mg/L	0.0010	106	70	130	0.4	20	
Barium	0.519	mg/L	0.10	100	70	130	0.6	20	
Beryllium	0.488	mg/L	0.010	98	70	130	4.1	20	
Cadmium	0.524	mg/L	0.010	105	70	130	0.2	20	
Chromium	0.516	mg/L	0.050	103	70	130	3.0	20	
Copper	0.510	mg/L	0.010	102	70	130	1.4	20	
Lead	0.505	mg/L	0.050	101	70	130	1.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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Gillette, WY 866-886-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-680-2218

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17769		
Sample ID: C08020433-002HMSD	Sample Matrix Spike Duplicate				Run: SUB-C99837			04/18/08 17:28	
Manganese	0.541	mg/L	0.010	103	70	130	2.1	20	
Molybdenum	0.536	mg/L	0.10	104	70	130	1.0	20	
Nickel	0.517	mg/L	0.050	103	70	130	1.2	20	
Selenium	0.538	mg/L	0.0020	104	70	130	1.4	20	
Strontium	1.59	mg/L	0.10	107	70	130	0.0	20	
Thallium	0.505	mg/L	0.10	101	70	130	1.0	20	
Uranium	0.522	mg/L	0.00032	103	70	130	0.6	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>									Batch: R33407
<b>Sample ID: R08020052-001AMS</b>	Sample Matrix Spike				Run: DIONEX_080206A				02/07/08 03:13
Chloride	251	mg/L	5.4	86	80	120			
Fluoride	96.7	mg/L	0.56	90	80	120			
Nitrogen, Nitrate as N	122	mg/L	1.3	97	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120			
Sulfate	1130	mg/L	3.4	90	80	120			
<b>Sample ID: R08020052-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_080206A				02/07/08 03:28
Chloride	249	mg/L	5.4	85	80	120	0.7	10	
Fluoride	97.4	mg/L	0.56	91	80	120	0.7	10	
Nitrogen, Nitrate as N	122	mg/L	1.3	98	80	120	0.2	10	
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120	0.3	10	
Sulfate	1120	mg/L	3.4	88	80	120	0.8	10	
<b>Sample ID: R08020058-001AMS</b>	Sample Matrix Spike				Run: DIONEX_080206A				02/07/08 08:21
Chloride	8.88	mg/L	0.50	83	80	120			
Fluoride	2.39	mg/L	0.10	99	80	120			
Nitrogen, Nitrate as N	3.53	mg/L	0.10	106	80	120			
Nitrogen, Nitrite as N	2.81	mg/L	0.10	112	80	120			
Sulfate	26.8	mg/L	1.0	89	80	120			
<b>Sample ID: R08020058-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_080206A				02/07/08 08:37
Chloride	8.73	mg/L	0.50	80	80	120	1.7	10	
Fluoride	2.38	mg/L	0.10	99	80	120	0.4	10	
Nitrogen, Nitrate as N	3.44	mg/L	0.10	102	80	120	2.6	10	
Nitrogen, Nitrite as N	2.73	mg/L	0.10	109	80	120	2.9	10	
Sulfate	26.3	mg/L	1.0	86	80	120	1.8	10	
<b>Method: E300.0</b>									Batch: R33410
<b>Sample ID: LFB0802075236-1</b>	Laboratory Fortified Blank				Run: DIONEX_080207A				02/07/08 18:53
Chloride	4.86	mg/L	0.50	97	90	110			
<b>Sample ID: LFB0802075236-1</b>	Laboratory Fortified Blank				Run: DIONEX_080207A				02/07/08 19:09
Chloride	4.88	mg/L	0.50	98	90	110			
<b>Sample ID: R08020044-003AMS</b>	Sample Matrix Spike				Run: DIONEX_080207A				02/08/08 01:03
Chloride	425	mg/L	5.4	82	80	120			
<b>Sample ID: R08020044-003AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_080207A				02/08/08 01:19
Chloride	425	mg/L	5.4	82	80	120	0.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Report Date: 05/13/08

Work Order: R08020052

Client: RESPEC Inc

Project: Edgemont

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0432		
<b>Sample ID: MB-GrAB-0432</b>	Method Blank				Run: SUB-C100250			04/26/08 05:14	
Gross Alpha	2	pCi/L							
Gross Beta	0.3	pCi/L							U
<b>Sample ID: UNAT-GrAB-0432</b>	Laboratory Control Sample				Run: SUB-C100250			04/26/08 05:15	
Gross Alpha	260	pCi/L		107	70	130			
<b>Sample ID: Cs137-GrAB-0432</b>	Laboratory Control Sample				Run: SUB-C100250			04/26/08 05:14	
Gross Beta	88	pCi/L		93	70	130			
<b>Sample ID: C08040522-001AMS</b>	Sample Matrix Spike				Run: SUB-C100250			04/26/08 05:15	
Gross Alpha	250	pCi/L		98	70	130			
<b>Sample ID: C08040522-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C100250			04/26/08 05:15	
Gross Alpha	250	pCi/L		101	70	130	2.8	14.8	
<b>Sample ID: C08040522-001AMS</b>	Sample Matrix Spike				Run: SUB-C100250			04/26/08 05:14	
Gross Beta	93	pCi/L		96	70	130			
<b>Sample ID: C08040522-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C100250			04/26/08 05:14	
Gross Beta	94	pCi/L		97	70	130	0.5	16	
<b>Method: E900.0</b>							Batch: C_GrAB-0397		
<b>Sample ID: MB-GrAB-0397</b>	Method Blank				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
<b>Sample ID: UNAT-GrAB-0397</b>	Laboratory Control Sample				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	270	pCi/L	1.0	112	70	130			
<b>Sample ID: Cs137-GrAB-0397</b>	Laboratory Control Sample				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	93	pCi/L	2.0	98	70	130			
<b>Sample ID: C08011257-001AMS</b>	Sample Matrix Spike				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	440	pCi/L	1.0	90	70	130			
<b>Sample ID: C08011257-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	370	pCi/L	1.0	75	70	130	19	30	
<b>Sample ID: C08011257-001AMS</b>	Sample Matrix Spike				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	240	pCi/L	2.0	93	70	130			
<b>Sample ID: C08011257-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	260	pCi/L	2.0	114	70	130	8.0	13.3	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R96978		
<b>Sample ID: MB-R96978</b>	Method Blank				Run: SUB-C96978		02/12/08 18:40		
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: LCS-R96978</b>	Laboratory Control Sample				Run: SUB-C96978		02/12/08 18:40		
Americium 241	710	pCi/L	20	87	70	130			
Cesium 137	1200	pCi/L	20	85	70	130			
Potassium 40	6900	pCi/L	20	103	70	130			
<b>Sample ID: R08020052-008H</b>	Sample Duplicate				Run: SUB-C96978			02/12/08 18:40	
Gross Gamma	87	pCi/L	20				22	30	
Gross Gamma precision ( $\pm$ )	21	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 05/23/11

Client: RESPEC Inc

Report Date: 05/13/08

Project: Edgemont

Work Order: R08020052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2628		
<b>Sample ID: C08020423-001AMS</b>	Sample Matrix Spike				Run: SUB-C97305		02/22/08 22:24		
Radium 226	14	pCi/L	0.20	100	70	130			
<b>Sample ID: C08020423-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97305		02/22/08 23:54		
Radium 226	12	pCi/L	0.20	87	70	130	12	24.3	
<b>Sample ID: MB-RA226-2628</b>	Method Blank				Run: SUB-C97305		02/23/08 04:25		
Radium 226	ND	pCi/L	0.2						
<b>Sample ID: LCS-RA226-2628</b>	Laboratory Control Sample				Run: SUB-C97305		02/23/08 05:55		
Radium 226	13	pCi/L	0.20	99	70	130			
<b>Method: E903.0</b>							Batch: C_17774		
<b>Sample ID: R08020052-001I</b>	Sample Matrix Spike				Run: SUB-C97404		02/25/08 03:07		
Radium 226	60	pCi/L	0.20	91	70	130			
<b>Sample ID: R08020052-001I</b>	Sample Matrix Spike Duplicate				Run: SUB-C97404		02/25/08 04:38		
Radium 226	64	pCi/L	0.20	97	70	130	6.3	26	
<b>Sample ID: MB-17774</b>	Method Blank				Run: SUB-C97404		02/25/08 18:12		
Radium 226	ND	pCi/L	0.004						
<b>Sample ID: LCS-17774</b>	Laboratory Control Sample				Run: SUB-C97404		02/25/08 21:12		
Radium 226	12	pCi/L	0.20	95	70	130			

### 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>LESPEC</b>		Project Name, PWS, Permit, Etc. <b>Lower Tech Dwy Burdack</b>		Sample Origin State: _____		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: <b>LESPEC</b>		Contact Name: <b>Crystal M Harding</b>		Email: <b>crystal.harding@lespec.com</b>		Sampler: (Please Print) <b>Crystal Harding</b>	
Invoice Address: <b>LESPEC</b>		Invoice Contact & Phone: <b>Crystal Harding</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"/> POTWW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> Other: _____ <b>M-D-Y</b>		ANALYSIS REQUESTED <b>As Per Quote</b>		SEE ATTACHED <b>Normal Turnaround (TAT)</b>		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page <b>R U S H</b>	
Number of Containers Sample Type: A W S V B O Vegetation Bioassay Other		MATRIX W W W W W W W W W W		Comments: <b>All GW</b>		Shipped by: Cooler ID(e): Receipt Temp: <b>2.8 °C</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal: Y N Intact: Y N Signature Match: Y N	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date Collection Time		Laboratory USE ONLY Set 17 Set 4 Set 7 Set 9 Set 16 Set 71 Set 18 Set 6		Date/Time:	
Dew Burd GW 5 Dew Burd GW 675 Dew Burd GW 677 Dew Burd GW 42 Dew Burd GW 678 Dew Burd GW 678 Dew Burd GW 676 Dew Burd BLK 01		02-05-08 10:30 02-05-08 12:04 02-05-08 13:39 02-05-08 14:10 02-05-08 15:39 02-05-08 15:45 02-05-08 16:57 02-05-08 8:30		Received by (print): <b>Crystal M Harding</b>		Date/Time: <b>2/6/08 10:20</b>	
Signature: <b>Crystal M Harding</b>		Signature: <b>Crystal M Harding</b>		Received by (print): <b>Crystal M Harding</b>		Date/Time: <b>2/6/08 10:20</b>	
Sample Disposal:		Return to Client:		Lab Disposal:		Received by Laboratory: <b>Crystal M Harding</b>	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete this service 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-  
(605) 342-1225

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1  
06-Feb-08

Custody Seal: Y N  
Intacted: Y N  
Signature Match: Y N  
Shipped By: \_\_\_\_\_  
Receipt Temp: \_\_\_\_\_

## Subcontractor:

ELI - Casper  
PO Box 3258  
Casper, WY 82602

TEL: \_\_\_\_\_ FAX: \_\_\_\_\_

Acct #: \_\_\_\_\_

Subcontractor's Client: RESPEC Inc

Shipped By: \_\_\_\_\_

## Requested Tests

200\_7\_8-W-T  
200\_7\_8-W-SUS  
200\_7\_8-W-D  
RAD-TH-ISO-W-SU  
RAD-TH-ISO-W-D  
RAD-RN222-W  
RAD-RA226-W-SUS  
RAD-RA226-W-D  
RAD-PO210-W-SUS  
RAD-PO210-W-D  
RAD-PB210-W-SUS  
RAD-PB210-W-D  
RAD-G-GAMMA-W-  
RAD-G-ALPHABET  
CVAA-SEVI-3114-W  
CVAA-SEIV-3114-W  
CVAA-SE-3114-W-D

Sample ID	Matrix	Collection Date	Bottle Type
R08020052-001C	Aqueous	02/05/08 10:20 A	500ML-P-F-HNO3
R08020052-001D	Aqueous	02/05/08 10:20 A	500ML-P-NF-HNO3
R08020052-001E	Aqueous	02/05/08 10:20 A	500ML-P-F-HNO3
R08020052-001G	Aqueous	02/05/08 10:20 A	40ML-CG-VOA
R08020052-001H	Aqueous	02/05/08 10:20 A	1GAL-CUBE-F-HNO3
R08020052-001I	Aqueous	02/05/08 10:20 A	ZIPLOCK
R08020052-002C	Aqueous	02/05/08 12:05 P	500ML-P-F-HNO3
R08020052-002D	Aqueous	02/05/08 12:05 P	500ML-P-NF-HNO3
R08020052-002E	Aqueous	02/05/08 12:05 P	500ML-P-F-HNO3
R08020052-002G	Aqueous	02/05/08 12:05 P	40ML-CG-VOA
R08020052-002H	Aqueous	02/05/08 12:05 P	1GAL-CUBE-F-HNO3
R08020052-002I	Aqueous	02/05/08 12:05 P	ZIPLOCK
R08020052-003C	Aqueous	02/05/08 01:39 P	500ML-P-F-HNO3
R08020052-003D	Aqueous	02/05/08 01:39 P	500ML-P-NF-HNO3
R08020052-003E	Aqueous	02/05/08 01:39 P	500ML-P-F-HNO3
R08020052-003G	Aqueous	02/05/08 01:39 P	40ML-CG-VOA

Comments:

QC Level:

Date/Time

Received by:

Received by:

Date/Time

Relinquished by:

Relinquished by:

# Energy Laboratories Inc.

2821 Plant St  
Rapid City, SD 57702-  
(605) 342-1225

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1  
06-Feb-08

Custody Seal: Y N  
Intacted: Y N  
Signature Match: Y N

Shipped By: \_\_\_\_\_  
Receipt Temp: \_\_\_\_\_

## Subcontractor:

ELI - Casper  
PO Box 3258  
Casper, WY 82602  
TEL: \_\_\_\_\_  
Acct #: \_\_\_\_\_

## FAX:

Subcontractor's Client: RESPEC Inc

## Shipped By:

## Requested Tests

Sample ID	Matrix	Collection Date	Bottle Type	200_7_8-W-D	200_7_8-W-SUS	200_7_8-W-T	CVAA-SE-3114-W-D	CVAA-SEIV-3114-W	CVAA-SEVI-3114-W	RAD-G-ALPHABET A M D	RAD-G-GAMMA-W	RAD-PB210-W-D	RAD-PB210-W-SUS	RAD-PO210-W-D	RAD-PO210-W-SUS	RAD-RA226-W-D	RAD-RA228-W-SUS	RAD-RN222-W	RAD-TH-ISO-W-D	RAD-TH-ISO-W-SU
R08020052-003H	Aqueous	02/05/08 01:39 P	1GAL-CUBE-F-HNO3																	
R08020052-003I	Aqueous	02/05/08 01:39 P	ZIPLOCK																	
R08020052-004C	Aqueous	02/05/08 02:10 P	500ML-P-F-HNO3	1																
R08020052-004D	Aqueous	02/05/08 02:10 P	500ML-P-NF-HNO3																	
R08020052-004E	Aqueous	02/05/08 02:10 P	500ML-P-F-HNO3																	
R08020052-004G	Aqueous	02/05/08 02:10 P	40ML-CG-VOA																	
R08020052-004H	Aqueous	02/05/08 02:10 P	1GAL-CUBE-F-HNO3																	
R08020052-004I	Aqueous	02/05/08 02:10 P	ZIPLOCK																	
R08020052-005C	Aqueous	02/05/08 03:39 P	500ML-P-F-HNO3	1																
R08020052-005D	Aqueous	02/05/08 03:39 P	500ML-P-NF-HNO3																	
R08020052-005E	Aqueous	02/05/08 03:39 P	500ML-P-F-HNO3																	
R08020052-005G	Aqueous	02/05/08 03:39 P	40ML-CG-VOA																	
R08020052-005H	Aqueous	02/05/08 03:39 P	1GAL-CUBE-F-HNO3																	
R08020052-005I	Aqueous	02/05/08 03:39 P	ZIPLOCK																	
R08020052-006C	Aqueous	02/05/08 03:45 P	500ML-P-F-HNO3	1																
R08020052-006D	Aqueous	02/05/08 03:45 P	500ML-P-NF-HNO3																	

## Comments:

QC Level: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Received by: \_\_\_\_\_

Received by: \_\_\_\_\_

Date/Time

Date/Time

# Energy Laboratories Inc.

2821 Plant St  
Rapid City, SD 57702  
(605) 342-1225

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1  
06-Feb-08

Custody Seal: Y N  
Intacted: Y N  
Signature Match: Y N

Shipped By: \_\_\_\_\_  
Receipt Temp: \_\_\_\_\_

## Subcontractor:

ELI - Casper  
PO Box 3258  
Casper, WY 82602  
TEL: \_\_\_\_\_  
Acct #: \_\_\_\_\_

FAX: \_\_\_\_\_

Subcontractor's Client: RESPEC Inc

Shipped By: \_\_\_\_\_

## Requested Tests

Sample ID	Matrix	Collection Date	Bottle Type	200_7_8-W-D	200_7_8-W-SUS	200_7_8-W-T	CVAA-SE-3114-W-D	CVAA-SEIV-3114-W	CVAA-SEVI-3114-W	RAD-G-ALPHABET	RAD-G-GAMMA-W-	RAD-PB210-W-D	RAD-PB210-W-SUS	RAD-PO210-W-D	RAD-PO210-W-SUS	RAD-RA226-W-D	RAD-RA226-W-SUS	RAD-RN222-W	RAD-TH-ISO-W-D	RAD-TH-ISO-W-SU
R08020052-006E	Aqueous	02/05/08 03:45 P	500ML-P-F-HNO3				1	1												
R08020052-006G	Aqueous	02/05/08 03:45 P	40ML-CG-VOA																	
R08020052-006H	Aqueous	02/05/08 03:45 P	1GAL-CUBE-F-HNO3																	
R08020052-006I	Aqueous	02/05/08 03:45 P	ZIPLOCK																	
R08020052-007C	Aqueous	02/05/08 04:57 P	500ML-P-F-HNO3	1																
R08020052-007D	Aqueous	02/05/08 04:57 P	500ML-P-NF-HNO3																	
R08020052-007E	Aqueous	02/05/08 04:57 P	500ML-P-F-HNO3																	
R08020052-007G	Aqueous	02/05/08 04:57 P	40ML-CG-VOA																	
R08020052-007H	Aqueous	02/05/08 04:57 P	1GAL-CUBE-F-HNO3																	
R08020052-007I	Aqueous	02/05/08 04:57 P	ZIPLOCK																	
R08020052-008C	Aqueous	02/06/08 08:30 A	500ML-P-F-HNO3	1																
R08020052-008D	Aqueous	02/06/08 08:30 A	500ML-P-NF-HNO3																	
R08020052-008E	Aqueous	02/06/08 08:30 A	500ML-P-F-HNO3																	
R08020052-008G	Aqueous	02/06/08 08:30 A	40ML-CG-VOA																	
R08020052-008H	Aqueous	02/06/08 08:30 A	1GAL-CUBE-F-HNO3																	
R08020052-008I	Aqueous	02/06/08 08:30 A	ZIPLOCK																	

Comments:

QC Level:

Relinquished by:

Relinquished by:

Received by:

Received by:

Date/Time

Date/Time



## ANALYTICAL SUMMARY REPORT

May 06, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08020082

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 2/11/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08020082-001	DewBurd GW635	02/10/08 14:55	02/11/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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: R08020082-001  
Client Sample ID: DewBurd GW635

Report Date: 05/06/08  
Collection Date: 02/10/08 14:55  
Date Received: 02/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	120	mg/L		5		1	A2320 B	02/21/08 16:30/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/21/08 16:30/sn
Bicarbonate as HCO3	146	mg/L		5		1	A2320 B	02/21/08 16:30/sn
Calcium	132	mg/L		0.5		1	E200.7	02/26/08 23:17/eli-c
Chloride	26	mg/L		1		5	E300.0	02/14/08 16:28/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/12/08 19:21/sn
Magnesium	52.3	mg/L		0.5		1	E200.7	02/26/08 23:17/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH3 G	02/11/08 17:52/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/12/08 19:21/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/12/08 19:21/sn
Potassium	8.2	mg/L		0.5		1	E200.7	02/26/08 23:17/eli-c
Silica	10	mg/L		0.5		1	E200.7	02/26/08 23:17/eli-c
Sodium	515	mg/L	D	8		10	E200.7_8	02/26/08 14:21/eli-c
Sulfate	1470	mg/L	D	7		100	E300.0	02/14/08 16:13/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2950	umhos/cm		5.0		1	A2510 B	02/16/08 15:23/jmh
Oxidation-Reduction Potential	129.4	mV				1	A2580 B	02/11/08 00:00/sn
pH	7.91	s.u.		0.01		1	A4500-H B	02/16/08 14:58/jmh
Sodium Adsorption Ratio (SAR)	9.6	unitless		0.10		1	Calculation	04/15/08 00:00/lkl
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	02/11/08 14:56/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/21/08 20:45/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/21/08 20:45/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 20:45/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/26/08 23:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 20:45/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 20:45/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 20:45/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/26/08 23:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 20:45/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	02/21/08 20:45/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 20:45/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/21/08 20:45/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 20:45/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/19/08 11:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 18:18/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020082-001  
Client Sample ID: DewBurd GW635

Report Date: 05/06/08  
Collection Date: 02/10/08 14:55  
Date Received: 02/11/08  
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	02/21/08 20:45/eli-c
Uranium	0.0021	mg/L		0.0003		1	E200.8	02/21/08 20:45/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/21/08 20:45/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/21/08 20:45/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 22:09/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 09:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	14.8	pCi/L		1.0		1	E900.0	02/21/08 21:10/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Gross Beta	10	pCi/L		2.0		1	E900.0	02/21/08 21:10/eli-c
Gross Beta precision (±)	5.5	pCi/L				1	E900.0	02/21/08 21:10/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/21/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	1.3	pCi/L		0.2		1	E903.0	02/25/08 13:01/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	02/25/08 13:01/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/20/08 16:30/eli-c
Gross Gamma	91	pCi/L		20		1	E901.1	02/19/08 08:48/eli-c
Gross Gamma precision (±)	24	pCi/L				1	E901.1	02/19/08 08:48/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/20/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	806	pCi/L		100		1	D5072-92	02/12/08 17:03/eli-c
Radon 222 precision (±)	56.8	pCi/L				1	D5072-92	02/12/08 17:03/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 03:07/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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:** R08020082-001  
**Client Sample ID:** DewBurd GW635

**Report Date:** 05/06/08  
**Collection Date:** 02/10/08 14:55  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Arsenic	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 03:07/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/26/08 23:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 03:07/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 03:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 03:07/eli-c
Iron	1.11	mg/L		0.03		1	E200.7	02/26/08 23:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	02/21/08 03:07/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Molybdenum	0.01	mg/L		0.01		1	E200.8	02/21/08 03:07/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 03:07/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 03:07/eli-c
Strontium	4.2	mg/L		0.1		1	E200.8	02/21/08 03:07/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/21/08 03:07/eli-c
Uranium	0.0021	mg/L		0.0003		1	E200.8	02/21/08 03:07/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/26/08 23:20/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.25					1	A1030 E	04/15/08 00:00/lkl
Anions	33.7	meq/L				1	A1030 E	04/15/08 00:00/lkl
Cations	33.5	meq/L				1	A1030 E	04/15/08 00:00/lkl
Solids, Total Dissolved Calculated	2270	mg/L				1	A1030 E	04/15/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	04/15/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080221A-ALK-SEL-W							
Sample ID: MBLK1_080221A	Method Blank					Run: PH_COND1-R_080221A			02/21/08 16:26
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_080221A	Laboratory Control Sample					Run: PH_COND1-R_080221A			02/21/08 16:28
Alkalinity, Total as CaCO <sub>3</sub>	1010	mg/L	5.0	101	90	110			
Sample ID: R08020143-002BMS	Sample Matrix Spike					Run: PH_COND1-R_080221A			02/21/08 16:57
Alkalinity, Total as CaCO <sub>3</sub>	380	mg/L	5.0	96	80	120			
Sample ID: R08020143-002BMDS	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080221A			02/21/08 17:00
Alkalinity, Total as CaCO <sub>3</sub>	380	mg/L	5.0	96	80	120	0.0	20	
Method: A2510 B		Batch: 080216_1_COND-PROBE-W							
Sample ID: LCS1-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:21
Conductivity @ 25 C	154	umhos/cm	5.0	103	90	110			
Sample ID: LCS2-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:21
Conductivity @ 25 C	5060	umhos/cm	5.0	101	90	110			
Sample ID: LCS_COND-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:22
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080216	Method Blank					Run: PH_COND2-R_080216A			02/16/08 15:22
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08020082-001ADUP	Sample Duplicate					Run: PH_COND2-R_080216A			02/16/08 15:23
Conductivity @ 25 C	2980	umhos/cm	5.0				1.0	10	
Method: A2540 C		Batch: 080211A-SLDS-TDS-W							
Sample ID: MBLK1_080211A	Method Blank					Run: BAL-4-R_080211A			02/11/08 14:08
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080211A	Laboratory Control Sample					Run: BAL-4-R_080211A			02/11/08 14:09
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	104	90	110			
Sample ID: R08020065-001AMS	Sample Matrix Spike					Run: BAL-4-R_080211A			02/11/08 14:47
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	101	80	120			
Sample ID: R08020065-001AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080211A			02/11/08 14:48
Solids, Total Dissolved TDS @ 180 C	1000	mg/L	5.0	112	80	120	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: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B							Batch: R33555		
Sample ID: LCS_021108	Laboratory Control Sample				Run: PH_COND1-R_080211A		02/11/08 00:00		
Oxidation-Reduction Potential	480	mV		102	95	105			
Method: A3114 B							Batch: C_R97081		
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97081		02/19/08 12:26		
Selenium-VI	0.048	mg/L	0.0010	95	85	115			
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97081		02/19/08 12:26		
Selenium-VI	0.050	mg/L	0.0010	99	85	115	3.9	10	
Method: A3114 B							Batch: C_SE3114-080219		
Sample ID: MBLK	Method Blank				Run: SUB-C97079		02/19/08 11:44		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample				Run: SUB-C97079		02/19/08 11:47		
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97079		02/19/08 12:10		
Selenium	0.048	mg/L	0.0010	96	85	115			
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97079		02/19/08 12:12		
Selenium	0.050	mg/L	0.0010	99	85	115	3.9	10	
Method: A3114 B							Batch: C_SEIV3114-080219		
Sample ID: MBLK	Method Blank				Run: SUB-C97072		02/19/08 09:27		
Selenium-IV	0.003	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample				Run: SUB-C97072		02/19/08 09:43		
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97072		02/19/08 10:20		
Selenium-IV	0.089	mg/L	0.0010	177	85	115			S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97072		02/19/08 10:22		
Selenium-IV	0.085	mg/L	0.0010	169	85	115	5.0	10	S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									

### 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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080216_1_PH-W		
Sample ID: LCS_pH-1_080216	Laboratory Control Sample				Run: PH_COND2-R_080216A		02/16/08 14:56		
pH	6.93	s.u.	0.010	101	98.55	101.45			
Sample ID: R08020082-001ADUP	Sample Duplicate				Run: PH_COND2-R_080216A		02/16/08 14:58		
pH	7.91	s.u.	0.010				0.0	1.25	
Method: A4500-NH3 G							Batch: A2008-02-11_2_NH3_01		
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080211A		02/11/08 15:32		
Nitrogen, Ammonia as N	0.26	mg/L	0.10	102	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080211A		02/11/08 15:33		
Nitrogen, Ammonia as N	0.25	mg/L	0.10	99	90	110			
Sample ID: MBLK-5	Method Blank				Run: TECHAA2-R_080211A		02/11/08 15:34		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08020074-002CMS	Sample Matrix Spike				Run: TECHAA2-R_080211A		02/11/08 17:47		
Nitrogen, Ammonia as N	0.69	mg/L	0.10	94	80	120			
Method: D5072-92							Batch: C_R96916		
Sample ID: C08020427-001IDUP	Sample Duplicate				Run: SUB-C96916		02/12/08 17:03		
Radon 222	307	pCi/L	100				8.9	30	
Sample ID: MB-R96916	Method Blank				Run: SUB-C96916		02/12/08 17:03		
Radon 222	ND	pCi/L	100						
Sample ID: LCS-R96916	Laboratory Control Sample				Run: SUB-C96916		02/12/08 17:03		
Radon 222	301	pCi/L	100	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: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_17796		
Sample ID: MB-17796	Method Blank		Run: SUB-C97399				02/26/08 12:13		
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Zinc	0.002	mg/L	0.001						
Sample ID: LCS-17796	Laboratory Control Sample		Run: SUB-C97399				02/26/08 12:30		
Boron	0.514	mg/L	0.10	103	85	115			
Iron	0.528	mg/L	0.030	106	85	115			
Zinc	0.528	mg/L	0.010	106	85	115			
Sample ID: LCS-17796	Laboratory Control Sample		Run: SUB-C97440				02/27/08 15:39		
Boron	0.550	mg/L	0.10	110	85	115			
Iron	0.554	mg/L	0.030	111	85	115			
Zinc	0.561	mg/L	0.010	112	85	115			
Sample ID: C08020547-001BMS	Sample Matrix Spike		Run: SUB-C97440				02/27/08 18:27		
Boron	9.95	mg/L	0.13	98	70	130			
Iron	9.57	mg/L	0.087	94	70	130			
Zinc	9.71	mg/L	0.014	97	70	130			
Sample ID: C08020547-001BMSD	Sample Matrix Spike Duplicate		Run: SUB-C97440				02/27/08 18:30		
Boron	10.3	mg/L	0.13	101	70	130	3.6	20	
Iron	9.80	mg/L	0.087	97	70	130	2.4	20	
Zinc	9.90	mg/L	0.014	99	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: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R97399		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C97399			02/26/08 10:20		
Silica	1.9	mg/L	0.10	97	85	125			
Boron	1.9	mg/L	0.10	95	85	125			
Iron	1.9	mg/L	0.030	97	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C97399			02/26/08 10:23		
Calcium	25	mg/L	0.50	99	85	125			
Magnesium	24	mg/L	0.50	97	85	125			
Potassium	25	mg/L	0.50	99	85	125			
Sodium	24	mg/L	0.76	95	85	125			
<b>Sample ID: LRB</b>	Laboratory Reagent Blank			Run: SUB-C97399			02/26/08 10:30		
Silica	ND	mg/L	0.10						
Boron	0.012	mg/L	0.10						
Calcium	ND	mg/L	0.50						
Iron	ND	mg/L	0.030						
Magnesium	ND	mg/L	0.50						
Potassium	0.062	mg/L	0.50						
Sodium	ND	mg/L	0.76						
<b>Sample ID: C08020245-001DMS</b>	Sample Matrix Spike			Run: SUB-C97399			02/26/08 13:03		
Boron	205	mg/L	1.7	99	70	130			
Iron	192	mg/L	0.93	96	70	130			
Calcium	9180	mg/L	21	92	70	130			
Magnesium	9450	mg/L	7.3	90	70	130			
Potassium	21900	mg/L	4.5	91	70	130			
Silica	284	mg/L	4.0	97	70	130			
Sodium	33200	mg/L	150	65	70	130			S
<b>Sample ID: C08020245-001DMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C97399			02/26/08 13:06		
Boron	208	mg/L	1.7	101	70	130	1.5	20	
Iron	193	mg/L	0.93	97	70	130	0.6	20	
Calcium	8970	mg/L	21	90	70	130	2.3	20	
Magnesium	9400	mg/L	7.3	89	70	130	0.5	20	
Potassium	22000	mg/L	4.5	91	70	130	0.2	20	
Silica	281	mg/L	4.0	95	70	130	1.3	20	
Sodium	33200	mg/L	150	66	70	130	0.1	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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_17792
Sample ID: MB-17792	Method Blank								02/21/08 21:54
Uranium	ND	mg/L	1E-06						
Sample ID: LCS1-17792	Laboratory Control Sample								02/21/08 22:01
Uranium	0.0534	mg/L	0.00030	101	80	120			
Sample ID: R08020083-003K	Post Digestion Spike								02/21/08 23:45
Uranium	0.0251	mg/L	0.00030	100	70	130			
Sample ID: R08020083-003K	Post Digestion Spike Duplicate								02/21/08 23:53
Uranium	0.0248	mg/L	0.00030	99	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17796		
<b>Sample ID: R08020083-003B</b>	Post Digestion Spike				Run: SUB-C97150		02/21/08 06:08		
Antimony	0.251	mg/L	0.050	100	70	130			
Arsenic	0.250	mg/L	0.0010	100	70	130			
Barium	0.252	mg/L	0.10	95	70	130			
Beryllium	0.202	mg/L	0.010	81	70	130			
Cadmium	0.248	mg/L	0.010	99	70	130			
Chromium	0.252	mg/L	0.050	101	70	130			
Copper	0.255	mg/L	0.010	100	70	130			
Lead	0.252	mg/L	0.050	101	70	130			
Manganese	0.302	mg/L	0.010	106	70	130			
Molybdenum	0.282	mg/L	0.10	112	70	130			
Nickel	0.264	mg/L	0.050	101	70	130			
Selenium	0.238	mg/L	0.0011	93	70	130			
Silver	0.0830	mg/L	0.010	83	70	130			
Strontium	8.15	mg/L	0.10		70	130			A
Thallium	0.254	mg/L	0.10	102	70	130			
Uranium	0.402	mg/L	0.00030	94	70	130			
<b>Sample ID: R08020083-003B</b>	Post Digestion Spike Duplicate				Run: SUB-C97150		02/21/08 06:16		
Antimony	0.262	mg/L	0.050	105	70	130	4.3	20	
Arsenic	0.253	mg/L	0.0010	101	70	130	1.2	20	
Barium	0.253	mg/L	0.10	95	70	130	0.4	20	
Beryllium	0.201	mg/L	0.010	81	70	130	0.1	20	
Cadmium	0.251	mg/L	0.010	100	70	130	1.1	20	
Chromium	0.252	mg/L	0.050	101	70	130	0.1	20	
Copper	0.251	mg/L	0.010	99	70	130	1.4	20	
Lead	0.253	mg/L	0.050	101	70	130	0.5	20	
Manganese	0.295	mg/L	0.010	103	70	130	2.4	20	
Molybdenum	0.278	mg/L	0.10	110	70	130	1.6	20	
Nickel	0.269	mg/L	0.050	103	70	130	1.7	20	
Selenium	0.240	mg/L	0.0011	94	70	130	0.6	20	
Silver	0.107	mg/L	0.010	107	70	130	26	20	R
Strontium	7.93	mg/L	0.10		70	130	2.7	20	A
Thallium	0.254	mg/L	0.10	102	70	130	0.0	20	
Uranium	0.406	mg/L	0.00030	95	70	130	1.0	20	
<b>Sample ID: MB-17796</b>	Method Blank				Run: SUB-C97150		02/21/08 02:45		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0004						

### 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.

R - RPD exceeds advisory limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17796		
<b>Sample ID: MB-17796</b>	Method Blank		Run: SUB-C97150				02/21/08 02:45		
Chromium	ND	mg/L	0.0002						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	0.0001						
Manganese	0.0001	mg/L	5E-05						
Mercury	9E-05	mg/L	3E-05						
Molybdenum	0.001	mg/L	0.0002						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	0.0001						
Strontium	ND	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	0.0004	mg/L	4E-05						
<b>Sample ID: LCS-17796</b>	Laboratory Control Sample		Run: SUB-C97150				02/21/08 03:00		
Antimony	0.0484	mg/L	0.050	97	85	115			
Arsenic	0.0492	mg/L	0.0010	98	85	115			
Barium	0.0487	mg/L	0.10	97	85	115			
Beryllium	0.0492	mg/L	0.010	98	85	115			
Cadmium	0.0492	mg/L	0.010	98	85	115			
Chromium	0.0490	mg/L	0.050	98	85	115			
Copper	0.0488	mg/L	0.010	98	85	115			
Lead	0.0492	mg/L	0.050	98	85	115			
Manganese	0.0480	mg/L	0.010	96	85	115			
Molybdenum	0.0509	mg/L	0.10	99	85	115			
Nickel	0.0501	mg/L	0.050	100	85	115			
Selenium	0.0485	mg/L	0.0010	97	85	115			
Silver	0.0218	mg/L	0.010	109	85	115			
Strontium	0.0475	mg/L	0.10	95	85	115			
Thallium	0.0495	mg/L	0.10	99	85	115			
Uranium	0.0479	mg/L	0.00030	95	85	115			
<b>Sample ID: MB-17796</b>	Method Blank		Run: SUB-C97226				02/21/08 20:25		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0002						
Chromium	ND	mg/L	0.0003						
Copper	ND	mg/L	8E-05						
Lead	ND	mg/L	0.0001						
Manganese	0.0001	mg/L	5E-05						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17796		
<b>Sample ID: MB-17796</b>	Method Blank		Run: SUB-C97226				02/21/08 20:25		
Molybdenum	ND	mg/L	0.0002						
Nickel	8E-05	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Strontium	9E-05	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	4E-05						
<b>Sample ID: LCS1-17796</b>	Laboratory Control Sample		Run: SUB-C97226				02/21/08 20:32		
Antimony	0.0195	mg/L	0.050	97	80	120			
Arsenic	0.0197	mg/L	0.0010	99	80	120			
Barium	0.0206	mg/L	0.10	103	80	120			
Beryllium	0.0202	mg/L	0.010	101	80	120			
Cadmium	0.0209	mg/L	0.010	104	80	120			
Chromium	0.0187	mg/L	0.050	93	80	120			
Copper	0.0197	mg/L	0.010	98	80	120			
Lead	0.0204	mg/L	0.050	102	80	120			
Manganese	0.0192	mg/L	0.010	96	80	120			
Molybdenum	0.0216	mg/L	0.10	108	80	120			
Nickel	0.0194	mg/L	0.050	97	80	120			
Selenium	0.101	mg/L	0.0010	101	80	120			
Strontium	0.0105	mg/L	0.10	105	80	120			
Thallium	0.0202	mg/L	0.10	101	80	120			
Uranium	0.0197	mg/L	0.00030	98	80	120			
<b>Sample ID: LCS-17796</b>	Laboratory Control Sample		Run: SUB-C97226				02/21/08 20:39		
Antimony	0.0502	mg/L	0.050	100	85	115			
Arsenic	0.0518	mg/L	0.0010	104	85	115			
Barium	0.0520	mg/L	0.10	104	85	115			
Beryllium	0.0522	mg/L	0.010	104	85	115			
Cadmium	0.0526	mg/L	0.010	105	85	115			
Chromium	0.0509	mg/L	0.050	102	85	115			
Copper	0.0494	mg/L	0.010	99	85	115			
Lead	0.0522	mg/L	0.050	104	85	115			
Manganese	0.0505	mg/L	0.010	101	85	115			
Molybdenum	0.0534	mg/L	0.10	107	85	115			
Nickel	0.0496	mg/L	0.050	99	85	115			
Selenium	0.0509	mg/L	0.0010	102	85	115			
Strontium	0.0518	mg/L	0.10	104	85	115			
Thallium	0.0523	mg/L	0.10	105	85	115			
Uranium	0.0506	mg/L	0.00030	101	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: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17796		
<b>Sample ID: R08020083-003B</b>		Post Digestion Spike		Run: SUB-C97226			02/21/08 21:39		
Antimony	0.268	mg/L	0.050	107	70	130			
Arsenic	0.265	mg/L	0.0010	106	70	130			
Barium	0.273	mg/L	0.10	103	70	130			
Beryllium	0.201	mg/L	0.010	80	70	130			
Cadmium	0.256	mg/L	0.010	102	70	130			
Copper	0.254	mg/L	0.010	99	70	130			
Lead	0.264	mg/L	0.050	106	70	130			
Nickel	0.270	mg/L	0.050	100	70	130			
Selenium	0.269	mg/L	0.0011	104	70	130			
Silver	0.0875	mg/L	0.010	88	70	130			
Strontium	9.41	mg/L	0.10		70	130			A
Thallium	0.267	mg/L	0.10	107	70	130			
Uranium	0.439	mg/L	0.00030	106	70	130			

- Matrix spike recoveries outside the acceptance range are considered matrix-related.

<b>Sample ID: R08020083-003B</b>		Post Digestion Spike Duplicate		Run: SUB-C97226			02/21/08 21:46		
Antimony	0.266	mg/L	0.050	106	70	130	1.0	20	
Arsenic	0.268	mg/L	0.0010	107	70	130	1.1	20	
Barium	0.273	mg/L	0.10	103	70	130	0.1	20	
Beryllium	0.210	mg/L	0.010	84	70	130	4.4	20	
Cadmium	0.263	mg/L	0.010	105	70	130	2.7	20	
Copper	0.254	mg/L	0.010	100	70	130	0.1	20	
Lead	0.265	mg/L	0.050	106	70	130	0.2	20	
Nickel	0.265	mg/L	0.050	98	70	130	1.7	20	
Selenium	0.274	mg/L	0.0011	106	70	130	1.8	20	
Silver	0.107	mg/L	0.010	107	70	130	20	20	R
Strontium	9.41	mg/L	0.10		70	130	0.0	20	A
Thallium	0.267	mg/L	0.10	107	70	130	0.2	20	
Uranium	0.431	mg/L	0.00030	103	70	130	2.0	20	

- Matrix spike recoveries outside the acceptance range are considered matrix-related.

### 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.

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R97199		
<b>Sample ID: CCB</b>	Method Blank		Run: SUB-C97199				02/21/08 13:16		
Aluminum	0.0003	mg/L	0.0001						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	8E-05						
Cadmium	ND	mg/L	8E-05						
Chromium	ND	mg/L	0.0002						
Copper	ND	mg/L	6E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	4E-05						
Mercury	ND	mg/L	4E-05						
Molybdenum	ND	mg/L							
Nickel	ND	mg/L	5E-05						
Thorium 232	ND	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	6E-05						
Zinc	ND	mg/L	0.0001						
<b>Sample ID: LFB</b>							Run: SUB-C97199		
Laboratory Fortified Blank							02/21/08 13:36		
Aluminum	0.0520	mg/L	0.0010	103	85	115			
Arsenic	0.0520	mg/L	0.0010	104	85	115			
Barium	0.0546	mg/L	0.0010	109	85	115			
Cadmium	0.0540	mg/L	0.0010	108	85	115			
Chromium	0.0523	mg/L	0.0010	105	85	115			
Copper	0.0526	mg/L	0.0010	105	85	115			
Lead	0.0519	mg/L	0.0010	104	85	115			
Manganese	0.0511	mg/L	0.0010	102	85	115			
Mercury	0.00510	mg/L	0.0010	102	85	115			
Molybdenum	0.0551	mg/L	0.0010	110	85	115			
Nickel	0.0517	mg/L	0.0010	103	85	115			
Thorium 232	0.0519	mg/L	0.0010	104	85	115			
Uranium	0.0513	mg/L	0.00030	103	85	115			
Vanadium	0.0526	mg/L	0.0010	105	85	115			
Zinc	0.0565	mg/L	0.0010	113	85	115			
<b>Sample ID: R08020083-002A</b>							Run: SUB-C97199		
Sample Matrix Spike							02/21/08 21:39		
Aluminum	102	mg/L	0.10		70	130			A
Arsenic	0.0550	mg/L	0.0010	101	70	130			
Barium	0.0567	mg/L	0.10	106	70	130			
Cadmium	0.0822	mg/L	0.010	91	70	130			
Chromium	0.0406	mg/L	0.050	55	70	130			S
Copper	0.178	mg/L	0.010	90	70	130			
Lead	0.0528	mg/L	0.050	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.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97199		
Sample ID: R08020083-002A	Sample Matrix Spike			Run: SUB-C97199			02/21/08 21:39		
Manganese	162	mg/L	0.010		70	130			A
Mercury	0.00485	mg/L	0.0010	97	70	130			
Molybdenum	0.0530	mg/L	0.10	106	70	130			
Nickel	6.31	mg/L	0.050		70	130			A
Thorium 232	0.0665	mg/L	0.0010	107	70	130			
Uranium	7.81	mg/L	0.00030		70	130			A
Vanadium	0.0289	mg/L	0.10	57	70	130			S
Zinc	6.36	mg/L	0.010		70	130			A
Method: E200.8							Batch: C_R97313		
Sample ID: LRB	Method Blank			Run: SUB-C97313			02/22/08 14:40		
Silver	0.0005	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C97313			02/22/08 16:36		
Silver	0.0196	mg/L	0.0010	95	85	115			
Sample ID: R08020083-002A	Post Digestion Spike			Run: SUB-C97313			02/22/08 17:57		
Silver	0.0166	mg/L	0.010	83	70	130			
Sample ID: R08020083-002A	Post Digestion Spike Duplicate			Run: SUB-C97313			02/22/08 18:04		
Silver	0.0149	mg/L	0.010	74	70	130	11	20	
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C97313			02/22/08 14:46		
Silver	0.0153	mg/L	0.0010	74	85	115			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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R33470		
Sample ID: LFB0802125708-1	Laboratory Fortified Blank			Run: DIONEX_080212A			02/12/08 18:04		
Fluoride	1.76	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.22	mg/L	0.10	99	90	110			
Nitrogen, Nitrite as N	2.19	mg/L	0.10	97	90	110			
Sample ID: LFB0802125708-1	Laboratory Fortified Blank			Run: DIONEX_080212A			02/12/08 18:20		
Fluoride	1.70	mg/L	0.10	94	90	110			
Nitrogen, Nitrate as N	2.24	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N	2.20	mg/L	0.10	98	90	110			
Sample ID: R08020082-001AMS	Sample Matrix Spike			Run: DIONEX_080212A			02/12/08 18:50		
Fluoride	89.3	mg/L	0.56	89	80	120			
Nitrogen, Nitrate as N	104	mg/L	1.3	83	80	120			
Nitrogen, Nitrite as N	95.4	mg/L	2.9	76	80	120			S
Sample ID: R08020082-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080212A			02/12/08 19:06		
Fluoride	88.8	mg/L	0.56	89	80	120	0.6	10	
Nitrogen, Nitrate as N	101	mg/L	1.3	81	80	120	2.6	10	
Nitrogen, Nitrite as N	99.4	mg/L	2.9	80	80	120	4.1	10	
Method: E300.0							Batch: R33510		
Sample ID: LFB0802130124-1	Laboratory Fortified Blank			Run: DIONEX_080214A			02/14/08 15:42		
Chloride	5.60	mg/L	0.50	112	90	110			S
Sulfate	14.9	mg/L	1.0	99	90	110			
Sample ID: LFB0802130124-1	Laboratory Fortified Blank			Run: DIONEX_080214A			02/14/08 15:57		
Chloride	5.29	mg/L	0.50	106	90	110			
Sulfate	14.3	mg/L	1.0	95	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: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0397		
<b>Sample ID: MB-GrAB-0397</b>	Method Blank				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
<b>Sample ID: UNAT-GrAB-0397</b>	Laboratory Control Sample				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	270	pCi/L	1.0	112	70	130			
<b>Sample ID: Cs137-GrAB-0397</b>	Laboratory Control Sample				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	93	pCi/L	2.0	98	70	130			
<b>Sample ID: C08011257-001AMS</b>	Sample Matrix Spike				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	440	pCi/L	1.0	90	70	130			
<b>Sample ID: C08011257-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97233			02/21/08 08:44	
Gross Alpha	370	pCi/L	1.0	75	70	130	19	30	
<b>Sample ID: C08011257-001AMS</b>	Sample Matrix Spike				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	240	pCi/L	2.0	93	70	130			
<b>Sample ID: C08011257-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97233			02/21/08 08:44	
Gross Beta	260	pCi/L	2.0	114	70	130	8.0	13.3	
<b>Method: E901.1</b>							Batch: C_R97137		
<b>Sample ID: LCS-R97137</b>	Laboratory Control Sample				Run: SUB-C97137			02/19/08 08:48	
Americium 241	720	pCi/L	20	88	70	130			
Cesium 137	1200	pCi/L	20	82	70	130			
Potassium 40	7400	pCi/L	20	111	70	130			
<b>Sample ID: MB-R97137</b>	Method Blank				Run: SUB-C97137			02/19/08 08:48	
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R08020083-003I</b>	Sample Duplicate				Run: SUB-C97137			02/19/08 08:48	
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/06/08

Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-2633		
Sample ID: R08020083-003K	Sample Matrix Spike				Run: SUB-C97303				02/25/08 14:45
Radium 226	120	pCi/L	0.20	95	70	130			
Sample ID: R08020083-003K	Sample Matrix Spike Duplicate				Run: SUB-C97303				02/25/08 14:45
Radium 226	120	pCi/L	0.20	92	70	130	2.6	24.9	
Sample ID: LCS-17792	Laboratory Control Sample				Run: SUB-C97303				02/25/08 14:45
Radium 226	12	pCi/L	0.20	95	70	130			
Sample ID: MB-17792	Method Blank				Run: SUB-C97303				02/25/08 14:45
Radium 226	ND	pCi/L	0.2						
Method: E903.0							Batch: C_RA226-2636		
Sample ID: C08020433-002AMS	Sample Matrix Spike				Run: SUB-C97306				02/25/08 14:46
Radium 226	8.3	pCi/L	0.20	96	70	130			
Sample ID: C08020433-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97306				02/25/08 14:46
Radium 226	7.8	pCi/L	0.20	90	70	130	6.2	24.9	
Sample ID: MB-RA226-2636	Method Blank				Run: SUB-C97306				02/25/08 14:46
Radium 226	ND	pCi/L	0.2						
Sample ID: LCS-RA226-2636	Laboratory Control Sample				Run: SUB-C97306				02/25/08 14:46
Radium 226	6.8	pCi/L	0.20	108	70	130			
Method: E907.0							Batch: C_17792		
Sample ID: R08020131-001K	Sample Duplicate				Run: SUB-C97814				02/21/08 16:15
Thorium 230	0.332	pCi/L	0.20		70	130	15	30	
Sample ID: LCS-17792	Laboratory Control Sample				Run: SUB-C97814				02/21/08 16:15
Thorium 230	32.7	pCi/g-dry	0.10	67	70	130			S
- LCS response is below the acceptance range for this analysis. Since the MB and the RPDs for all 3 MDs are acceptable the batch is approved.									
Sample ID: MB-17792	Method Blank				Run: SUB-C97814				02/21/08 16:15
Thorium 230	ND	pCi/g-dry							

### 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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R98124		
Sample ID: LCS-R98124	Laboratory Control Sample				Run: SUB-C98124		02/20/08 16:30		
Thorium 230	4.40	pCi/L	0.20	66	70	130			S
- LCS response is below the acceptance range for this analysis. Since the MB and the RPDs for for this batch are acceptable the batch is approved.									
Sample ID: C08020336-005HMS	Sample Matrix Spike				Run: SUB-C98124		02/20/08 16:30		
Thorium 230	13.0	pCi/L	0.20	77	70	130			
Sample ID: C08020336-005HMSD	Sample Matrix Spike Duplicate				Run: SUB-C98124		02/20/08 16:30		
Thorium 230	11.8	pCi/L	0.20	71	70	130	9.7	30	
Sample ID: MB-R98124	Method Blank				Run: SUB-C98124		02/20/08 16:30		
Thorium 230	0.1	pCi/L							
Method: E909.0M							Batch: C_R97461		
Sample ID: C08020617-003FMS	Sample Matrix Spike				Run: SUB-C97461		02/21/08 10:45		
Lead 210	170	pCi/L	1.0	89	70	130			
Sample ID: C08020617-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C97461		02/21/08 10:45		
Lead 210	230	pCi/L	1.0	122	70	130	32	30	R
- The RPD for the spike 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: C08020617-008FDUP	Sample Duplicate				Run: SUB-C97461		02/21/08 10:45		
Lead 210	-3.3	pCi/L	1.0				0.0	30	
Sample ID: MB-R97461	Method Blank				Run: SUB-C97461		02/21/08 10:45		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R97461	Laboratory Control Sample				Run: SUB-C97461		02/21/08 10:45		
Lead 210	85	pCi/L	1.0	71	70	130			
Method: RMO-3008							Batch: C_R97290		
Sample ID: R08020130-004I	Sample Duplicate				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	ND	pCi/L	1.0				0.0	30	
Sample ID: LCS-17696	Laboratory Control Sample				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	18	pCi/L	1.0	80	70	130			
Sample ID: MB-17696	Method Blank				Run: SUB-C97290		02/21/08 15:15		
Polonium 210	ND	pCi/L	0.02						

### 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: 05/06/08  
Work Order: R08020082

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R97982		
Sample ID: R08020220-005H	Sample Matrix Spike				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	160	pCi/L	1.0	70	70	130			
Sample ID: R08020220-005H	Sample Matrix Spike Duplicate				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	170	pCi/L	1.0	74	70	130	6.4	30	
Sample ID: LCS-R97982	Laboratory Control Sample				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	78	pCi/L	1.0	68	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MS, MSD and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R97982	Method Blank				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	2	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



# Chain of Custody and Analytical Request Record

PLEASE PRINT. Provide as much information as possible.

Company Name: RESPEC		Project Name, PWS, Permit, Etc. Powitah Dewey Burdock		Sample Origin: State: Yes <input type="checkbox"/> No <input type="checkbox"/>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: RESPEC		Contact Name: Cory Foreman Phone/Fax:		Email:	Sampler: (Please Print) Cory Foreman
Invoice Address: RESPEC		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"/> NEIAC <input type="checkbox"/> State: <input type="checkbox"/> Other:			Number of Containers: Sample Type: AWSVBO Air Water Soils/Solids Vegetation Bioassay Other		
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	
1. DelBurd GW635		2/10/08	14:55	W	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
Custody Record MUST be Signed		Relinquished by (print): Matt Steberg	Date/Time: 2-11-08	Signature: [Signature]	Received by (print): Steve Truitt
Sample Disposal: Return to Client:		Lab Disposal:		Received by Laboratory:	Date/Time: 2-11-08 9:00
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 for additional information, downloadable fee schedule, forms, and links.		LABORATORY USE ONLY			



## ANALYTICAL SUMMARY REPORT

May 08, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08020130

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 2/12/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08020130-001	DewBurd <del>GW4</del> GW2	02/12/08 <del>9:52</del> 10:21	02/12/08	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 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
R08020130-002	DewBurd <del>GW2</del> GW4	02/12/08 <del>10:21</del> 11:52	02/12/08	Aqueous	Same As Above
R08020130-003	DewBurd GW18	02/12/08 11:08	02/12/08	Aqueous	Same As Above
R08020130-004	DewBurd GW4002	02/12/08 11:47	02/12/08	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



## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by RESPEC Inc on 2/12/2008 3:38:00 PM. These samples were assigned ELI Workorder Number R08020130.

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 were 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: C08020548

Comments imported for SUBBED Workorder: B08031411

Prep Comments for Sample R08020130-001D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 12.9 days.

Prep Comments for Sample R08020130-002D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 12.9 days.

Prep Comments for Sample R08020130-003D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 12.8 days.

Prep Comments for Sample R08020130-004D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 12.8 days.

End of comments imported for SUBBED Workorder: B08031411

End of comments imported for SUBBED Workorder: C08020548



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08020130-001

Client Sample ID: DewBurd ~~GW4~~  
6W2

Report Date: 05/08/08

Collection Date: 02/12/08 09:52 10:21

Date Received: 02/12/08

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	208	mg/L		5		1		A2320 B	02/21/08 16:38/sn
Carbonate as CO3	ND	mg/L		5		1		A2320 B	02/21/08 16:38/sn
Bicarbonate as HCO3	254	mg/L		5		1		A2320 B	02/21/08 16:38/sn
Calcium	54.0	mg/L		0.5		1		E200.7	02/27/08 20:29/eli-c
Chloride	11	mg/L		1		1		E300.0	02/14/08 21:21/sn
Fluoride	0.3	mg/L		0.1		1		E300.0	02/14/08 21:21/sn
Magnesium	17.6	mg/L		0.5		1		E200.7	02/27/08 20:29/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1		A4500-NH3 G	02/19/08 12:24/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1		E300.0	02/14/08 21:21/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1		E300.0	02/14/08 21:21/sn
Potassium	11.5	mg/L		0.5		1		E200.7	02/27/08 20:29/eli-c
Silica	8.7	mg/L		0.1		1		E200.7	02/27/08 20:29/eli-c
Sodium	276	mg/L	D	0.8		1		E200.7	02/27/08 20:29/eli-c
Sulfate	639	mg/L		1		5		E300.0	02/14/08 21:05/sn
PHYSICAL PROPERTIES									
Conductivity @ 25 C	1580	umhos/cm		5.0		1		A2510 B	02/16/08 15:30/jmh
Oxidation-Reduction Potential	190	mV				1		A2580 B	02/13/08 00:00/sn
pH	7.93	s.u.		0.01		1		A4500-H B	02/16/08 15:03/jmh
Sodium Adsorption Ratio (SAR)	8.3	Unitless		0.10		1		Calculation	02/27/08 20:29/krs
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1		A2540 C	02/19/08 14:20/jmh
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1		1		E200.8	02/22/08 19:39/eli-c
Arsenic	ND	mg/L		0.001		1		E200.8	02/22/08 19:39/eli-c
Barium	ND	mg/L		0.1		1		E200.8	02/22/08 19:39/eli-c
Boron	ND	mg/L		0.1		1		E200.7	02/27/08 20:29/eli-c
Cadmium	ND	mg/L		0.005		1		E200.8	02/22/08 19:39/eli-c
Chromium	ND	mg/L		0.05		1		E200.8	02/22/08 19:39/eli-c
Copper	ND	mg/L		0.01		1		E200.8	02/22/08 19:39/eli-c
Iron	ND	mg/L		0.03		1		E200.7	02/27/08 20:29/eli-c
Lead	ND	mg/L		0.001		1		E200.8	02/22/08 19:39/eli-c
Manganese	0.09	mg/L		0.01		1		E200.8	02/22/08 19:39/eli-c
Mercury	ND	mg/L		0.001		1		E200.8	02/22/08 19:39/eli-c
Molybdenum	ND	mg/L		0.1		1		E200.8	02/22/08 19:39/eli-c
Nickel	ND	mg/L		0.05		1		E200.8	02/22/08 19:39/eli-c
Selenium	ND	mg/L		0.001		1		A3114 B	02/19/08 11:55/eli-c
Silver	ND	mg/L		0.005		1		E200.8	02/22/08 19:39/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 12

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08020130-001

Client Sample ID: DewBurd ~~GW4~~  
GW2

Report Date: 05/08/08

Collection Date: 02/12/08 09:52 10:21

Date Received: 02/12/08

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	02/22/08 19:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/22/08 19:39/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/22/08 19:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/22/08 19:39/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 22:53/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 09:52/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.7	pCi/L		1.0		1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	1.2	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Beta	22.1	pCi/L		2.0		1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/21/08 10:45/eli-c
Polonium 210	2.1	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	2.0	pCi/L				1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	1.1	pCi/L		0.2		1	E903.0	03/03/08 19:46/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/03/08 19:46/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/22/08 14:15/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/19/08 08:48/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/20/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	792	pCi/L	H	100		1	D5072-92	02/19/08 02:27/eli-c
Radon 222 precision (±)	122	pCi/L	H			1	D5072-92	02/19/08 02:27/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 04:53/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c

- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.

### TOTAL METALS ANALYSES

Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 04:53/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 2 of 12

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

H - Analysis performed past recommended holding time.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08020130-001

Client Sample ID: DewBurd ~~GW4~~  
662

Report Date: 05/08/08

Collection Date: 02/12/08 09:52 / 10:21

Date Received: 02/12/08

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 04:53/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 20:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 04:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 04:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 04:53/eli-c
Iron	1.48	mg/L		0.03		1	E200.7	02/27/08 20:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	02/21/08 04:53/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 11:50/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/21/08 04:53/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 04:53/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 04:53/eli-c
Strontium	1.7	mg/L		0.1		1	E200.8	02/21/08 04:53/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/21/08 04:53/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 04:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/27/08 20:42/eli-c
DATA QUALITY								
A/C Balance (± 5)	-3.82	%				1	A1030 E	05/07/08 09:15/krs
Anions	17.8	meq/L				1	A1030 E	05/07/08 09:15/krs
Cations	16.5	meq/L				1	A1030 E	05/07/08 09:15/krs
Solids, Total Dissolved Calculated	1160	mg/L				1	A1030 E	05/07/08 09:15/krs
TDS Balance (0.80 - 1.20)	0.940	dec. %				1	A1030 E	05/07/08 09:15/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020130-002  
Client Sample ID: DewBurd GW2  
624

Report Date: 05/08/08  
Collection Date: 02/12/08 10:21 9:52  
Date Received: 02/12/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	88	mg/L		5		1	A2320 B	02/21/08 16:40/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/21/08 16:40/sn
Bicarbonate as HCO3	107	mg/L		5		1	A2320 B	02/21/08 16:40/sn
Calcium	241	mg/L		0.5		1	E200.7	02/27/08 20:32/eli-c
Chloride	26	mg/L		1		5	E300.0	02/14/08 21:52/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/14/08 22:07/sn
Magnesium	87.0	mg/L		0.5		1	E200.7	02/27/08 20:32/eli-c
Nitrogen, Ammonia as N	0.8	mg/L		0.1		1	A4500-NH3 G	02/19/08 12:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/14/08 22:07/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/14/08 22:07/sn
Potassium	7.8	mg/L		0.5		1	E200.7	02/27/08 20:32/eli-c
Silica	10.2	mg/L		0.5		1	E200.7	02/27/08 20:32/eli-c
Sodium	716	mg/L	D	8		10	E200.7	02/27/08 17:54/eli-c
Sulfate	2440	mg/L	D	7		100	E300.0	02/14/08 21:36/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	4400	umhos/cm		5.0		1	A2510 B	02/16/08 15:39/jmh
Oxidation-Reduction Potential	120	mV				1	A2580 B	02/13/08 00:00/sn
pH	7.94	s.u.		0.01		1	A4500-H B	02/16/08 15:04/jmh
Sodium Adsorption Ratio (SAR)	10	Unitless		0.10		1	Calculation	02/27/08 20:32/krs
Solids, Total Dissolved TDS @ 180 C	3700	mg/L		5		1	A2540 C	02/19/08 14:24/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/22/08 19:59/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/22/08 19:59/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/22/08 19:59/eli-c
Boron	0.7	mg/L		0.1		1	E200.7	02/27/08 20:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/22/08 19:59/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/22/08 19:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/22/08 19:59/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/27/08 20:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/22/08 19:59/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	02/22/08 19:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/22/08 19:59/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/22/08 19:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/22/08 19:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/19/08 11:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 19:59/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-002  
Client Sample ID: DewBurd ~~GW2~~  
6W4

Report Date: 05/08/08  
Collection Date: 02/12/08 10:21 4:52  
Date Received: 02/12/08  
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	02/22/08 19:59/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	02/22/08 19:59/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/22/08 19:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/22/08 19:59/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 23:01/eli-c
METALS - SPECIATED								
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	02/19/08 10:07/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.5	pCi/L		1.0		1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	3.1	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Beta	14.4	pCi/L		2.0		1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	7.2	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/21/08 10:45/eli-c
Polonium 210	2.7	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	2.1	pCi/L				1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	1.1	pCi/L		0.2		1	E903.0	03/03/08 21:17/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/03/08 21:17/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/22/08 14:15/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/19/08 08:48/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/20/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	0.7	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	908	pCi/L	H	100		1	D5072-92	02/19/08 02:27/eli-c
Radon 222 precision (±)	123	pCi/L	H			1	D5072-92	02/19/08 02:27/eli-c
- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.								
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 05:00/eli-c
Report	RL - Analyte reporting limit.			MCL - Maximum contaminant level.			Page 5 of 12	
Definitions:	QCL - Quality control limit.			ND - Not detected at the reporting limit.				
	H - Analysis performed past recommended holding time.							



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-002  
Client Sample ID: DewBurd ~~GW2~~  
GW4

Report Date: 05/08/08  
Collection Date: 02/12/08 ~~10:21~~ 9:52  
Date Received: 02/12/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>TOTAL METALS ANALYSES</b>								
Arsenic	ND	mg/L		0.001		1	E200.8	02/21/08 05:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 05:00/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/21/08 05:00/eli-c
Boron	0.6	mg/L		0.1		1	E200.7	02/27/08 20:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 05:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 05:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 05:00/eli-c
Iron	1.32	mg/L		0.03		1	E200.7	02/27/08 20:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 05:00/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	02/21/08 05:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 11:52/eli-b
Molybdenum	0.02	mg/L		0.01		1	E200.8	02/21/08 05:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 05:00/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	02/21/08 05:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 05:00/eli-c
Strontium	5.7	mg/L		0.1		1	E200.8	02/21/08 05:00/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/21/08 05:00/eli-c
Uranium	ND	mg/L	D	0.0005		1	E200.8	02/21/08 05:00/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/27/08 20:45/eli-c
<b>DATA QUALITY</b>								
A/C Balance ( $\pm 5$ )	-2.60	%				1	A1030 E	05/07/08 09:18/krs
Anions	53.3	meq/L				1	A1030 E	05/07/08 09:18/krs
Cations	50.6	meq/L				1	A1030 E	05/07/08 09:18/krs
Solids, Total Dissolved Calculated	3600	mg/L				1	A1030 E	05/07/08 09:18/krs
TDS Balance (0.80 - 1.20)	1.02	dec. %				1	A1030 E	05/07/08 09:18/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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:** R08020130-003  
**Client Sample ID:** DewBurd GW18

**Report Date:** 05/08/08  
**Collection Date:** 02/12/08 11:08  
**Date Received:** 02/12/08  
**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	02/21/08 16:43/sn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	02/21/08 16:43/sn
Bicarbonate as HCO <sub>3</sub>	219	mg/L		5		1	A2320 B	02/21/08 16:43/sn
Calcium	34.0	mg/L		0.5		1	E200.7	02/27/08 20:35/eli-c
Chloride	14	mg/L		1		1	E300.0	02/14/08 22:53/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/14/08 22:53/sn
Magnesium	12.2	mg/L		0.5		1	E200.7	02/27/08 20:35/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	02/19/08 12:29/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/14/08 22:53/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/14/08 22:53/sn
Potassium	7.3	mg/L		0.5		1	E200.7	02/27/08 20:35/eli-c
Silica	7.8	mg/L		0.5		1	E200.7	02/27/08 20:35/eli-c
Sodium	270	mg/L	D	0.8		1	E200.7	02/27/08 20:35/eli-c
Sulfate	537	mg/L		1		5	E300.0	02/14/08 22:38/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1450	umhos/cm		5.0		1	A2510 B	02/16/08 15:40/jmh
Oxidation-Reduction Potential	130	mV				1	A2580 B	02/13/08 00:00/sn
pH	8.11	s.u.		0.01		1	A4500-H B	02/16/08 15:05/jmh
Sodium Adsorption Ratio (SAR)	10	Unitless		0.10		1	Calculation	02/27/08 20:35/krs
Solids, Total Dissolved TDS @ 180 C	960	mg/L		5		1	A2540 C	02/19/08 14:26/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.7	02/27/08 20:35/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/22/08 20:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/22/08 20:33/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 20:35/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/22/08 20:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/22/08 20:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/22/08 20:33/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/27/08 20:35/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/22/08 20:33/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	02/22/08 20:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/22/08 20:33/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/22/08 20:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/22/08 20:33/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/19/08 11:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 20:33/eli-c

**Report** RL - Analyte reporting limit.

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

D - RL increased due to sample matrix interference.

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: R08020130-003  
Client Sample ID: DewBurd GW18

Report Date: 05/08/08  
Collection Date: 02/12/08 11:08  
Date Received: 02/12/08  
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	02/22/08 20:33/eli-c
Uranium	0.0066	mg/L		0.0003		1	E200.8	02/22/08 20:33/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/22/08 20:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/22/08 20:33/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 23:08/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 10:09/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	31.7	pCi/L		1.0		1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	1.4	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Beta	13.0	pCi/L		2.0		1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/21/08 10:45/eli-c
Polonium 210	2.2	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	1.8	pCi/L				1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	3.2	pCi/L		0.2		1	E903.0	03/03/08 22:47/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	03/03/08 22:47/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	02/22/08 14:15/eli-c
Thorium 230 precision (±)	0.03	pCi/L				1	E907.0	02/22/08 14:15/eli-c
Gross Gamma	190	pCi/L		20		1	E901.1	02/19/08 08:48/eli-c
Gross Gamma precision (±)	25	pCi/L				1	E901.1	02/19/08 08:48/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/20/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	1.1	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1220	pCi/L	H	100		1	D5072-92	02/19/08 02:27/eli-c
Radon 222 precision (±)	126	pCi/L	H			1	D5072-92	02/19/08 02:27/eli-c

- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.

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.

H - Analysis performed past recommended holding time.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-003  
Client Sample ID: DewBurd GW18

Report Date: 05/08/08  
Collection Date: 02/12/08 11:08  
Date Received: 02/12/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 05:08/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	02/21/08 05:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 05:08/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/21/08 05:08/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 21:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 05:08/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 05:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 05:08/eli-c
Iron	1.04	mg/L		0.03		1	E200.7	02/27/08 21:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 05:08/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	02/21/08 05:08/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 11:55/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/21/08 05:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 05:08/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/21/08 05:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 05:08/eli-c
Strontium	0.6	mg/L		0.1		1	E200.8	02/21/08 05:08/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/21/08 05:08/eli-c
Uranium	0.0062	mg/L	D	0.0005		1	E200.8	02/21/08 05:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	02/27/08 21:08/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.77	%				1	A1030 E	05/07/08 09:33/krs
Anions	15.2	meq/L				1	A1030 E	05/07/08 09:33/krs
Cations	14.7	meq/L				1	A1030 E	05/07/08 09:33/krs
Solids, Total Dissolved Calculated	1000	mg/L				1	A1030 E	05/07/08 09:33/krs
TDS Balance (0.80 - 1.20)	0.960	dec. %				1	A1030 E	05/07/08 09:33/krs

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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-004  
Client Sample ID: DewBurd GW4002

Report Date: 05/08/08  
Collection Date: 02/12/08 11:47  
Date Received: 02/12/08  
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	02/21/08 16:45/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/21/08 16:45/sn
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	02/21/08 16:45/sn
Calcium	42.4	mg/L		0.5		1	E200.7	02/27/08 20:38/eli-c
Chloride	7	mg/L		1		1	E300.0	02/14/08 23:40/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/14/08 23:40/sn
Magnesium	14.2	mg/L		0.5		1	E200.7	02/27/08 20:38/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/19/08 12:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/14/08 23:40/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/14/08 23:40/sn
Potassium	7.4	mg/L		0.5		1	E200.7	02/27/08 20:38/eli-c
Silica	7.3	mg/L		0.5		1	E200.7	02/27/08 20:38/eli-c
Sodium	198	mg/L	D	0.8		1	E200.7	02/27/08 20:38/eli-c
Sulfate	470	mg/L		1		5	E300.0	02/14/08 23:24/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	02/16/08 15:41/jmh
Oxidation-Reduction Potential	190	mV				1	A2580 B	02/13/08 00:00/sn
pH	7.83	s.u.		0.01		1	A4500-H B	02/16/08 15:05/jmh
Sodium Adsorption Ratio (SAR)	6.7	Unitless		0.10		1	Calculation	02/27/08 20:38/krs
Solids, Total Dissolved TDS @ 180 C	830	mg/L		5		1	A2540 C	02/19/08 14:27/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	02/27/08 20:38/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/22/08 20:40/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/22/08 20:40/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 20:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/22/08 20:40/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/22/08 20:40/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/22/08 20:40/eli-c
Iron	ND	mg/L		0.03		1	E200.7	02/27/08 20:38/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/22/08 20:40/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/22/08 20:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/22/08 20:40/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/22/08 20:40/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/22/08 20:40/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/19/08 12:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 20:40/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-004  
Client Sample ID: DewBurd GW4002

Report Date: 05/08/08  
Collection Date: 02/12/08 11:47  
Date Received: 02/12/08  
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	02/22/08 20:40/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	02/22/08 20:40/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/22/08 20:40/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/22/08 20:40/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 23:16/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 10:12/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	314	pCi/L		1.0		1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Beta	101	pCi/L		2.0		1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	3.4	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/21/08 10:45/eli-c
Polonium 210	2.1	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	2.2	pCi/L				1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	57.0	pCi/L		0.4		1	E903.0	03/03/08 23:35/eli-c
Radium 226 precision (±)	2.1	pCi/L				1	E903.0	03/03/08 23:35/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	02/22/08 14:15/eli-c
Thorium 230 precision (±)	0.03	pCi/L				1	E907.0	02/22/08 14:15/eli-c
Gross Gamma	650	pCi/L		20		1	E901.1	02/19/08 08:48/eli-c
Gross Gamma precision (±)	82	pCi/L				1	E901.1	02/19/08 08:48/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	02/20/08 10:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/21/08 15:15/eli-c
Radium 226	37.0	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Radium 226 precision (±)	3.7	pCi/L				1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	9890	pCi/L	H	100		1	D5072-92	02/19/08 02:27/eli-c
Radon 222 precision (±)	208	pCi/L	H			1	D5072-92	02/19/08 02:27/eli-c

- Hold time for Radon is set to 1 half life as a guideline. Since this data is well above RL/MDC, this batch is approved.

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.

H - Analysis performed past recommended holding time.





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020130-004  
Client Sample ID: DewBurd GW4002

Report Date: 05/08/08  
Collection Date: 02/12/08 11:47  
Date Received: 02/12/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/21/08 05:38/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/21/08 05:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 05:38/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/21/08 21:09/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 21:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 05:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 05:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 05:38/eli-c
Iron	2.23	mg/L		0.03		1	E200.7	02/27/08 21:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 05:38/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	02/21/08 05:38/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 11:57/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/21/08 05:38/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 05:38/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/21/08 05:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 05:38/eli-c
Strontium	0.8	mg/L		0.1		1	E200.8	02/21/08 05:38/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/21/08 05:38/eli-c
Uranium	0.0025	mg/L	D	0.0005		1	E200.8	02/21/08 05:38/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/21/08 21:09/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.61	%				1	A1030 E	05/07/08 09:06/krs
Anions	12.8	meq/L				1	A1030 E	05/07/08 09:06/krs
Cations	12.1	meq/L				1	A1030 E	05/07/08 09:06/krs
Solids, Total Dissolved Calculated	842	mg/L				1	A1030 E	05/07/08 09:06/krs
TDS Balance (0.80 - 1.20)	0.980	dec. %				1	A1030 E	05/07/08 09:06/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080221A-ALK-SEL-W							
Sample ID: MBLK1_080221A	Method Blank					Run: PH_COND1-R_080221A			02/21/08 16:26
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_080221A	Laboratory Control Sample					Run: PH_COND1-R_080221A			02/21/08 16:28
Alkalinity, Total as CaCO <sub>3</sub>	1010	mg/L	5.0	101	90	110			
Sample ID: R08020143-002BMS	Sample Matrix Spike					Run: PH_COND1-R_080221A			02/21/08 16:57
Alkalinity, Total as CaCO <sub>3</sub>	380	mg/L	5.0	96	80	120			
Sample ID: R08020143-002BMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080221A			02/21/08 17:00
Alkalinity, Total as CaCO <sub>3</sub>	380	mg/L	5.0	96	80	120	0.0	20	
Method: A2510 B		Batch: 080216_1_COND-PROBE-W							
Sample ID: LCS1-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:21
Conductivity @ 25 C	154	umhos/cm	5.0	103	90	110			
Sample ID: LCS2-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:21
Conductivity @ 25 C	5060	umhos/cm	5.0	101	90	110			
Sample ID: LCS_COND-1_080216	Laboratory Control Sample					Run: PH_COND2-R_080216A			02/16/08 15:22
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080216	Method Blank					Run: PH_COND2-R_080216A			02/16/08 15:22
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080219A-SLDS-TDS-W							
Sample ID: MBLK1_080219A	Method Blank					Run: BAL-4-R_080219A			02/19/08 14:17
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080219A	Laboratory Control Sample					Run: BAL-4-R_080219A			02/19/08 14:18
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	99	90	110			
Sample ID: R08020130-001AMS	Sample Matrix Spike					Run: BAL-4-R_080219A			02/19/08 14:21
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	95	80	120			
Sample ID: R08020130-001AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080219A			02/19/08 14:23
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	89	80	120	0.9	10	
Method: A2580 B		Batch: R33556							
Sample ID: LCS_021308	Laboratory Control Sample					Run: PH_COND1-R_080213A			02/13/08 00:00
Oxidation-Reduction Potential	480	mV		102	95	105			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_R97081		
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97081		02/19/08 12:26		
Selenium-VI	0.048	mg/L	0.0010	95	85	115			
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97081		02/19/08 12:26		
Selenium-VI	0.050	mg/L	0.0010	99	85	115	3.9	10	
Method: A3114 B							Batch: C_SE3114-080219		
Sample ID: MBLK	Method Blank				Run: SUB-C97079		02/19/08 11:44		
Selenium	ND	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample				Run: SUB-C97079		02/19/08 11:47		
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97079		02/19/08 12:10		
Selenium	0.048	mg/L	0.0010	96	85	115			
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97079		02/19/08 12:12		
Selenium	0.050	mg/L	0.0010	99	85	115	3.9	10	
Method: A3114 B							Batch: C_SEIV3114-080219		
Sample ID: MBLK	Method Blank				Run: SUB-C97072		02/19/08 09:27		
Selenium-IV	0.003	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample				Run: SUB-C97072		02/19/08 09:43		
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: C08020402-001EMS	Sample Matrix Spike				Run: SUB-C97072		02/19/08 10:20		
Selenium-IV	0.089	mg/L	0.0010	177	85	115			S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
Sample ID: C08020402-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-C97072		02/19/08 10:22		
Selenium-IV	0.085	mg/L	0.0010	169	85	115	5.0	10	S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
Method: A4500-H B							Batch: 080216_1-PH-W		
Sample ID: LCS_pH-1_080216	Laboratory Control Sample				Run: PH_COND2-R_080216A		02/16/08 14:56		
pH	6.93	s.u.	0.010	101	98.55	101.45			

### 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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>							Batch: A2008-02-19_2_NH3_01		
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01			Run: TECHAA2-R_080219A			02/19/08 11:22
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.23	mg/L	0.10	92	90	110			02/19/08 11:24
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.24	mg/L	0.10	94	90	110			02/19/08 11:25
<b>Sample ID: R08020157-001BMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.34	mg/L	0.10	88	80	120			02/19/08 12:45
<b>Sample ID: R08020157-001BMDS</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.31	mg/L	0.10	73	80	120	11	10	02/19/08 12:47 SR
<b>Method: D5072-92</b>							Batch: C_R97139		
<b>Sample ID: R08020130-004G</b> Radon 222	Sample Duplicate 9730	pCi/L	100			Run: SUB-C97139	1.6	30	02/19/08 02:27
<b>Sample ID: MB-R97139</b> Radon 222	Method Blank ND	pCi/L	100			Run: SUB-C97139			02/19/08 02:27
<b>Sample ID: LCS-R97139</b> Radon 222	Laboratory Control Sample 302	pCi/L	100	99	70	130			02/19/08 02:27

### 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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_17796		
Sample ID: MB-17796	Method Blank		Run: SUB-C97399				02/26/08 12:13		
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Zinc	0.002	mg/L	0.001						
Sample ID: LCS-17796	Laboratory Control Sample		Run: SUB-C97440				02/27/08 15:39		
Boron	0.550	mg/L	0.10	110	85	115			
Iron	0.554	mg/L	0.030	111	85	115			
Zinc	0.561	mg/L	0.010	112	85	115			
Sample ID: C08020547-001BMS	Sample Matrix Spike		Run: SUB-C97440				02/27/08 18:27		
Boron	9.95	mg/L	0.13	98	70	130			
Iron	9.57	mg/L	0.087	94	70	130			
Zinc	9.71	mg/L	0.014	97	70	130			
Sample ID: C08020547-001BMSD	Sample Matrix Spike Duplicate		Run: SUB-C97440				02/27/08 18:30		
Boron	10.3	mg/L	0.13	101	70	130	3.6	20	
Iron	9.80	mg/L	0.087	97	70	130	2.4	20	
Zinc	9.90	mg/L	0.014	99	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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R97440		
Sample ID: LFB-TM	Laboratory Fortified Blank			Run: SUB-C97440			02/27/08 13:40		
Silica	2.0	mg/L	0.10	100	85	125			
Aluminum	2.0	mg/L	0.10	98	85	125			
Boron	1.9	mg/L	0.10	96	85	125			
Iron	2.0	mg/L	0.030	99	85	125			
Sample ID: LFB-MAJORS	Laboratory Fortified Blank			Run: SUB-C97440			02/27/08 13:43		
Calcium	24	mg/L	0.50	96	85	125			
Magnesium	24	mg/L	0.50	96	85	125			
Potassium	25	mg/L	0.50	99	85	125			
Sodium	24	mg/L	0.76	96	85	125			
Sample ID: LRB	Laboratory Reagent Blank			Run: SUB-C97440			02/27/08 13:50		
Silica	ND	mg/L	0.10						
Aluminum	ND	mg/L	0.10						
Boron	0.015	mg/L	0.10						
Calcium	ND	mg/L	0.50						
Iron	ND	mg/L	0.030						
Magnesium	ND	mg/L	0.50						
Potassium	0.045	mg/L	0.50						
Sodium	ND	mg/L	0.76						
Sample ID: C08020547-001AMS	Sample Matrix Spike			Run: SUB-C97440			02/27/08 17:35		
Aluminum	9.63	mg/L	0.10	96	70	130			
Boron	10.2	mg/L	0.10	100	70	130			
Iron	9.71	mg/L	0.046	97	70	130			
Calcium	914	mg/L	1.0	84	70	130			
Magnesium	558	mg/L	0.50	89	70	130			
Potassium	1140	mg/L	0.50	94	70	130			
Silica	23.1	mg/L	0.20	93	70	130			
Sodium	638	mg/L	7.6	89	70	130			
Sample ID: C08020547-001AMSD	Sample Matrix Spike Duplicate			Run: SUB-C97440			02/27/08 17:38		
Aluminum	9.66	mg/L	0.10	97	70	130	0.3	20	
Boron	10.3	mg/L	0.10	101	70	130	1.3	20	
Iron	9.72	mg/L	0.046	97	70	130	0.1	20	
Calcium	902	mg/L	1.0	81	70	130	1.3	20	
Magnesium	552	mg/L	0.50	88	70	130	1.1	20	
Potassium	1130	mg/L	0.50	94	70	130	0.4	20	
Silica	22.9	mg/L	0.20	92	70	130	0.6	20	
Sodium	627	mg/L	7.6	87	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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_17792
Sample ID: MB-17792	Method Blank								02/21/08 21:54
Uranium	ND	mg/L	1E-06						
Sample ID: LCS1-17792	Laboratory Control Sample								02/21/08 22:01
Uranium	0.0534	mg/L	0.00030	101	80	120			
Sample ID: R08020083-003K	Post Digestion Spike								02/21/08 23:45
Uranium	0.0251	mg/L	0.00030	100	70	130			
Sample ID: R08020083-003K	Post Digestion Spike Duplicate								02/21/08 23:53
Uranium	0.0248	mg/L	0.00030	99	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/08/08

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17796		
Sample ID: R08020083-003B	Post Digestion Spike			Run: SUB-C97150			02/21/08 06:08		
Antimony	0.251	mg/L	0.050	100	70	130			
Arsenic	0.250	mg/L	0.0010	100	70	130			
Barium	0.252	mg/L	0.10	95	70	130			
Beryllium	0.202	mg/L	0.010	81	70	130			
Cadmium	0.248	mg/L	0.010	99	70	130			
Chromium	0.252	mg/L	0.050	101	70	130			
Copper	0.255	mg/L	0.010	100	70	130			
Lead	0.252	mg/L	0.050	101	70	130			
Manganese	0.302	mg/L	0.010	106	70	130			
Molybdenum	0.282	mg/L	0.10	112	70	130			
Nickel	0.264	mg/L	0.050	101	70	130			
Selenium	0.238	mg/L	0.0011	93	70	130			
Silver	0.0830	mg/L	0.010	83	70	130			
Strontium	8.15	mg/L	0.10		70	130			A
Thallium	0.254	mg/L	0.10	102	70	130			
Uranium	0.402	mg/L	0.00030	94	70	130			
Sample ID: R08020083-003B	Post Digestion Spike Duplicate			Run: SUB-C97150			02/21/08 06:16		
Antimony	0.262	mg/L	0.050	105	70	130	4.3	20	
Arsenic	0.253	mg/L	0.0010	101	70	130	1.2	20	
Barium	0.253	mg/L	0.10	95	70	130	0.4	20	
Beryllium	0.201	mg/L	0.010	81	70	130	0.1	20	
Cadmium	0.251	mg/L	0.010	100	70	130	1.1	20	
Chromium	0.252	mg/L	0.050	101	70	130	0.1	20	
Copper	0.251	mg/L	0.010	99	70	130	1.4	20	
Lead	0.253	mg/L	0.050	101	70	130	0.5	20	
Manganese	0.295	mg/L	0.010	103	70	130	2.4	20	
Molybdenum	0.278	mg/L	0.10	110	70	130	1.6	20	
Nickel	0.269	mg/L	0.050	103	70	130	1.7	20	
Selenium	0.240	mg/L	0.0011	94	70	130	0.6	20	
Silver	0.107	mg/L	0.010	107	70	130	26	20	R
Strontium	7.93	mg/L	0.10		70	130	2.7	20	A
Thallium	0.254	mg/L	0.10	102	70	130	0.0	20	
Uranium	0.406	mg/L	0.00030	95	70	130	1.0	20	
Sample ID: MB-17796	Method Blank			Run: SUB-C97150			02/21/08 02:45		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0004						

### 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.

R - RPD exceeds advisory limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E200.8							Batch: C_17796			
Sample ID: MB-17796	Method Blank		Run: SUB-C97150				02/21/08 02:45			
Chromium	ND	mg/L	0.0002							
Copper	ND	mg/L	0.0001							
Lead	ND	mg/L	0.0001							
Manganese	0.0001	mg/L	5E-05							
Molybdenum	0.001	mg/L	0.0002							
Nickel	ND	mg/L	6E-05							
Selenium	ND	mg/L	0.0002							
Silver	ND	mg/L	0.0001							
Strontium	ND	mg/L	7E-05							
Thallium	ND	mg/L	5E-05							
Uranium	0.0004	mg/L	4E-05							
Sample ID: LCS1-17796							Laboratory Control Sample		Run: SUB-C97150	02/21/08 02:52
Antimony	0.0187	mg/L	0.050	93	80	120				
Arsenic	0.0201	mg/L	0.0010	100	80	120				
Barium	0.0194	mg/L	0.10	97	80	120				
Beryllium	0.0182	mg/L	0.010	91	80	120				
Cadmium	0.0196	mg/L	0.010	98	80	120				
Chromium	0.0193	mg/L	0.050	97	80	120				
Copper	0.0199	mg/L	0.010	100	80	120				
Lead	0.0196	mg/L	0.050	98	80	120				
Manganese	0.0195	mg/L	0.010	97	80	120				
Molybdenum	0.0202	mg/L	0.10	95	80	120				
Nickel	0.0203	mg/L	0.050	102	80	120				
Selenium	0.0953	mg/L	0.0010	95	80	120				
Silver	0.0214	mg/L	0.010	107	80	120				
Strontium	0.00994	mg/L	0.10	99	80	120				
Thallium	0.0191	mg/L	0.10	96	80	120				
Uranium	0.0186	mg/L	0.00030	91	80	120				
Sample ID: LCS-17796							Laboratory Control Sample		Run: SUB-C97150	02/21/08 03:00
Antimony	0.0484	mg/L	0.050	97	85	115				
Arsenic	0.0492	mg/L	0.0010	98	85	115				
Barium	0.0487	mg/L	0.10	97	85	115				
Beryllium	0.0492	mg/L	0.010	98	85	115				
Cadmium	0.0492	mg/L	0.010	98	85	115				
Chromium	0.0490	mg/L	0.050	98	85	115				
Copper	0.0488	mg/L	0.010	98	85	115				
Lead	0.0492	mg/L	0.050	98	85	115				
Manganese	0.0480	mg/L	0.010	96	85	115				
Molybdenum	0.0509	mg/L	0.10	99	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: 05/08/08

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_17796		
Sample ID: LCS-17796	Laboratory Control Sample			Run: SUB-C97150			02/21/08 03:00		
Nickel	0.0501	mg/L	0.050	100	85	115			
Selenium	0.0485	mg/L	0.0010	97	85	115			
Silver	0.0218	mg/L	0.010	109	85	115			
Strontium	0.0475	mg/L	0.10	95	85	115			
Thallium	0.0495	mg/L	0.10	99	85	115			
Uranium	0.0479	mg/L	0.00030	95	85	115			
Sample ID: MB-17796	Method Blank			Run: SUB-C97226			02/21/08 20:25		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0002						
Chromium	ND	mg/L	0.0003						
Copper	ND	mg/L	8E-05						
Lead	ND	mg/L	0.0001						
Manganese	0.0001	mg/L	5E-05						
Molybdenum	ND	mg/L	0.0002						
Nickel	8E-05	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Strontium	9E-05	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	4E-05						
Zinc	0.1	mg/L	0.002						
Sample ID: LCS-17796	Laboratory Control Sample			Run: SUB-C97226			02/21/08 20:39		
Antimony	0.0502	mg/L	0.050	100	85	115			
Arsenic	0.0518	mg/L	0.0010	104	85	115			
Barium	0.0520	mg/L	0.10	104	85	115			
Beryllium	0.0522	mg/L	0.010	104	85	115			
Cadmium	0.0526	mg/L	0.010	105	85	115			
Chromium	0.0509	mg/L	0.050	102	85	115			
Copper	0.0494	mg/L	0.010	99	85	115			
Lead	0.0522	mg/L	0.050	104	85	115			
Manganese	0.0505	mg/L	0.010	101	85	115			
Molybdenum	0.0534	mg/L	0.10	107	85	115			
Nickel	0.0496	mg/L	0.050	99	85	115			
Selenium	0.0509	mg/L	0.0010	102	85	115			
Strontium	0.0518	mg/L	0.10	104	85	115			
Thallium	0.0523	mg/L	0.10	105	85	115			
Uranium	0.0506	mg/L	0.00030	101	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 05/08/08

Project: Edgemont

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_17796
Sample ID: LCS-17796	Laboratory Control Sample					Run: SUB-C97226			02/21/08 20:39
Zinc	0.0530	mg/L	0.010	102	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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97313		
Sample ID: LRB	Method Blank		Run: SUB-C97313				02/22/08 14:40		
Aluminum	ND	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	0.0002	mg/L	3E-05						
Cadmium	2E-05	mg/L	1E-05						
Chromium	7E-05	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						
Silver	0.0005	mg/L	3E-05						
Thorium 232	ND	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	0.01	mg/L	0.0003						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C97313				02/22/08 16:36		
Aluminum	0.0540	mg/L	0.0010	108	85	115			
Arsenic	0.0506	mg/L	0.0010	101	85	115			
Barium	0.0509	mg/L	0.0010	101	85	115			
Cadmium	0.0511	mg/L	0.0010	102	85	115			
Chromium	0.0502	mg/L	0.0010	100	85	115			
Copper	0.0500	mg/L	0.0010	100	85	115			
Lead	0.0509	mg/L	0.0010	102	85	115			
Manganese	0.0503	mg/L	0.0010	101	85	115			
Mercury	0.00494	mg/L	0.0010	99	85	115			
Molybdenum	0.0563	mg/L	0.0010	113	85	115			
Nickel	0.0503	mg/L	0.0010	101	85	115			
Silver	0.0196	mg/L	0.0010	95	85	115			
Thorium 232	0.0505	mg/L	0.0010	101	85	115			
Uranium	0.0510	mg/L	0.00030	102	85	115			
Vanadium	0.0504	mg/L	0.0010	101	85	115			
Zinc	0.0523	mg/L	0.0010	84	85	115			S
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C97313				02/22/08 14:46		
Aluminum	0.0534	mg/L	0.0010	107	85	115			
Arsenic	0.0502	mg/L	0.0010	100	85	115			
Barium	0.0498	mg/L	0.0010	99	85	115			
Cadmium	0.0516	mg/L	0.0010	103	85	115			
Chromium	0.0507	mg/L	0.0010	101	85	115			

### 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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97313		
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C97313			02/22/08 14:46		
Copper	0.0500	mg/L	0.0010	100	85	115			
Lead	0.0507	mg/L	0.0010	101	85	115			
Manganese	0.0502	mg/L	0.0010	100	85	115			
Mercury	0.00502	mg/L	0.0010	100	85	115			
Molybdenum	0.0540	mg/L	0.0010	108	85	115			
Nickel	0.0502	mg/L	0.0010	100	85	115			
Silver	0.0153	mg/L	0.0010	74	85	115			S
Thorium 232	0.0503	mg/L	0.0010	101	85	115			
Uranium	0.0505	mg/L	0.00030	101	85	115			
Vanadium	0.0508	mg/L	0.0010	102	85	115			
Zinc	0.0708	mg/L	0.0010	121	85	115			S
Sample ID: C08020548-001CMS4	Post Digestion Spike			Run: SUB-C97313			02/22/08 19:46		
Aluminum	0.0521	mg/L	0.10	104	70	130			
Arsenic	0.0512	mg/L	0.0010	101	70	130			
Barium	0.0608	mg/L	0.10	103	70	130			
Cadmium	0.0481	mg/L	0.010	96	70	130			
Chromium	0.0491	mg/L	0.050	94	70	130			
Copper	0.0460	mg/L	0.010	91	70	130			
Lead	0.0520	mg/L	0.050	104	70	130			
Manganese	0.136	mg/L	0.010	85	70	130			
Mercury	0.00503	mg/L	0.0010	101	70	130			
Molybdenum	0.0556	mg/L	0.10	109	70	130			
Nickel	0.0468	mg/L	0.050	94	70	130			
Silver	0.0169	mg/L	0.010	84	70	130			
Thorium 232	0.0542	mg/L	0.0010	108	70	130			
Uranium	0.0548	mg/L	0.00030	109	70	130			
Vanadium	0.0495	mg/L	0.10	98	70	130			
Zinc	0.0482	mg/L	0.010	98	70	130			
Sample ID: C08020548-001CMSD4	Post Digestion Spike Duplicate			Run: SUB-C97313			02/22/08 19:53		
Aluminum	0.0499	mg/L	0.10	100	70	130	0.0	20	
Arsenic	0.0497	mg/L	0.0010	98	70	130	2.9	20	
Barium	0.0595	mg/L	0.10	100	70	130	0.0	20	
Cadmium	0.0482	mg/L	0.010	96	70	130	0.2	20	
Chromium	0.0493	mg/L	0.050	95	70	130	0.0	20	
Copper	0.0456	mg/L	0.010	91	70	130	0.9	20	
Lead	0.0510	mg/L	0.050	102	70	130	1.9	20	
Manganese	0.138	mg/L	0.010	88	70	130	1.4	20	
Mercury	0.00513	mg/L	0.0010	102	70	130	1.9	20	
Molybdenum	0.0548	mg/L	0.10	108	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: 05/08/08

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97313		
Sample ID: C08020548-001CMSD4	Post Digestion Spike Duplicate			Run: SUB-C97313			02/22/08 19:53		
Nickel	0.0469	mg/L	0.050	94	70	130	0.0	20	
Silver	0.0170	mg/L	0.010	85	70	130	0.4	20	
Thorium 232	0.0540	mg/L	0.0010	108	70	130	0.2	20	
Uranium	0.0542	mg/L	0.00030	108	70	130	1.1	20	
Vanadium	0.0501	mg/L	0.10	99	70	130	0.0	20	
Zinc	0.0452	mg/L	0.010	92	70	130	6.4	20	
Sample ID: C08020583-002AMS	Sample Matrix Spike			Run: SUB-C97313			02/23/08 03:28		
Copper	0.0729	mg/L	0.010	99	70	130			
Lead	0.0510	mg/L	0.0010	102	70	130			
Sample ID: C08020583-002AMSD	Sample Matrix Spike Duplicate			Run: SUB-C97313			02/23/08 03:35		
Copper	0.0713	mg/L	0.010	96	70	130	2.2	20	
Lead	0.0495	mg/L	0.0010	99	70	130	3.1	20	
Method: E245.1							Batch: C_B_31543		
Sample ID: MB-31543	Method Blank			Run: SUB-C98552			03/24/08 10:46		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-31543	Laboratory Fortified Blank			Run: SUB-C98552			03/24/08 10:49		
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: R08020220-001D	Sample Matrix Spike			Run: SUB-C98552			03/24/08 10:53		
Mercury	0.0016	mg/L	0.0010	82	70	130			
Sample ID: R08020220-001D	Sample Matrix Spike Duplicate			Run: SUB-C98552			03/24/08 10:56		
Mercury	0.0018	mg/L	0.0010	89	70	130	8.8	30	
Sample ID: B08031358-013CMS	Sample Matrix Spike			Run: SUB-C98552			03/24/08 11:31		
Mercury	0.0023	mg/L	0.0010	113	70	130			
Sample ID: B08031358-013CMSD	Sample Matrix Spike Duplicate			Run: SUB-C98552			03/24/08 11:33		
Mercury	0.0020	mg/L	0.0010	99	70	130	13	30	
Method: E245.1							Analytical Run: SUB-C98552		
Sample ID: QCS	Initial Calibration Verification Standard						03/24/08 10:39		
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: 05/08/08

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R33510		
Sample ID: LFB0802130124-1	Laboratory Fortified Blank			Run: DIONEX_080214A			02/14/08 15:42		
Chloride	5.60	mg/L	0.50	112	90	110			S
Fluoride	2.13	mg/L	0.10	106	90	110			
Nitrogen, Nitrate as N	2.52	mg/L	0.10	101	90	110			
Nitrogen, Nitrite as N	2.34	mg/L	0.10	94	90	110			
Sulfate	14.9	mg/L	1.0	99	90	110			
Sample ID: LFB0802130124-1	Laboratory Fortified Blank			Run: DIONEX_080214A			02/14/08 15:57		
Chloride	5.29	mg/L	0.50	106	90	110			
Fluoride	1.89	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N	2.42	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	2.26	mg/L	0.10	90	90	110			
Sulfate	14.3	mg/L	1.0	95	90	110			
Sample ID: R08020138-002AMS	Sample Matrix Spike			Run: DIONEX_080214A			02/15/08 02:14		
Chloride	294	mg/L	0.54		80	120			A
Fluoride	10.3	mg/L	0.10	93	80	120			
Nitrogen, Nitrate as N	34.8	mg/L	0.13	90	80	120			
Nitrogen, Nitrite as N	18.0	mg/L	0.29	144	80	120			S
Sulfate	1330	mg/L	1.0		80	120			A
Sample ID: R08020138-002AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080214A			02/15/08 09:43		
Chloride	294	mg/L	0.54		80	120	0.0	10	A
Fluoride	11.1	mg/L	0.10	101	80	120	7.0	10	
Nitrogen, Nitrate as N	34.6	mg/L	0.13	89	80	120	0.6	10	
Nitrogen, Nitrite as N	18.0	mg/L	0.29	144	80	120	0.2	10	S
Sulfate	1320	mg/L	1.0		80	120	0.4	10	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:** 05/08/08

**Work Order:** R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0398		
<b>Sample ID: MB-GrAB-0398</b>	Method Blank				Run: SUB-C97539		02/28/08 02:15		
Gross Alpha	ND	pCi/L	1						
Gross Beta	ND	pCi/L	2						
<b>Sample ID: UNAT-GrAB-0398</b>	Laboratory Control Sample				Run: SUB-C97539		02/28/08 02:16		
Gross Alpha	230	pCi/L	1.0	94	70	130			
<b>Sample ID: Cs137-GrAB-0398</b>	Laboratory Control Sample				Run: SUB-C97539		02/28/08 02:16		
Gross Beta	89	pCi/L	2.0	94	70	130			
<b>Sample ID: C08020423-001AMS</b>	Sample Matrix Spike				Run: SUB-C97539		02/28/08 02:16		
Gross Alpha	340	pCi/L	1.0	117	70	130			
<b>Sample ID: C08020423-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97539		02/28/08 02:15		
Gross Alpha	370	pCi/L	1.0	127	70	130	8.0	11.9	
<b>Sample ID: C08020423-001AMS</b>	Sample Matrix Spike				Run: SUB-C97539		02/28/08 02:15		
Gross Beta	100	pCi/L	2.0	87	70	130			
<b>Sample ID: C08020423-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97539		02/28/08 02:15		
Gross Beta	110	pCi/L	2.0	92	70	130	5.4	15.5	
<b>Method: E901.1</b>							Batch: C_R97137		
<b>Sample ID: LCS-R97137</b>	Laboratory Control Sample				Run: SUB-C97137		02/19/08 08:48		
Americium 241	720	pCi/L	20	88	70	130			
Cesium 137	1200	pCi/L	20	82	70	130			
Potassium 40	7400	pCi/L	20	111	70	130			
<b>Sample ID: MB-R97137</b>	Method Blank				Run: SUB-C97137		02/19/08 08:48		
Gross Gamma	ND	pCi/L	20						
<b>Sample ID: R08020083-003I</b>	Sample Duplicate				Run: SUB-C97137		02/19/08 08:48		
Gross Gamma	ND	pCi/L	20				0.0	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2633		
<b>Sample ID: R08020083-003K</b> Radium 226	Sample Matrix Spike 120	pCi/L	0.20	95	70	130			02/25/08 14:45
<b>Sample ID: R08020083-003K</b> Radium 226	Sample Matrix Spike Duplicate 120	pCi/L	0.20	92	70	130	2.6	24.9	02/25/08 14:45
<b>Sample ID: LCS-17792</b> Radium 226	Laboratory Control Sample 12	pCi/L	0.20	95	70	130			02/25/08 14:45
<b>Sample ID: MB-17792</b> Radium 226	Method Blank ND	pCi/L	0.2						02/25/08 14:45
<b>Method: E903.0</b>							Batch: C_RA226-2639		
<b>Sample ID: C08020692-001AMS</b> Radium 226	Sample Matrix Spike 9.7	pCi/L	0.20	81	70	130			03/04/08 04:52
<b>Sample ID: C08020692-001AMSD</b> Radium 226	Sample Matrix Spike Duplicate 10	pCi/L	0.20	92	70	130	6.8	22.2	03/04/08 06:22
<b>Sample ID: MB-RA226-2639</b> Radium 226	Method Blank ND	pCi/L							03/04/08 07:52
<b>Sample ID: LCS-RA226-2639</b> Radium 226	Laboratory Control Sample 12	pCi/L	0.40	93	70	130			03/04/08 09:23
<b>Method: E907.0</b>							Batch: C_17792		
<b>Sample ID: LCS-17792</b> Thorium 230	Laboratory Control Sample 32.7	pCi/g-dry	0.10	67	70	130			02/21/08 16:15 S
- LCS response is below the acceptance range for this analysis. Since the MB and the RPDs for all 3 MDs are acceptable the batch is approved.									
<b>Sample ID: MB-17792</b> Thorium 230	Method Blank ND	pCi/g-dry							02/21/08 16:15
<b>Sample ID: C08020475-002BDUP</b> Thorium 230	Sample Duplicate 9.67	pCi/g-dry	0.10		70	130	4.6	30	02/21/08 16:15

### 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: 05/08/08  
Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R98194		
Sample ID: LCS-R98194	Laboratory Control Sample				Run: SUB-C98194			02/22/08 14:15	
Thorium 230	7.40	pCi/L	0.20	106	70	130			
Sample ID: C08020548-004HMS	Sample Matrix Spike				Run: SUB-C98194			02/22/08 14:15	
Thorium 230	44.3	pCi/L	0.20	93	70	130			
Sample ID: C08020548-004HMSD	Sample Matrix Spike Duplicate				Run: SUB-C98194			02/22/08 14:15	
Thorium 230	42.4	pCi/L	0.20	89	70	130	4.4	30	
Sample ID: MB-R98194	Method Blank				Run: SUB-C98194			02/22/08 14:15	
Thorium 230		pCi/L							
Method: E909.0M							Batch: C_R97461		
Sample ID: C08020617-003FMS	Sample Matrix Spike				Run: SUB-C97461			02/21/08 10:45	
Lead 210	170	pCi/L	1.0	89	70	130			
Sample ID: C08020617-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C97461			02/21/08 10:45	
Lead 210	230	pCi/L	1.0	122	70	130	32	30	R
- The RPD for the spike 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-R97461	Method Blank				Run: SUB-C97461			02/21/08 10:45	
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R97461	Laboratory Control Sample				Run: SUB-C97461			02/21/08 10:45	
Lead 210	85	pCi/L	1.0	71	70	130			
Method: RMO-3008							Batch: C_R97290		
Sample ID: R08020130-004I	Sample Duplicate				Run: SUB-C97290			02/21/08 15:15	
Polonium 210	ND	pCi/L	1.0				0.0	30	
Sample ID: LCS-17696	Laboratory Control Sample				Run: SUB-C97290			02/21/08 15:15	
Polonium 210	18	pCi/L	1.0	80	70	130			
Sample ID: MB-17696	Method Blank				Run: SUB-C97290			02/21/08 15:15	
Polonium 210	ND	pCi/L	0.02						

### 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: 05/08/08

Work Order: R08020130

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R97982		
Sample ID: R08020220-005H	Sample Matrix Spike				Run: SUB-C97982			02/27/08 13:30	
Polonium 210	160	pCi/L	1.0	70	70	130			
Sample ID: R08020220-005H	Sample Matrix Spike Duplicate				Run: SUB-C97982			02/27/08 13:30	
Polonium 210	170	pCi/L	1.0	74	70	130	6.4	30	
Sample ID: LCS-R97982	Laboratory Control Sample				Run: SUB-C97982			02/27/08 13:30	
Polonium 210	78	pCi/L	1.0	68	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MS, MSD and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R97982	Method Blank				Run: SUB-C97982			02/27/08 13:30	
Polonium 210	2	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



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>Dewey - Burdock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>PO Box 725 Rapid City, SD 57704</b>		Contact Name: <b>Carly Bernan</b>		Phone/Fax: <b>394-6400</b>	Email: <b>carly.bern@respec.com</b>
Invoice Address: <b>Rapid City, SD 57704</b>		Invoice Contact & Phone: <b>Carly Bernan 394-6400</b>		Purchase Order: <b>Mat St. Leary</b>	
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		Shipped by: Cooler Dry: Receipt Temp <b>3.6 °C</b> On Ice: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	Comments: Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page
1. <b>GLD-4 2</b>		<b>8/12/08</b>	<b>9:52</b>	<b>W</b>	<b>ANALYSIS REQUESTED</b>  <b>SEE ATTACHED</b> <b>Normal Turnaround (TAT)</b>  <b>RUSH</b>
2. <b>GLD-2 4</b>		<b>8/12/08</b>	<b>10:21</b>	<b>W</b>	
3. <b>GLD 18</b>		<b>8/12/08</b>	<b>11:08</b>	<b>W</b>	
4. <b>GLD 4002</b>		<b>8/12/08</b>	<b>11:47</b>	<b>W</b>	
5.					
6.					
7.					
8.					
9.					
10.					
Custody Record Must be Signed		Relinquished by (print): <b>Crystal Hocking</b>		Signature: <b>Crystal Hocking</b>	
Sample Disposal: Return to Client		Lab Disposal:		Received by (print): <b>Indalason</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.		Date/Time: <b>8/12/08 15:38</b>		Signature: <b>Indalason</b>	



## ANALYTICAL SUMMARY REPORT

May 08, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08020220

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 5 samples from RESPEC Inc on 2/21/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08020220-001	DewBurd GW7002	02/20/08 8:30	02/21/08	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 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
R08020220-002	DewBurd GW7	02/20/08 8:45	02/21/08	Aqueous	Same As Above
R08020220-003	DewBurd GW631	02/20/08 13:55	02/21/08	Aqueous	Same As Above
R08020220-004	DewBurd GW13	02/20/08 14:41	02/21/08	Aqueous	Same As Above
R08020220-005	DewBurd GW628	02/20/08 18:30	02/21/08	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:



Date: 08-May-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08020220

## 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: C08020812

Comments imported for SUBBED Workorder: B08030260

Prep Comments for Sample R08020220-001D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 4.9 days.

Prep Comments for Sample R08020220-002D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 4.9 days.

Prep Comments for Sample R08020220-005D, Test PRP-HG-245.1: The prep HoldTime was exceeded by 4.5 days.

End of comments imported for SUBBED Workorder: B08030260

End of comments imported for SUBBED Workorder: C08020812



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020220-001  
**Client Sample ID:** DewBurd GW7002

**Report Date:** 05/08/08  
**Collection Date:** 02/20/08 08:30  
**Date Received:** 02/21/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	260	mg/L		5		1	A2320 B	02/26/08 15:59/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/26/08 15:59/sn
Bicarbonate as HCO3	317	mg/L		5		1	A2320 B	02/26/08 15:59/sn
Calcium	213	mg/L		0.5		1	E200.7	03/04/08 01:45/eli-c
Chloride	9	mg/L		1		1	E300.0	02/21/08 19:04/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/21/08 19:04/sn
Magnesium	81.7	mg/L		0.5		1	E200.7	03/04/08 01:45/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/26/08 14:20/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/21/08 19:04/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/21/08 19:04/sn
Potassium	21.0	mg/L		0.5		1	E200.7	03/04/08 01:45/eli-c
Silica	7.8	mg/L		0.5		1	E200.7	03/04/08 01:45/eli-c
Sodium	162	mg/L	D	0.8		1	E200.7	03/04/08 01:45/eli-c
Sulfate	1080	mg/L	D	3		50	E300.0	02/21/08 18:18/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2420	umhos/cm		5.0		1	A2510 B	02/27/08 12:48/ch
Oxidation-Reduction Potential	170	mV				1	A2580 B	02/22/08 00:00/sn
pH	7.56	s.u.		0.01		1	A4500-H B	02/26/08 00:00/ch
Sodium Adsorption Ratio (SAR)	2.4	Unitless		0.10		1	Calculation	03/04/08 01:45/krs
Solids, Total Dissolved TDS @ 180 C	1900	mg/L		5		1	A2540 C	02/22/08 10:31/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/29/08 07:10/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/29/08 07:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/29/08 07:10/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/04/08 01:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/29/08 07:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/29/08 07:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/29/08 07:10/eli-c
Iron	0.28	mg/L		0.03		1	E200.7	03/04/08 01:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/29/08 07:10/eli-c
Manganese	0.38	mg/L		0.01		1	E200.8	02/29/08 07:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/29/08 07:10/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/29/08 07:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/29/08 07:10/eli-c
Selenium	0.001	mg/L		0.001		1	A3114 B	02/25/08 10:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 17:53/eli-c

**Report** RL - Analyte reporting limit.

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

D - RL increased due to sample matrix interference.

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: R08020220-001  
Client Sample ID: DewBurd GW7002

Report Date: 05/08/08  
Collection Date: 02/20/08 08:30  
Date Received: 02/21/08  
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	02/29/08 07:10/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	02/29/08 07:10/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/29/08 07:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 07:10/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/01/08 06:59/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/08 09:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/08 11:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	91.4	pCi/L		7.0		1	E900.0	03/07/08 03:32/eli-c
Gross Alpha precision (±)	9.6	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Gross Beta	41.4	pCi/L		9.0		1	E900.0	03/07/08 03:32/eli-c
Gross Beta precision (±)	6.4	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Lead 210	13	pCi/L		1.0		1	E909.0M	02/26/08 09:30/eli-c
Lead 210 precision (±)	2.4	pCi/L				1	E909.0M	02/26/08 09:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	8.8	pCi/L		0.1		1	E903.0	03/06/08 15:27/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	03/06/08 15:27/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
Gross Gamma	370	pCi/L		20		1	E901.1	02/22/08 16:15/eli-c
Gross Gamma precision (±)	42	pCi/L				1	E901.1	02/22/08 16:15/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	7.9	pCi/L		1.0		1	E909.0M	03/04/08 09:45/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	03/04/08 09:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	03/06/08 14:45/eli-c
Radium 226	ND	pCi/L		0.9		1	E903.0	03/11/08 17:06/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	03/14/08 14:45/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	752	pCi/L		100		1	D5072-92	02/22/08 15:00/eli-c
Radon 222 precision (±)	50.6	pCi/L				1	D5072-92	02/22/08 15:00/eli-c

### TOTAL METALS ANALYSES

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-001  
Client Sample ID: DewBurd GW7002

Report Date: 05/08/08  
Collection Date: 02/20/08 08:30  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/27/08 03:17/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/27/08 03:17/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/27/08 03:17/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/27/08 03:17/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/29/08 21:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/27/08 03:17/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/27/08 03:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/27/08 03:17/eli-c
Iron	1.25	mg/L		0.03		1	E200.7	02/29/08 21:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/27/08 03:17/eli-c
Manganese	0.37	mg/L		0.01		1	E200.8	02/27/08 03:17/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 10:51/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/27/08 03:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/27/08 03:17/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/27/08 03:17/eli-c
Silver	ND	mg/L		0.005		5	E200.8	02/29/08 22:43/eli-c
Strontium	6.6	mg/L		0.1		1	E200.8	02/27/08 03:17/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/27/08 03:17/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	02/27/08 03:17/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 05:47/eli-c
DATA QUALITY								
A/C Balance (± 5)	-5.62	%				1	A1030 E	05/07/08 12:33/krs
Anions	28.0	meq/L				1	A1030 E	05/07/08 12:33/krs
Cations	25.0	meq/L				1	A1030 E	05/07/08 12:33/krs
Solids, Total Dissolved Calculated	1750	mg/L				1	A1030 E	05/07/08 12:33/krs
TDS Balance (0.80 - 1.20)	1.07	dec. %				1	A1030 E	05/07/08 12:33/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-002  
Client Sample ID: DewBurd GW7

Report Date: 05/08/08  
Collection Date: 02/20/08 08:45  
Date Received: 02/21/08  
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	02/26/08 16:01/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/26/08 16:01/sn
Bicarbonate as HCO3	207	mg/L		5		1	A2320 B	02/26/08 16:01/sn
Calcium	32.9	mg/L		0.5		1	E200.7	03/04/08 01:49/eli-c
Chloride	11	mg/L		1		1	E300.0	02/21/08 19:35/sn
Fluoride	0.3	mg/L		0.1		1	E300.0	02/21/08 19:35/sn
Magnesium	14.0	mg/L		0.5		1	E200.7	03/04/08 01:49/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	02/26/08 14:22/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/21/08 19:35/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/21/08 19:35/sn
Potassium	10.8	mg/L		0.5		1	E200.7	03/04/08 01:49/eli-c
Silica	7.5	mg/L		0.5		1	E200.7	03/04/08 01:49/eli-c
Sodium	276	mg/L	D	8		10	E200.7	03/03/08 20:39/eli-c
Sulfate	583	mg/L	D	3		50	E300.0	02/21/08 19:19/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1600	umhos/cm		5.0		1	A2510 B	02/27/08 12:51/ch
Oxidation-Reduction Potential	180	mV				1	A2580 B	02/22/08 00:00/sn
pH	8.14	s.u.		0.01		1	A4500-H B	02/26/08 00:00/ch
Sodium Adsorption Ratio (SAR)	10	Unitless		0.10		1	Calculation	03/04/08 01:49/krs
Solids, Total Dissolved TDS @ 180 C	990	mg/L		5		1	A2540 C	02/22/08 10:32/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/29/08 07:17/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/29/08 07:17/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/29/08 07:17/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/04/08 01:49/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/29/08 07:17/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/29/08 07:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/29/08 07:17/eli-c
Iron	ND	mg/L		0.03		1	E200.7	03/04/08 01:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/29/08 07:17/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	02/29/08 07:17/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/29/08 07:17/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/29/08 07:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/29/08 07:17/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/08 11:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 18:00/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020220-002  
Client Sample ID: DewBurd GW7

Report Date: 05/08/08  
Collection Date: 02/20/08 08:45  
Date Received: 02/21/08  
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	02/29/08 07:17/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/29/08 07:17/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/29/08 07:17/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 07:17/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/01/08 07:06/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/08 09:29/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/08 11:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.5	pCi/L		4.0		1	E900.0	03/07/08 03:32/eli-c
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Gross Beta	10.1	pCi/L		6.0		1	E900.0	03/07/08 03:32/eli-c
Gross Beta precision (±)	3.5	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Lead 210	24	pCi/L		1.0		1	E909.0M	02/26/08 09:30/eli-c
Lead 210 precision (±)	3.2	pCi/L				1	E909.0M	02/26/08 09:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	0.7	pCi/L		0.1		1	E903.0	03/06/08 15:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/06/08 15:27/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
Gross Gamma	77	pCi/L		20		1	E901.1	02/22/08 16:15/eli-c
Gross Gamma precision (±)	29	pCi/L				1	E901.1	02/22/08 16:15/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	ND	pCi/L		1.0		1	E909.0M	03/04/08 09:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	03/06/08 14:45/eli-c
Radium 226	ND	pCi/L		0.9		1	E903.0	03/11/08 17:06/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	03/14/08 14:45/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/08 14:45/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	242	pCi/L		100		1	D5072-92	02/22/08 15:00/eli-c
Radon 222 precision (±)	44.2	pCi/L				1	D5072-92	02/22/08 15:00/eli-c

### TOTAL METALS ANALYSES

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-002  
Client Sample ID: DewBurd GW7

Report Date: 05/08/08  
Collection Date: 02/20/08 08:45  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/27/08 03:24/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/27/08 03:24/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/27/08 03:24/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/27/08 03:24/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/29/08 21:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/27/08 03:24/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/27/08 03:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/27/08 03:24/eli-c
Iron	0.41	mg/L		0.03		1	E200.7	02/29/08 21:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/27/08 03:24/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	02/27/08 03:24/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 10:58/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/27/08 03:24/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/27/08 03:24/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/27/08 03:24/eli-c
Silver	ND	mg/L		0.005		5	E200.8	02/29/08 22:51/eli-c
Strontium	1.0	mg/L		0.1		1	E200.8	02/27/08 03:24/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/27/08 03:24/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/27/08 03:24/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 06:17/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.50	%				1	A1030 E	05/07/08 12:36/hrs
Anions	15.9	meq/L				1	A1030 E	05/07/08 12:36/hrs
Cations	15.1	meq/L				1	A1030 E	05/07/08 12:36/hrs
Solids, Total Dissolved Calculated	1050	mg/L				1	A1030 E	05/07/08 12:36/hrs
TDS Balance (0.80 - 1.20)	0.940	dec. %				1	A1030 E	05/07/08 12:36/hrs

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

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: R08020220-003  
Client Sample ID: DewBurd GW631

Report Date: 05/08/08  
Collection Date: 02/20/08 13:55  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	158	mg/L		5		1	A2320 B	02/26/08 16:03/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/26/08 16:03/sn
Bicarbonate as HCO3	193	mg/L		5		1	A2320 B	02/26/08 16:03/sn
Calcium	324	mg/L	D	1		10	E200.7	03/03/08 20:43/eli-c
Chloride	8	mg/L		1		1	E300.0	02/21/08 20:06/sn
Fluoride	0.2	mg/L		0.1		1	E300.0	02/21/08 20:06/sn
Magnesium	82.6	mg/L		0.5		1	E200.7	03/04/08 01:52/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/26/08 14:25/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/21/08 20:06/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/21/08 20:06/sn
Potassium	15.7	mg/L		0.5		1	E200.7	03/04/08 01:52/eli-c
Silica	6.9	mg/L		0.5		1	E200.7	03/04/08 01:52/eli-c
Sodium	77.1	mg/L	D	0.8		1	E200.7	03/04/08 01:52/eli-c
Sulfate	1250	mg/L	D	3		50	E300.0	02/21/08 19:50/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2420	umhos/cm		5.0		1	A2510 B	02/27/08 12:51/ch
Oxidation-Reduction Potential	180	mV				1	A2580 B	02/22/08 00:00/sn
pH	7.60	s.u.		0.01		1	A4500-H B	02/26/08 00:00/ch
Sodium Adsorption Ratio (SAR)	0.99	Unitless		0.10		1	Calculation	03/04/08 01:52/krs
Solids, Total Dissolved TDS @ 180 C	2000	mg/L		5		1	A2540 C	02/22/08 10:32/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/29/08 07:25/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/29/08 07:25/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/29/08 07:25/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	03/04/08 01:52/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/29/08 07:25/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/29/08 07:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/29/08 07:25/eli-c
Iron	0.57	mg/L		0.03		1	E200.7	03/04/08 01:52/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/29/08 07:25/eli-c
Manganese	0.30	mg/L		0.01		1	E200.8	02/29/08 07:25/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/29/08 07:25/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/29/08 07:25/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/29/08 07:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/08 11:03/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 18:07/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020220-003  
Client Sample ID: DewBurd GW631

Report Date: 05/08/08  
Collection Date: 02/20/08 13:55  
Date Received: 02/21/08  
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	02/29/08 07:25/eli-c
Uranium	0.0027	mg/L		0.0003		1	E200.8	02/29/08 07:25/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/29/08 07:25/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 07:25/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/01/08 07:14/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/08 09:31/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/08 11:26/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	162	pCi/L		7.0		1	E900.0	03/07/08 03:32/eli-c
Gross Alpha precision (±)	12.2	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Gross Beta	52.1	pCi/L		9.0		1	E900.0	03/07/08 03:32/eli-c
Gross Beta precision (±)	6.5	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Lead 210	6.1	pCi/L		1.0		1	E909.0M	02/26/08 09:30/eli-c
Lead 210 precision (±)	1.8	pCi/L				1	E909.0M	02/26/08 09:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	19.4	pCi/L		0.1		1	E903.0	03/06/08 15:27/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	03/06/08 15:27/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
Gross Gamma	510	pCi/L		20		1	E901.1	02/22/08 16:15/eli-c
Gross Gamma precision (±)	46	pCi/L				1	E901.1	02/22/08 16:15/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	7.5	pCi/L		1.0		1	E909.0M	03/04/08 09:45/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	03/04/08 09:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	03/06/08 14:45/eli-c
Radium 226	ND	pCi/L		0.9		1	E903.0	03/11/08 17:06/eli-c
Thorium 230	0.6	pCi/L		0.2		1	E907.0	03/14/08 14:45/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/14/08 14:45/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	3920	pCi/L		100		1	D5072-92	02/22/08 15:00/eli-c
Radon 222 precision (±)	77.0	pCi/L				1	D5072-92	02/22/08 15:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-003  
Client Sample ID: DewBurd GW631

Report Date: 05/08/08  
Collection Date: 02/20/08 13:55  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/27/08 03:32/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/27/08 03:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/27/08 03:32/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/27/08 03:32/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	02/29/08 21:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/27/08 03:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/27/08 03:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/27/08 03:32/eli-c
Iron	1.06	mg/L		0.03		1	E200.7	02/29/08 21:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/27/08 03:32/eli-c
Manganese	0.28	mg/L		0.01		1	E200.8	02/27/08 03:32/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/06/08 09:04/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/27/08 03:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/27/08 03:32/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	02/27/08 03:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 18:14/eli-c
Strontium	5.6	mg/L		0.1		1	E200.8	02/27/08 03:32/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/27/08 03:32/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	02/27/08 03:32/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 06:25/eli-c
DATA QUALITY								
A/C Balance (± 5)	-4.87	%				1	A1030 E	05/07/08 13:15/krs
Anions	29.5	meq/L				1	A1030 E	05/07/08 13:15/krs
Cations	26.8	meq/L				1	A1030 E	05/07/08 13:15/krs
Solids, Total Dissolved Calculated	1880	mg/L				1	A1030 E	05/07/08 13:15/krs
TDS Balance (0.80 - 1.20)	1.05	dec. %				1	A1030 E	05/07/08 13:15/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-004  
Client Sample ID: DewBurd GW13

Report Date: 05/08/08  
Collection Date: 02/20/08 14:41  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	02/26/08 16:05/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/26/08 16:05/sn
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	02/26/08 16:05/sn
Calcium	58	mg/L	D	1		10	E200.7	03/03/08 21:05/eli-c
Chloride	10	mg/L		1		1	E300.0	02/21/08 20:36/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/21/08 20:36/sn
Magnesium	22.4	mg/L		0.5		10	E200.7	03/03/08 21:05/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/26/08 14:26/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/21/08 20:36/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/21/08 20:36/sn
Potassium	11.8	mg/L		0.5		10	E200.7	03/03/08 21:05/eli-c
Silica	6.5	mg/L		0.5		1	E200.7	03/04/08 01:55/eli-c
Sodium	173	mg/L	D	8		10	E200.7	03/03/08 21:05/eli-c
Sulfate	499	mg/L	D	3		50	E300.0	02/21/08 20:21/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5.0		1	A2510 B	02/27/08 12:52/ch
Oxidation-Reduction Potential	200	mV				1	A2580 B	02/22/08 00:00/sn
pH	8.05	s.u.		0.01		1	A4500-H B	02/26/08 00:00/ch
Sodium Adsorption Ratio (SAR)	4.9	Unitless		0.10		1	Calculation	03/03/08 21:05/krs
Solids, Total Dissolved TDS @ 180 C	850	mg/L		5		1	A2540 C	02/22/08 10:33/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/01/08 05:36/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/29/08 07:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/29/08 07:55/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/04/08 01:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/29/08 07:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/29/08 07:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/29/08 07:55/eli-c
Iron	ND	mg/L		0.03		1	E200.7	03/04/08 01:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/29/08 07:55/eli-c
Manganese	0.16	mg/L		0.01		1	E200.8	02/29/08 07:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/29/08 07:55/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/29/08 07:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/29/08 07:55/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/08 11:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 18:21/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.

D - RL increased due to sample matrix interference.





## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020220-004  
Client Sample ID: DewBurd GW13

Report Date: 05/08/08  
Collection Date: 02/20/08 14:41  
Date Received: 02/21/08  
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	02/29/08 07:55/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/29/08 07:55/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/29/08 07:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 07:55/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	03/01/08 07:21/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/08 09:33/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/08 11:26/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	19.5	pCi/L		3.0		1	E900.0	03/07/08 03:32/eli-c
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Gross Beta	11.4	pCi/L		5.0		1	E900.0	03/07/08 03:32/eli-c
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	03/07/08 03:32/eli-c
Lead 210	4.7	pCi/L		1.0		1	E909.0M	02/26/08 09:30/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	02/26/08 09:30/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	0.9	pCi/L				1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	1.1	pCi/L		0.1		1	E903.0	03/06/08 15:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/06/08 15:27/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/29/08 14:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	02/22/08 16:15/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	02/22/08 16:15/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	03/04/08 09:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	03/06/08 14:45/eli-c
Radium 226	1.6	pCi/L		0.9		1	E903.0	03/11/08 17:06/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	03/11/08 17:06/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	03/14/08 14:45/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/14/08 14:45/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	258	pCi/L		100		1	D5072-92	02/22/08 15:00/eli-c
Radon 222 precision (±)	42.6	pCi/L				1	D5072-92	02/22/08 15:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-004  
Client Sample ID: DewBurd GW13

Report Date: 05/08/08  
Collection Date: 02/20/08 14:41  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/27/08 03:39/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/27/08 03:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/27/08 03:39/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/27/08 03:39/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/29/08 21:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/27/08 03:39/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/27/08 03:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/27/08 03:39/eli-c
Iron	3.11	mg/L		0.03		1	E200.7	02/29/08 21:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/27/08 03:39/eli-c
Manganese	0.16	mg/L		0.01		1	E200.8	02/27/08 03:39/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/06/08 09:06/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/27/08 03:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/27/08 03:39/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/27/08 03:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 18:27/eli-c
Strontium	1.5	mg/L		0.1		1	E200.8	02/27/08 03:39/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/27/08 03:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/27/08 03:39/eli-c
Zinc	0.07	mg/L		0.01		1	E200.8	02/29/08 06:32/eli-c
DATA QUALITY								
A/C Balance (± 5)	-4.96	%				1	A1030 E	05/07/08 13:07/krs
Anions	13.9	meq/L				1	A1030 E	05/07/08 13:07/krs
Cations	12.6	meq/L				1	A1030 E	05/07/08 13:07/krs
Solids, Total Dissolved Calculated	888	mg/L				1	A1030 E	05/07/08 13:07/krs
TDS Balance (0.80 - 1.20)	0.960	dec. %				1	A1030 E	05/07/08 13:07/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: R08020220-005  
Client Sample ID: DewBurd GW628

Report Date: 05/08/08  
Collection Date: 02/20/08 18:30  
Date Received: 02/21/08  
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	02/26/08 16:07/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/26/08 16:07/sn
Bicarbonate as HCO3	193	mg/L		5		1	A2320 B	02/26/08 16:07/sn
Calcium	50.0	mg/L		0.5		1	E200.7	05/05/08 17:06/eli-c
Chloride	29	mg/L		1		1	E300.0	02/21/08 21:07/sn
Fluoride	0.4	mg/L		0.1		1	E300.0	02/21/08 21:07/sn
Magnesium	20.6	mg/L		0.5		1	E200.7	05/05/08 17:06/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/26/08 14:27/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/21/08 21:07/sn
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/21/08 21:07/sn
Potassium	9.3	mg/L		0.5		1	E200.7	05/05/08 17:06/eli-c
Silica	5.0	mg/L		0.5		1	E200.7	05/05/08 17:06/eli-c
Sodium	306	mg/L	D	0.8		1	E200.7	05/05/08 17:06/eli-c
Sulfate	651	mg/L		1		1	E300.0	02/21/08 21:07/sn
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1510	umhos/cm		5.0		1	A2510 B	02/27/08 12:54/ch
Oxidation-Reduction Potential	110	mV				1	A2580 B	02/22/08 00:00/sn
pH	8.32	s.u.		0.01		1	A4500-H B	02/26/08 00:00/ch
Sodium Adsorption Ratio (SAR)	9.2	Unitless		0.10		1	Calculation	05/05/08 17:06/krs
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	02/22/08 10:34/sn
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/01/08 05:44/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/29/08 08:02/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/29/08 08:02/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	05/05/08 17:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/29/08 08:02/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/29/08 08:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/29/08 08:02/eli-c
Iron	ND	mg/L		0.03		1	E200.7	05/05/08 17:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/29/08 08:02/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	02/29/08 08:02/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/29/08 08:02/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/29/08 08:02/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/29/08 08:02/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/08 11:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/03/08 19:15/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.

D - RL increased due to sample matrix interference.



## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020220-005  
**Client Sample ID:** DewBurd GW628

**Report Date:** 05/08/08  
**Collection Date:** 02/20/08 18:30  
**Date Received:** 02/21/08  
**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	02/29/08 08:02/eli-c
Uranium	0.0030	mg/L		0.0003			1	E200.8	02/29/08 08:02/eli-c
Vanadium	ND	mg/L		0.1			1	E200.8	02/29/08 08:02/eli-c
Zinc	ND	mg/L		0.01			1	E200.8	02/29/08 08:02/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	03/01/08 07:29/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	02/25/08 09:35/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	02/25/08 11:26/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	64.5	pCi/L		4.0			1	E900.0	03/07/08 03:32/eli-c
Gross Alpha precision (±)	5.8	pCi/L					1	E900.0	03/07/08 03:32/eli-c
Gross Beta	19.0	pCi/L		6.0			1	E900.0	03/07/08 03:32/eli-c
Gross Beta precision (±)	3.7	pCi/L					1	E900.0	03/07/08 03:32/eli-c
Lead 210	14	pCi/L		1.0			1	E909.0M	02/26/08 09:30/eli-c
Lead 210 precision (±)	2.5	pCi/L					1	E909.0M	02/26/08 09:30/eli-c
Polonium 210	1.3	pCi/L		1.0			1	RMO-3008	02/27/08 13:30/eli-c
Polonium 210 precision (±)	1.1	pCi/L					1	RMO-3008	02/27/08 13:30/eli-c
Radium 226	9.0	pCi/L		0.1			1	E903.0	03/06/08 15:27/eli-c
Radium 226 precision (±)	0.6	pCi/L					1	E903.0	03/06/08 15:27/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	02/29/08 14:00/eli-c
Gross Gamma	440	pCi/L		20			1	E901.1	02/22/08 16:15/eli-c
Gross Gamma precision (±)	42	pCi/L					1	E901.1	02/22/08 16:15/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	1.2	pCi/L		1.0			1	E909.0M	03/04/08 09:45/eli-c
Lead 210 precision (±)	0.54	pCi/L					1	E909.0M	03/04/08 09:45/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	03/06/08 14:45/eli-c
Radium 226	1.7	pCi/L		1.0			1	E903.0	03/11/08 17:06/eli-c
Radium 226 precision (±)	0.8	pCi/L					1	E903.0	03/11/08 17:06/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	03/26/08 14:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	03/26/08 14:30/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	4360	pCi/L		100			1	D5072-92	02/22/08 15:00/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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: R08020220-005  
Client Sample ID: DewBurd GW628

Report Date: 05/08/08  
Collection Date: 02/20/08 18:30  
Date Received: 02/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - TOTAL								
Radon 222 precision (±)	78.4	pCi/L				1	D5072-92	02/22/08 15:00/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/27/08 03:47/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/27/08 03:47/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/27/08 03:47/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/27/08 03:47/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/29/08 21:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/27/08 03:47/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/27/08 03:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/27/08 03:47/eli-c
Iron	0.70	mg/L		0.03		1	E200.7	02/29/08 21:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/27/08 03:47/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	02/27/08 03:47/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/24/08 11:00/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	02/27/08 03:47/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/27/08 03:47/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/27/08 03:47/eli-c
Silver	ND	mg/L		0.005		5	E200.8	02/29/08 23:36/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	02/27/08 03:47/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/27/08 03:47/eli-c
Uranium	0.0031	mg/L		0.0003		1	E200.8	02/27/08 03:47/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/29/08 06:40/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.362	%				1	A1030 E	05/07/08 13:10/krs
Anions	17.6	meq/L				1	A1030 E	05/07/08 13:10/krs
Cations	17.8	meq/L				1	A1030 E	05/07/08 13:10/krs
Solids, Total Dissolved Calculated	1180	mg/L				1	A1030 E	05/07/08 13:10/krs
TDS Balance (0.80 - 1.20)	0.780	dec. %				1	A1030 E	05/07/08 13:10/krs

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080225A-ALK-SEL-W							
Sample ID: MBLK1_080225A	Method Blank					Run: PH_COND1-R_080226A		02/26/08 12:12	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_080225A	Laboratory Control Sample					Run: PH_COND1-R_080226A		02/26/08 12:16	
Alkalinity, Total as CaCO <sub>3</sub>	1000	mg/L	5.0	102	90	110			
Sample ID: R08020220-005AMS	Sample Matrix Spike					Run: PH_COND1-R_080226A		02/26/08 16:10	
Alkalinity, Total as CaCO <sub>3</sub>	264	mg/L	5.0	96	80	120			
Sample ID: R08020220-005AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080226A		02/26/08 16:13	
Alkalinity, Total as CaCO <sub>3</sub>	250	mg/L	5.0	83	80	120	5.4	10	
Method: A2510 B		Batch: 080227_1_COND-PROBE-W							
Sample ID: LCS1-1_080227	Laboratory Control Sample					Run: PH_COND2-R_080227A		02/27/08 12:33	
Conductivity @ 25 C	156	umhos/cm	5.0	104	90	110			
Sample ID: LCS2-1_080227	Laboratory Control Sample					Run: PH_COND2-R_080227A		02/27/08 12:35	
Conductivity @ 25 C	5080	umhos/cm	5.0	102	90	110			
Sample ID: LCS_COND-1_080227	Laboratory Control Sample					Run: PH_COND2-R_080227A		02/27/08 12:42	
Conductivity @ 25 C	1310	umhos/cm	5.0	93	90	110			
Sample ID: MBLK-1_080227	Method Blank					Run: PH_COND2-R_080227A		02/27/08 13:07	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08020171-002ADUP	Sample Duplicate					Run: PH_COND2-R_080227A		02/27/08 12:47	
Conductivity @ 25 C	530	umhos/cm	5.0				1.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C		Batch: 080222A-SLDS-TDS-W							
Sample ID: MBLK1_080222A	Method Blank					Run: BAL-4-R_080222A			02/22/08 10:18
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080222A	Laboratory Control Sample					Run: BAL-4-R_080222A			02/22/08 10:19
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	100	90	110			
Sample ID: R08020218-008AMS	Sample Matrix Spike					Run: BAL-4-R_080222A			02/22/08 10:28
Solids, Total Dissolved TDS @ 180 C	1500	mg/L	5.0	116	80	120			
Sample ID: R08020218-008AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080222A			02/22/08 10:29
Solids, Total Dissolved TDS @ 180 C	1500	mg/L	5.0	113	80	120	0.4	10	
Sample ID: R08020228-003AMS	Sample Matrix Spike					Run: BAL-4-R_080222A			02/22/08 10:38
Solids, Total Dissolved TDS @ 180 C	3000	mg/L	5.0	116	80	120			
Sample ID: R08020228-003AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080222A			02/22/08 10:39
Solids, Total Dissolved TDS @ 180 C	3000	mg/L	5.0	126	80	120	0.7	10	S
Method: A2580 B		Batch: R33568							
Sample ID: LCS_022208A	Laboratory Control Sample					Run: PH_COND1-R_080222A			02/22/08 00:00
Oxidation-Reduction Potential	490	mV		102	95	105			
Method: A3114 B		Batch: C_SE3114-080225A							
Sample ID: MBLK	Method Blank					Run: SUB-C97291			02/25/08 10:55
Selenium	0.0003	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample					Run: SUB-C97291			02/25/08 10:57
Selenium	0.049	mg/L	0.0010	98	90	110			
Sample ID: R08020220-001E	Sample Matrix Spike					Run: SUB-C97291			02/25/08 11:10
Selenium	0.047	mg/L	0.0010	91	85	115			
Sample ID: R08020220-001E	Sample Matrix Spike Duplicate					Run: SUB-C97291			02/25/08 11:12
Selenium	0.049	mg/L	0.0010	96	85	115	5.0	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: 05/08/08  
Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SEIV3114-080225		
Sample ID: MBLK	Method Blank					Run: SUB-C97273			02/25/08 09:22
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-30-5	Laboratory Control Sample					Run: SUB-C97273			02/25/08 09:25
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Sample ID: R08020220-001E	Sample Matrix Spike					Run: SUB-C97273			02/25/08 09:38
Selenium-IV	0.047	mg/L	0.0010	93	85	115			
Sample ID: R08020220-001E	Sample Matrix Spike Duplicate					Run: SUB-C97273			02/25/08 09:40
Selenium-IV	0.045	mg/L	0.0010	88	85	115	4.7	10	
Method: A4500-H B							Batch: 080226_1_PH-W		
Sample ID: LCS_pH-1_080226	Laboratory Control Sample					Run: PH_COND2-R_080226A			02/26/08 00:00
pH	6.96	s.u.	0.010	101	98.55	101.45			
Sample ID: R08020171-003ADUP	Sample Duplicate					Run: PH_COND2-R_080226A			02/26/08 00:00
pH	6.82	s.u.	0.010				0.0	1.25	
Method: A4500-NH3 G							Batch: A2008-02-26_2_NH3_01		
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080226A			02/26/08 11:54
Nitrogen, Ammonia as N	0.26	mg/L	0.10	102	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080226A			02/26/08 11:55
Nitrogen, Ammonia as N	0.27	mg/L	0.10	106	90	110			
Sample ID: MBLK-5	Method Blank					Run: TECHAA2-R_080226A			02/26/08 11:56
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08020220-001BDUP	Sample Duplicate					Run: TECHAA2-R_080226A			02/26/08 14:21
Nitrogen, Ammonia as N	0.22	mg/L	0.10				0.0	10	
Sample ID: R08020220-002BMS	Sample Matrix Spike					Run: TECHAA2-R_080226A			02/26/08 14:24
Nitrogen, Ammonia as N	0.57	mg/L	0.10	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: 05/08/08  
Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R97324		
Sample ID: C08020802-002CDUP	Sample Duplicate				Run: SUB-C97324			02/22/08 15:00	
Radon 222	287	pCi/L	100				14	30	
Sample ID: MB-R97324	Method Blank				Run: SUB-C97324			02/22/08 15:00	
Radon 222	ND	pCi/L							
Sample ID: LCS-R97324	Laboratory Control Sample				Run: SUB-C97324			02/22/08 15:00	
Radon 222	302	pCi/L	100	99	70	130			
Method: E200.7							Batch: C_17842		
Sample ID: MB-17842	Method Blank				Run: SUB-C97563			02/29/08 11:55	
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS-17842	Laboratory Control Sample				Run: SUB-C97563			02/29/08 12:31	
Boron	0.493	mg/L	0.10	99	85	115			
Iron	0.500	mg/L	0.030	100	85	115			
Sample ID: R08020220-005D	Sample Matrix Spike				Run: SUB-C97563			02/29/08 21:17	
Boron	0.574	mg/L	0.10	97	70	130			
Iron	1.17	mg/L	0.030	94	70	130			
Sample ID: R08020220-005D	Sample Matrix Spike Duplicate				Run: SUB-C97563			02/29/08 21:20	
Boron	0.588	mg/L	0.10	100	70	130	2.4	20	
Iron	1.19	mg/L	0.030	98	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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R97620		
<b>Sample ID: LFB-TM</b>	Laboratory Fortified Blank			Run: SUB-C97620			03/03/08 11:30		
Silica	2.0	mg/L	0.10	99	85	125			
Boron	1.9	mg/L	0.10	96	85	125			
Iron	2.0	mg/L	0.030	99	85	125			
<b>Sample ID: LFB-MAJORS</b>	Laboratory Fortified Blank			Run: SUB-C97620			03/03/08 11:33		
Calcium	25	mg/L	0.50	99	85	125			
Magnesium	24	mg/L	0.50	95	85	125			
Potassium	25	mg/L	0.50	101	85	125			
Sodium	25	mg/L	0.76	98	85	125			
<b>Sample ID: LRB</b>	Laboratory Reagent Blank			Run: SUB-C97620			03/03/08 11:40		
Silica	ND	mg/L	0.10						
Boron	ND	mg/L	0.10						
Calcium	ND	mg/L	0.50						
Iron	ND	mg/L	0.030						
Magnesium	ND	mg/L	0.50						
Potassium	0.050	mg/L	0.50						
Sodium	ND	mg/L	0.76						
<b>Sample ID: C08020768-001FMS</b>	Sample Matrix Spike			Run: SUB-C97620			03/03/08 20:19		
Boron	0.975	mg/L	0.10	98	70	130			
Calcium	55.8	mg/L	0.50	88	70	130			
Iron	0.948	mg/L	0.030	94	70	130			
Magnesium	45.3	mg/L	0.50	88	70	130			
Potassium	106	mg/L	0.50	88	70	130			
Silica	16.8	mg/L	0.10		70	130			A
Sodium	49.9	mg/L	0.76	92	70	130			
<b>Sample ID: C08020768-001FMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-C97620			03/03/08 20:23		
Boron	1.02	mg/L	0.10	102	70	130	4.8	20	
Calcium	57.7	mg/L	0.50	91	70	130	3.3	20	
Iron	1.00	mg/L	0.030	99	70	130	5.8	20	
Magnesium	47.3	mg/L	0.50	92	70	130	4.2	20	
Potassium	108	mg/L	0.50	89	70	130	2.1	20	
Silica	17.7	mg/L	0.10		0	0			A
Sodium	49.0	mg/L	0.76	90	70	130	1.8	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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17842		
<b>Sample ID: MB-17842</b>	Method Blank		Run: SUB-C97361				02/27/08 01:32		
Antimony	ND	mg/L	0.0003						
Arsenic	ND	mg/L	0.0001						
Barium	ND	mg/L	8E-05						
Beryllium	ND	mg/L	7E-05						
Cadmium	ND	mg/L	0.0004						
Chromium	ND	mg/L	0.0002						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	0.0001						
Manganese	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	0.0002						
Nickel	0.0006	mg/L	6E-05						
Selenium	0.0007	mg/L	0.0002						
Strontium	ND	mg/L	7E-05						
Thallium	ND	mg/L	5E-05						
Uranium	ND	mg/L	4E-05						
<b>Sample ID: LCS1-17842</b>	Laboratory Control Sample		Run: SUB-C97361				02/27/08 01:39		
Antimony	0.0186	mg/L	0.050	93	80	120			
Arsenic	0.0196	mg/L	0.0010	98	80	120			
Barium	0.0198	mg/L	0.10	99	80	120			
Beryllium	0.0208	mg/L	0.010	104	80	120			
Cadmium	0.0195	mg/L	0.010	97	80	120			
Chromium	0.0190	mg/L	0.050	95	80	120			
Copper	0.0192	mg/L	0.010	96	80	120			
Lead	0.0190	mg/L	0.050	95	80	120			
Manganese	0.0187	mg/L	0.010	94	80	120			
Molybdenum	0.0189	mg/L	0.10	95	80	120			
Nickel	0.0194	mg/L	0.050	97	80	120			
Selenium	0.0928	mg/L	0.0010	92	80	120			
Strontium	0.00959	mg/L	0.10	96	80	120			
Thallium	0.0187	mg/L	0.10	94	80	120			
Uranium	0.0194	mg/L	0.00030	97	80	120			
<b>Sample ID: LCS-17842</b>	Laboratory Control Sample		Run: SUB-C97361				02/27/08 01:47		
Antimony	0.510	mg/L	0.050	102	85	115			
Arsenic	0.493	mg/L	0.0013	99	85	115			
Barium	0.518	mg/L	0.10	104	85	115			
Beryllium	0.524	mg/L	0.010	105	85	115			
Cadmium	0.496	mg/L	0.010	99	85	115			
Chromium	0.506	mg/L	0.050	101	85	115			
Copper	0.483	mg/L	0.010	97	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 05/08/08

Project: Edgemont

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_17842		
<b>Sample ID: LCS-17842</b>	Laboratory Control Sample			Run: SUB-C97361			02/27/08 01:47		
Lead	0.501	mg/L	0.050	100	85	115			
Manganese	0.489	mg/L	0.010	98	85	115			
Molybdenum	0.497	mg/L	0.10	99	85	115			
Nickel	0.488	mg/L	0.050	98	85	115			
Selenium	0.482	mg/L	0.0022	96	85	115			
Strontium	0.463	mg/L	0.10	93	85	115			
Thallium	0.499	mg/L	0.10	100	85	115			
Uranium	0.510	mg/L	0.00038	102	85	115			
<b>Sample ID: R08020220-005D</b>	Post Digestion Spike			Run: SUB-C97361			02/27/08 04:17		
Antimony	0.0758	mg/L	0.050	108	70	130			
Arsenic	0.0701	mg/L	0.0010	98	70	130			
Barium	0.0807	mg/L	0.10	102	70	130			
Beryllium	0.0673	mg/L	0.010	96	70	130			
Cadmium	0.0674	mg/L	0.010	96	70	130			
Chromium	0.0679	mg/L	0.050	97	70	130			
Copper	0.0652	mg/L	0.010	93	70	130			
Lead	0.0702	mg/L	0.050	100	70	130			
Manganese	0.160	mg/L	0.010	97	70	130			
Molybdenum	0.0774	mg/L	0.10	107	70	130			
Nickel	0.0650	mg/L	0.050	92	70	130			
Selenium	0.138	mg/L	0.0010	91	70	130			
Strontium	0.926	mg/L	0.10		70	130			A
Thallium	0.0691	mg/L	0.10	99	70	130			
Uranium	0.0768	mg/L	0.00030	105	70	130			
<b>Sample ID: R08020220-005D</b>	Post Digestion Spike Duplicate			Run: SUB-C97361			02/27/08 04:25		
Antimony	0.0741	mg/L	0.050	106	70	130	2.3	20	
Arsenic	0.0694	mg/L	0.0010	97	70	130	0.9	20	
Barium	0.0797	mg/L	0.10	101	70	130	0.0	20	
Beryllium	0.0631	mg/L	0.010	90	70	130	6.6	20	
Cadmium	0.0682	mg/L	0.010	97	70	130	1.2	20	
Chromium	0.0668	mg/L	0.050	95	70	130	1.7	20	
Copper	0.0646	mg/L	0.010	92	70	130	0.8	20	
Lead	0.0698	mg/L	0.050	100	70	130	0.6	20	
Manganese	0.159	mg/L	0.010	97	70	130	0.2	20	
Molybdenum	0.0771	mg/L	0.10	106	70	130	0.0	20	
Nickel	0.0650	mg/L	0.050	92	70	130	0.0	20	
Selenium	0.137	mg/L	0.0010	91	70	130	1.0	20	
Strontium	0.940	mg/L	0.10		70	130	1.5	20	A
Thallium	0.0692	mg/L	0.10	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: 05/08/08

Project: Edgemont

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_17842	
Sample ID: R08020220-005D		Post Digestion Spike Duplicate			Run: SUB-C97361			02/27/08 04:25	
Uranium	0.0764	mg/L	0.00030	105	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: 05/08/08  
Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97512		
Sample ID: LRB	Method Blank		Run: SUB-C97512				02/28/08 16:39		
Aluminum	ND	mg/L	0.0002						
Arsenic	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Cadmium	0.002	mg/L	0.0002						
Chromium	ND	mg/L	0.0001						
Copper	ND	mg/L	0.0001						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	3E-05						
Mercury	0.0001	mg/L	6E-06						
Molybdenum	0.001	mg/L	7E-05						
Nickel	ND	mg/L	8E-05						
Thorium 232	8E-05	mg/L	6E-05						
Uranium	ND	mg/L	4E-05						
Vanadium	ND	mg/L	9E-05						
Zinc	ND	mg/L	0.002						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C97512				02/28/08 16:47		
Aluminum	0.0503	mg/L	0.0010	101	85	115			
Arsenic	0.0533	mg/L	0.0010	107	85	115			
Barium	0.0529	mg/L	0.0010	106	85	115			
Cadmium	0.0540	mg/L	0.0010	104	85	115			
Chromium	0.0523	mg/L	0.0010	105	85	115			
Copper	0.0541	mg/L	0.0010	108	85	115			
Lead	0.0532	mg/L	0.0010	106	85	115			
Manganese	0.0528	mg/L	0.0010	106	85	115			
Mercury	0.00537	mg/L	0.0010	105	85	115			
Molybdenum	0.0541	mg/L	0.0010	105	85	115			
Nickel	0.0540	mg/L	0.0010	108	85	115			
Thorium 232	0.0529	mg/L	0.0010	106	85	115			
Uranium	0.0538	mg/L	0.00030	108	85	115			
Vanadium	0.0523	mg/L	0.0010	105	85	115			
Zinc	0.0554	mg/L	0.0021	111	85	115			
Sample ID: C08020768-002FMS4	Post Digestion Spike		Run: SUB-C97512				02/29/08 08:32		
Aluminum	0.0416	mg/L	0.10	83	70	130			
Arsenic	0.0532	mg/L	0.0010	104	70	130			
Barium	0.0895	mg/L	0.10	96	70	130			
Cadmium	0.0503	mg/L	0.0010	101	70	130			
Chromium	0.0518	mg/L	0.050	103	70	130			
Copper	0.0581	mg/L	0.010	99	70	130			
Lead	0.0512	mg/L	0.0010	102	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Report Date: 05/08/08

Project: Edgemont

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R97512		
Sample ID: C08020768-002FMS4	Post Digestion Spike			Run: SUB-C97512			02/29/08 08:32		
Manganese	0.0523	mg/L	0.010	104	70	130			
Mercury	0.00511	mg/L	0.0010	102	70	130			
Molybdenum	0.0525	mg/L	0.10	96	70	130			
Nickel	0.0467	mg/L	0.050	93	70	130			
Thorium 232	0.0495	mg/L	0.0010	99	70	130			
Uranium	0.0533	mg/L	0.00030	101	70	130			
Vanadium	0.0532	mg/L	0.10	106	70	130			
Zinc	0.0915	mg/L	0.010	103	70	130			
Sample ID: C08020768-002FMSD4	Post Digestion Spike Duplicate			Run: SUB-C97512			02/29/08 08:40		
Aluminum	0.0423	mg/L	0.10	85	70	130	0.0	20	
Arsenic	0.0529	mg/L	0.0010	104	70	130	0.5	20	
Barium	0.0920	mg/L	0.10	101	70	130	0.0	20	
Cadmium	0.0504	mg/L	0.0010	101	70	130	0.2	20	
Chromium	0.0522	mg/L	0.050	104	70	130	0.9	20	
Copper	0.0581	mg/L	0.010	99	70	130	0.1	20	
Lead	0.0516	mg/L	0.0010	102	70	130	0.8	20	
Manganese	0.0521	mg/L	0.010	104	70	130	0.5	20	
Mercury	0.00517	mg/L	0.0010	103	70	130	1.2	20	
Molybdenum	0.0542	mg/L	0.10	99	70	130	0.0	20	
Nickel	0.0463	mg/L	0.050	93	70	130	0.0	20	
Thorium 232	0.0497	mg/L	0.0010	99	70	130	0.5	20	
Uranium	0.0529	mg/L	0.00030	100	70	130	0.7	20	
Vanadium	0.0530	mg/L	0.10	105	70	130	0.0	20	
Zinc	0.0923	mg/L	0.010	105	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: 05/08/08  
Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R97552		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C97552		02/29/08 15:24		
Aluminum	ND	mg/L	0.0002						
Uranium	ND	mg/L	4E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C97552		02/29/08 15:32		
Aluminum	0.0487	mg/L	0.0010	95	85	115			
Uranium	0.0551	mg/L	0.00030	110	85	115			
<b>Sample ID: MB-17899</b>	Method Blank				Run: SUB-C97552		03/01/08 06:36		
Uranium	0.0001	mg/L	4E-05						
<b>Sample ID: LCS1-17899</b>	Laboratory Control Sample				Run: SUB-C97552		03/01/08 06:44		
Uranium	0.0491	mg/L	0.00030	98	80	120			
<b>Sample ID: R08020220-005I</b>	Post Digestion Spike				Run: SUB-C97552		03/01/08 07:36		
Aluminum	2.97	mg/L	0.10		70	130			A
Uranium	0.0506	mg/L	0.00030	101	70	130			
<b>Sample ID: R08020220-005I</b>	Post Digestion Spike Duplicate				Run: SUB-C97552		03/01/08 08:06		
Aluminum	2.95	mg/L	0.10		70	130	0.5	20	A
Uranium	0.0504	mg/L	0.00030	100	70	130	0.4	20	
<b>Method: E200.8</b>							Batch: C_R97625		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C97625		03/03/08 12:50		
Silver	0.001	mg/L	3E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C97625		03/03/08 12:56		
Silver	0.0209	mg/L	0.0010	104	85	115			
<b>Sample ID: C08020752-003CMS</b>	Sample Matrix Spike				Run: SUB-C97625		03/03/08 16:40		
Silver	0.0824	mg/L	0.010	82	70	130			
<b>Sample ID: C08020752-003CMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C97625		03/03/08 16:51		
Silver	0.0823	mg/L	0.010	82	70	130	0.2	20	
<b>Sample ID: R08020220-005C</b>	Sample Matrix Spike				Run: SUB-C97625		03/03/08 19:22		
Silver	0.0120	mg/L	0.010	60	70	130			S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									
<b>Sample ID: R08020220-005C</b>	Sample Matrix Spike Duplicate				Run: SUB-C97625		03/03/08 19:29		
Silver	0.0112	mg/L	0.010	56	70	130	6.7	20	S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.									

### 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: 05/08/08  
Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b> Batch: C_B_31291									
Sample ID: MB-31291	Method Blank					Run: SUB-C97764			03/06/08 07:45
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-31291	Laboratory Fortified Blank					Run: SUB-C97764			03/06/08 07:49
Mercury	0.0021	mg/L	0.0010	106	85	115			
Sample ID: R08020220-004D	Sample Matrix Spike					Run: SUB-C97764			03/06/08 09:09
Mercury	0.0018	mg/L	0.0010	92	70	130			
Sample ID: R08020220-004D	Sample Matrix Spike Duplicate					Run: SUB-C97764			03/06/08 09:16
Mercury	0.0018	mg/L	0.0010	89	70	130	3.3	30	
Sample ID: B08020433-001CMS	Sample Matrix Spike					Run: SUB-C97764			03/06/08 07:56
Mercury	0.0017	mg/L	0.0010	87	70	130			
Sample ID: B08020433-001CMSD	Sample Matrix Spike Duplicate					Run: SUB-C97764			03/06/08 07:58
Mercury	0.0018	mg/L	0.0010	89	70	130	1.7	30	
<b>Method: E245.1</b> Batch: C_B_31543									
Sample ID: MB-31543	Method Blank					Run: SUB-C98552			03/24/08 10:46
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-31543	Laboratory Fortified Blank					Run: SUB-C98552			03/24/08 10:49
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: R08020220-001D	Sample Matrix Spike					Run: SUB-C98552			03/24/08 10:53
Mercury	0.0016	mg/L	0.0010	82	70	130			
Sample ID: R08020220-001D	Sample Matrix Spike Duplicate					Run: SUB-C98552			03/24/08 10:56
Mercury	0.0018	mg/L	0.0010	89	70	130	8.8	30	
Sample ID: B08031358-013CMS	Sample Matrix Spike					Run: SUB-C98552			03/24/08 11:31
Mercury	0.0023	mg/L	0.0010	113	70	130			
Sample ID: B08031358-013CMSD	Sample Matrix Spike Duplicate					Run: SUB-C98552			03/24/08 11:33
Mercury	0.0020	mg/L	0.0010	99	70	130	13	30	
<b>Method: E245.1</b> Analytical Run: SUB-C97764									
Sample ID: QCS	Initial Calibration Verification Standard								03/06/08 07:37
Mercury	0.0021	mg/L	0.0010	106	90	110			
Sample ID: QCS	Initial Calibration Verification Standard								03/06/08 14:36
Mercury	0.0021	mg/L	0.0010	105	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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Analytical Run: SUB-C98552		
Sample ID: QCS	Initial Calibration Verification Standard							03/24/08 10:39	
Mercury	0.0018	mg/L	0.0010	92	90	110			
Method: E300.0							Batch: R33567		
Sample ID: LFB0802212544-1	Laboratory Fortified Blank				Run: DIONEX_080221A			02/21/08 17:47	
Chloride	5.00	mg/L	0.50	100	90	110			
Fluoride	2.06	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.55	mg/L	0.10	102	90	110			
Nitrogen, Nitrite as N	2.53	mg/L	0.10	101	90	110			
Sulfate	14.8	mg/L	1.0	99	90	110			
Sample ID: LFB0802212544-1	Laboratory Fortified Blank				Run: DIONEX_080221A			02/21/08 18:02	
Chloride	5.02	mg/L	0.50	100	90	110			
Fluoride	2.06	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.56	mg/L	0.10	102	90	110			
Nitrogen, Nitrite as N	2.52	mg/L	0.10	101	90	110			
Sulfate	14.8	mg/L	1.0	99	90	110			
Sample ID: R08020220-001AMS	Sample Matrix Spike				Run: DIONEX_080221A			02/21/08 18:33	
Chloride	259	mg/L	5.4	88	80	120			
Fluoride	103	mg/L	0.56	103	80	120			
Nitrogen, Nitrate as N	126	mg/L	1.3	101	80	120			
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120			
Sulfate	1700	mg/L	3.4	82	80	120			
Sample ID: R08020220-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_080221A			02/21/08 18:49	
Chloride	257	mg/L	5.4	87	80	120	0.6	10	
Fluoride	103	mg/L	0.56	103	80	120	0.8	10	
Nitrogen, Nitrate as N	125	mg/L	1.3	100	80	120	0.8	10	
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120	0.0	10	
Sulfate	1700	mg/L	3.4	82	80	120	0.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0402		
Sample ID: MB-GrAB-0402	Method Blank				Run: SUB-C99057		03/06/08 01:41		
Gross Alpha	2	pCi/L							
Gross Beta	-1	pCi/L							
Sample ID: UNAT-GrAB-0402	Laboratory Control Sample				Run: SUB-C99057		03/06/08 01:42		
Gross Alpha	290	pCi/L		118	70	130			
Sample ID: Cs137-GrAB-0402	Laboratory Control Sample				Run: SUB-C99057		03/06/08 01:41		
Gross Beta	96	pCi/L		102	70	130			
Sample ID: C08020709-001AMS	Sample Matrix Spike				Run: SUB-C99057		03/06/08 01:42		
Gross Alpha	320	pCi/L		126	70	130			
Sample ID: C08020709-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99057		03/06/08 01:42		
Gross Alpha	320	pCi/L		128	70	130	1.6	15.9	
Sample ID: C08020709-001AMS	Sample Matrix Spike				Run: SUB-C99057		03/06/08 01:41		
Gross Beta	110	pCi/L		97	70	130			
Sample ID: C08020709-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99057		03/06/08 01:41		
Gross Beta	100	pCi/L		95	70	130	2.1	16	
Method: E901.1							Batch: C_R97327		
Sample ID: MB-R97327	Method Blank				Run: SUB-C97327		02/22/08 16:15		
Gross Gamma	ND	pCi/L	20						
Sample ID: LCS-R97327	Laboratory Control Sample				Run: SUB-C97327		02/22/08 16:15		
Americium 241	730	pCi/L	20	87	70	130			
Cesium 137	1100	pCi/L	20	67	70	130			S
Potassium 40	7200	pCi/L	20	108	70	130			
Sample ID: R08020220-005H	Sample Duplicate				Run: SUB-C97327		02/22/08 16:15		
Gross Gamma	400	pCi/L	20				10.0	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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-2646		
Sample ID: C08020820-001AMS	Sample Matrix Spike				Run: SUB-C97898		03/06/08 15:27		
Radium 226	12	pCi/L	0.10	95	70	130			
Sample ID: C08020837-001CDUP	Sample Duplicate				Run: SUB-C97898		03/06/08 17:01		
Radium 226	3.6	pCi/L	0.10				52	32.8	R
- The RPD for the dup is high. The spike recovery is within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-RA226-2646	Method Blank				Run: SUB-C97898		03/06/08 17:01		
Radium 226	ND	pCi/L							
Sample ID: LCS-RA226-2646	Laboratory Control Sample				Run: SUB-C97898		03/06/08 17:01		
Radium 226	8.1	pCi/L	0.20	127	70	130			
Method: E903.0							Batch: C_RA226-2653		
Sample ID: C08020894-001AMS	Sample Matrix Spike				Run: SUB-C97955		03/11/08 21:37		
Radium 226	2.9	pCi/g-dry	0.10	81	70	130			
Sample ID: C08020894-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C97955		03/11/08 21:37		
Radium 226	2.9	pCi/g-dry	0.10	78	70	130	1.8	22.3	
Sample ID: LCS-17899	Laboratory Control Sample				Run: SUB-C97955		03/11/08 21:37		
Radium 226	12	pCi/L	0.40	92	70	130			
Sample ID: MB-17899	Method Blank				Run: SUB-C97955		03/11/08 21:37		
Radium 226	-0.3	pCi/L							
Method: E907.0							Batch: C_17899		
Sample ID: C08020775-086CMS	Sample Matrix Spike				Run: SUB-C98651		03/14/08 14:45		
Thorium 230	4.80	pCi/g-dry	0.10	93	70	130			
Sample ID: C08020775-086CMSD	Sample Matrix Spike Duplicate				Run: SUB-C98651		03/14/08 14:45		
Thorium 230	5.04	pCi/g-dry	0.10	107	70	130	4.8	30	
Sample ID: LCS-17899	Laboratory Control Sample				Run: SUB-C98651		03/14/08 14:45		
Thorium 230	50.2	pCi/Filter	0.20	102	70	130			
Sample ID: MB-17899	Method Blank				Run: SUB-C98651		03/14/08 14:45		
Thorium 230	0.1	pCi/g-dry							

### 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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R98209		
Sample ID: LCS-R98209	Laboratory Control Sample				Run: SUB-C98209		02/29/08 14:00		
Thorium 230	7.40	pCi/L	0.20	104	70	130			
Sample ID: C08020617-006FMS	Sample Matrix Spike				Run: SUB-C98209		02/29/08 14:00		
Thorium 230	15.5	pCi/L	0.20	95	70	130			
Sample ID: C08020617-006FMSD	Sample Matrix Spike Duplicate				Run: SUB-C98209		02/29/08 14:00		
Thorium 230	14.6	pCi/L	0.20	89	70	130	6.0	30	
Sample ID: MB-R98209	Method Blank				Run: SUB-C98209		02/29/08 14:00		
Thorium 230	0.1	pCi/L							
Method: E909.0M							Batch: C_17899		
Sample ID: R08020220-005I	Sample Matrix Spike				Run: SUB-C97876		03/04/08 09:45		
Lead 210	1000	pCi/L	1.0	87	70	130			
Sample ID: R08020220-005I	Sample Matrix Spike Duplicate				Run: SUB-C97876		03/04/08 09:45		
Lead 210	670	pCi/L	1.0	56	70	130	43	30	SR
- MSD response is outside of the acceptance range for this analysis. Since the LCS, MB, and MS are acceptable the batch is approved.									
Sample ID: MB-R97876	Method Blank				Run: SUB-C97876		03/04/08 09:45		
Lead 210	ND	pCi/L							
Sample ID: LCS-R97876	Laboratory Control Sample				Run: SUB-C97876		03/04/08 09:45		
Lead 210	110	pCi/L	1.0	96	70	130			
Method: E909.0M							Batch: C_R97515		
Sample ID: R08020220-004H	Sample Matrix Spike				Run: SUB-C97515		02/26/08 09:30		
Lead 210	620	pCi/L	1.0	103	70	130			
Sample ID: R08020220-004H	Sample Matrix Spike Duplicate				Run: SUB-C97515		02/26/08 09:30		
Lead 210	530	pCi/L	1.0	88	70	130	15	30	
Sample ID: MB-R97515	Method Blank				Run: SUB-C97515		02/26/08 09:30		
Lead 210	ND	pCi/L	1						
Sample ID: LCS-R97515	Laboratory Control Sample				Run: SUB-C97515		02/26/08 09:30		
Lead 210	110	pCi/L	1.0	93	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: 05/08/08

Work Order: R08020220

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_17899		
Sample ID: R08020220-004I	Sample Matrix Spike				Run: SUB-C97991		03/06/08 14:45		
Polonium 210	82	pCi/L	1.0	75	70	130			
Sample ID: R08020220-004I	Sample Matrix Spike Duplicate				Run: SUB-C97991		03/06/08 14:45		
Polonium 210	96	pCi/L	1.0	88	70	130	16	30	
Sample ID: LCS-17899	Laboratory Control Sample				Run: SUB-C97991		03/06/08 14:45		
Polonium 210	150	pCi/L	1.0	68	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MS, MSD and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-17899	Method Blank				Run: SUB-C97991		03/06/08 14:45		
Polonium 210	0.3	pCi/L							
Method: RMO-3008							Batch: C_R97982		
Sample ID: R08020220-005H	Sample Matrix Spike				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	160	pCi/L	1.0	70	70	130			
Sample ID: R08020220-005H	Sample Matrix Spike Duplicate				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	170	pCi/L	1.0	74	70	130	6.4	30	
Sample ID: LCS-R97982	Laboratory Control Sample				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	78	pCi/L	1.0	68	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MS, MSD and the RPD for the MS MSD pair are acceptable the batch is approved.									
Sample ID: MB-R97982	Method Blank				Run: SUB-C97982		02/27/08 13:30		
Polonium 210	2	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## 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: <b>RESPEC</b>		Contact Name: <b>Corey Foreman</b>		Phone/Fax: <b>605.342.1111</b>	Email: <b>Eric.Kranth</b>
Invoice Address: <b>RESPEC</b>		Invoice Contact & Phone: <b>605.342.1111</b>		Purchase Order:	Sampler: (Please Print) <b>Eric Kranth</b>
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: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other		Shipped by: Cooler ID(s): Receipt Temp <b>0.1 °C</b> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1 Dew Burd GW 7002		02/22/08	0830	W	SEE ATTACHED Normal Turnaround (TAT) <b>RUSH</b> Comments: <b>GW</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page
2 Dew Burd GW 7		02/22/08	0845	W	
3 Dew Burd GW 631		02/20/08	1355	W	
4 Dew Burd GW 13		02/22/08	1414	W	
5 Dew Burd GW 628		02/22/08	1830	W	
6					
7					
8					
9					
10					
Custody Record MUST be Signed		Relinquished By (print): <b>Eric Krantz</b>	Date/Time: <b>02/21/08 09:25</b>	Signature: <b>[Signature]</b>	Received by Laboratory: <b>Linda Gorton</b>
Sample Disposal:		Return to Client:	Lab Disposal:	Date/Time: <b>02/21/08 09:25</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 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 04, 2008

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

Workorder No.: R08030154      Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 2 samples from RESPEC Inc on 3/13/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08030154-001	DewBurd GW135	03/13/08 12:15	03/13/08	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Anion - Cation Balance Conductivity Anions by Ion Chromatography Nitrogen, Ammonia pH Dissolved Filtration Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Polonium 210, Dissolved Radium 226, Dissolved Radon 222 Thorium, Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R08030154-002	DewBurd GW135	03/13/08 11:45	03/13/08	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: 04-Aug-08

CLIENT: RESPEC Inc  
Project: Edgemont  
Sample Delivery Group: R08030154

## 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.

This report is being re-issued due to a change in the report that was made following the original issuance of the report. The reason for this re-issuance is due to the following.  
- Site ID needs to be GW 135 per Eric Krantz with ReSpec

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.

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).



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030154-001  
Client Sample ID: DewBurd GW135

Revised Date: 08/04/08  
Report Date: 05/08/08  
Collection Date: 03/13/08 12:15  
Date Received: 03/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
MAJOR IONS									
Alkalinity, Total as CaCO3	254	mg/L		5			1	A2320 B	03/19/08 14:11/sn
Carbonate as CO3	ND	mg/L		5			1	A2320 B	03/19/08 14:11/sn
Bicarbonate as HCO3	310	mg/L		5			1	A2320 B	03/19/08 14:11/sn
Calcium	292	mg/L		0.5			2	E200.7	03/25/08 14:14/eli-c
Chloride	19	mg/L		1			1	E300.0	03/14/08 15:24/jmh
Fluoride	0.2	mg/L		0.1			1	E300.0	03/14/08 15:24/jmh
Magnesium	149	mg/L		0.5			2	E200.7	03/25/08 14:14/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1			1	A4500-NH3 G	03/14/08 16:45/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1			1	E300.0	03/14/08 15:24/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1			1	E300.0	03/14/08 15:24/jmh
Potassium	20.1	mg/L		0.5			2	E200.7	03/25/08 14:14/eli-c
Silica	8.0	mg/L		0.5			2	E200.7	03/25/08 14:14/eli-c
Sodium	185	mg/L	D	2			2	E200.7	03/25/08 14:14/eli-c
Sulfate	1460	mg/L	D	3			50	E300.0	03/14/08 15:09/jmh
PHYSICAL PROPERTIES									
Conductivity @ 25 C	2700	umhos/cm		5.0			1	A2510 B	03/18/08 16:38/jmh
pH	7.40	s.u.		0.01			1	A4500-H B	03/18/08 16:24/jmh
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10			1	Calculation	04/05/08 15:09/ADM
Solids, Total Dissolved TDS @ 180 C	2400	mg/L		5			1	A2540 C	03/14/08 14:36/sn
METALS - DISSOLVED									
Aluminum	ND	mg/L		0.1			2	E200.7	03/25/08 14:14/eli-c
Arsenic	ND	mg/L		0.001			1	E200.8	03/28/08 15:49/eli-c
Barium	ND	mg/L		0.1			2	E200.7	03/25/08 14:14/eli-c
Boron	ND	mg/L		0.1			2	E200.7	03/25/08 14:14/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	03/28/08 15:49/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	03/25/08 14:14/eli-c
Copper	ND	mg/L		0.01			1	E200.8	03/28/08 15:49/eli-c
Iron	6.64	mg/L		0.03			2	E200.7	03/25/08 14:14/eli-c
Lead	ND	mg/L		0.001			1	E200.8	03/28/08 15:49/eli-c
Manganese	0.13	mg/L		0.01			2	E200.7	03/25/08 14:14/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	03/28/08 15:49/eli-c
Molybdenum	ND	mg/L		0.1			2	E200.7	03/25/08 14:14/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	03/28/08 15:49/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	03/28/08 15:49/eli-c
Silver	ND	mg/L		0.005			1	E200.8	03/28/08 15:49/eli-c
Thorium 232	ND	mg/L		0.005			1	E200.8	03/28/08 15:49/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: R08030154-001  
Client Sample ID: DewBurd GW135

Revised Date: 08/04/08  
Report Date: 05/08/08  
Collection Date: 03/13/08 12:15  
Date Received: 03/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
METALS - DISSOLVED									
Uranium	0.0164	mg/L		0.0003			1	E200.8	03/28/08 15:49/eli-c
Vanadium	ND	mg/L		0.1			2	E200.7	03/25/08 14:14/eli-c
Zinc	0.01	mg/L		0.01			2	E200.7	03/25/08 14:14/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	66.5	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Gross Alpha precision (±)	7.8	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Gross Alpha MDC	5.8	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Gross Beta	28.5	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Gross Beta precision (±)	5.7	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Gross Beta MDC	8.6	pCi/L					1	E900.0	03/27/08 02:05/eli-c
Lead 210	0.3	pCi/L		1.0			1	E909.0M	03/17/08 05:45/eli-c
Lead 210 precision (±)	1.0	pCi/L					1	E909.0M	03/17/08 05:45/eli-c
Polonium 210	0.6	pCi/L		1.0			1	RMO-3008	03/25/08 15:00/eli-c
Polonium 210 precision (±)	1.4	pCi/L					1	RMO-3008	03/25/08 15:00/eli-c
Radium 226	2.3	pCi/L		0.2			1	E903.0	03/24/08 14:23/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	03/24/08 14:23/eli-c
Radium 226 MDC	0.1	pCi/L					1	E903.0	03/24/08 14:23/eli-c
Thorium 230	1.8	pCi/L		0.2			1	E907.0	03/31/08 14:00/eli-c
Thorium 230 precision (±)	0.8	pCi/L					1	E907.0	03/31/08 14:00/eli-c
Gross Gamma	90	pCi/L		20			1	E901.1	03/14/08 16:57/eli-c
Gross Gamma precision (±)	34	pCi/L					1	E901.1	03/14/08 16:57/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	948	pCi/L		100			1	D5072-92	03/15/08 10:08/eli-c
Radon 222 precision (±)	57.3	pCi/L					1	D5072-92	03/15/08 10:08/eli-c
DATA QUALITY									
A/C Balance (± 5)	-0.798	%					1	A1030 E	05/05/08 09:27/krs
Anions	35.9	meq/L					1	A1030 E	05/05/08 09:27/krs
Cations	35.4	meq/L					1	A1030 E	05/05/08 09:27/krs
Solids, Total Dissolved Calculated	2280	mg/L					1	A1030 E	05/05/08 09:27/krs
TDS Balance (0.80 - 1.20)	1.07	dec. %					1	A1030 E	05/05/08 09:27/krs

Report 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: R08030154-002  
Client Sample ID: DewBurd GW135

Revised Date: 08/04/08  
Report Date: 05/08/08  
Collection Date: 03/13/08 11:45  
Date Received: 03/13/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	12	mg/L		5		1	A2320 B	03/19/08 14:13/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/19/08 14:13/sn
Bicarbonate as HCO3	15	mg/L		5		1	A2320 B	03/19/08 14:13/sn
Calcium	ND	mg/L		0.5		2	E200.7	03/25/08 14:17/eli-c
Chloride	2	mg/L		1		1	E300.0	03/14/08 15:55/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	03/14/08 15:55/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	03/25/08 14:17/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/14/08 16:48/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/14/08 15:55/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/14/08 15:55/jmh
Potassium	ND	mg/L		0.5		2	E200.7	03/25/08 14:17/eli-c
Silica	ND	mg/L		0.5		2	E200.7	03/25/08 14:17/eli-c
Sodium	12	mg/L	D	2		2	E200.7	03/25/08 14:17/eli-c
Sulfate	39	mg/L		1		1	E300.0	03/14/08 15:55/jmh

### PHYSICAL PROPERTIES

Conductivity @ 25 C	131	umhos/cm		5.0		1	A2510 B	03/18/08 16:39/jmh
pH	6.49	s.u.		0.01		1	A4500-H B	03/18/08 16:27/jmh
Sodium Adsorption Ratio (SAR)	NA	unitless		0.10		1	Calculation	05/05/08 00:00/krs
Solids, Total Dissolved TDS @ 180 C	92	mg/L		5		1	A2540 C	03/14/08 14:37/sn

- Calcium and magnesium concentrations are less than detectable. SAR cannot be calculated for this sample (divide by 0).

### METALS - DISSOLVED

Aluminum	ND	mg/L		0.1		2	E200.7	03/25/08 14:17/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/18/08 17:34/eli-c
Barium	ND	mg/L		0.1		2	E200.7	03/25/08 14:17/eli-c
Boron	ND	mg/L		0.1		2	E200.7	03/25/08 14:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/18/08 17:34/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	03/25/08 14:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/18/08 17:34/eli-c
Iron	ND	mg/L		0.03		2	E200.7	03/25/08 14:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/18/08 17:34/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	03/25/08 14:17/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/18/08 17:34/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	03/25/08 14:17/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/18/08 17:34/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/18/08 17:34/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/18/08 17:34/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/18/08 17:34/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:** R08030154-002  
**Client Sample ID:** DewBurd GW135

**Revised Date:** 08/04/08  
**Report Date:** 05/08/08  
**Collection Date:** 03/13/08 11:45  
**Date Received:** 03/13/08  
**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	04/18/08 17:34/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	03/25/08 14:17/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	03/25/08 14:17/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	2.5	pCi/L				1	E900.0	03/27/08 02:05/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0	03/27/08 02:05/eli-c
Gross Alpha MDC	0.7	pCi/L				1	E900.0	03/27/08 02:05/eli-c
Gross Beta	0.0	pCi/L	U			1	E900.0	03/27/08 02:05/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	03/27/08 02:05/eli-c
Gross Beta MDC	2.4	pCi/L				1	E900.0	03/27/08 02:05/eli-c
Lead 210	3.9	pCi/L		1.0		1	E909.0M	03/17/08 05:45/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	03/17/08 05:45/eli-c
Polonium 210	0.7	pCi/L		1.0		1	RMO-3008	03/25/08 15:00/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	03/25/08 15:00/eli-c
Radium 226	-0.12	pCi/L	U			1	E903.0	03/24/08 14:23/eli-c
Radium 226 precision (±)	0.06	pCi/L				1	E903.0	03/24/08 14:23/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/24/08 14:23/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	03/31/08 14:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/31/08 14:00/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	03/14/08 16:57/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	03/14/08 16:57/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	218	pCi/L		100		1	D5072-92	03/15/08 10:08/eli-c
Radon 222 precision (±)	48.5	pCi/L				1	D5072-92	03/15/08 10:08/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-33.6	%				1	A1030 E	05/05/08 09:38/krs
Anions	1.10	meq/L				1	A1030 E	05/05/08 09:38/krs
Cations	0.547	meq/L				1	A1030 E	05/05/08 09:38/krs
Solids, Total Dissolved Calculated	61.0	mg/L				1	A1030 E	05/05/08 09:38/krs
TDS Balance (0.80 - 1.20)	1.51	dec. %				1	A1030 E	05/05/08 09:38/krs

- The Ion and TDS balances may not calculate within acceptable values for near blank results.

**Report** 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

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080319A-ALK-SEL-W							
Sample ID: MBLK1_080319A	Method Blank					Run: PH_COND1-R_080319A		03/19/08 10:32	
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Bicarbonate as HCO <sub>3</sub>	ND	mg/L	3						
Carbonate as CO <sub>3</sub>	ND	mg/L	3						
Sample ID: LCS1_080319A	Laboratory Control Sample					Run: PH_COND1-R_080319A		03/19/08 10:36	
Alkalinity, Total as CaCO <sub>3</sub>	1000	mg/L	5.0	101	90	110			
Sample ID: R08030162-002AMS	Sample Matrix Spike					Run: PH_COND1-R_080319A		03/19/08 14:24	
Alkalinity, Total as CaCO <sub>3</sub>	322	mg/L	5.0	92	80	120			
Sample ID: R08030162-002AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080319A		03/19/08 14:26	
Alkalinity, Total as CaCO <sub>3</sub>	318	mg/L	5.0	89	80	120	1.3	10	
Method: A2510 B		Batch: 080318_1_COND-PROBE-W							
Sample ID: LCS1-1_080318	Laboratory Control Sample					Run: PH_COND2-R_080318A		03/18/08 16:33	
Conductivity @ 25 C	144	umhos/cm	5.0	96	90	110			
Sample ID: LCS2-1_080318	Laboratory Control Sample					Run: PH_COND2-R_080318A		03/18/08 16:34	
Conductivity @ 25 C	4800	umhos/cm	5.0	96	90	110			
Sample ID: LCS_COND-1_080318	Laboratory Control Sample					Run: PH_COND2-R_080318A		03/18/08 16:35	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080318	Method Blank					Run: PH_COND2-R_080318A		03/18/08 16:35	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08030146-001BDUP	Sample Duplicate					Run: PH_COND2-R_080318A		03/18/08 16:37	
Conductivity @ 25 C	1700	umhos/cm	5.0				0.6	10	
Method: A2540 C		Batch: 080314A-SLDS-TDS-W							
Sample ID: MBLK1_080314A	Method Blank					Run: BAL-4-R_080314A		03/14/08 10:05	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: LCS1_080314A	Laboratory Control Sample					Run: BAL-4-R_080314A		03/14/08 10:06	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	105	90	110			
Sample ID: R08030152-007BMS	Sample Matrix Spike					Run: BAL-4-R_080314A		03/14/08 14:35	
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	104	80	120			
Sample ID: R08030152-007BMDS	Sample Matrix Spike Duplicate					Run: BAL-4-R_080314A		03/14/08 14:36	
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	105	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

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080318_1_PH-W		
Sample ID: LCS_pH-1_080318	Laboratory Control Sample				Run: PH_COND2-R_080318A			03/18/08 16:06	
pH	6.92	s.u.	0.010	101	98.55	101.45			
Sample ID: R08030146-001BDUP	Sample Duplicate				Run: PH_COND2-R_080318A			03/18/08 16:24	
pH	8.01	s.u.	0.010				0.9	1.25	
Method: A4500-NH3 G							Batch: A2008-03-14_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080314A			03/14/08 14:45	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080314A			03/14/08 14:46	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	92	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080314A			03/14/08 14:47	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	92	90	110			
Sample ID: R08030073-004BDUP	Sample Duplicate				Run: TECHAA2-R_080314A			03/14/08 16:17	
Nitrogen, Ammonia as N	23000	mg/L	530				1.5	10	
Sample ID: R08030154-001BMS	Sample Matrix Spike				Run: TECHAA2-R_080314A			03/14/08 16:46	
Nitrogen, Ammonia as N	0.30	mg/L	0.10	90	80	120			
Sample ID: R08030154-001BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080314A			03/14/08 16:47	
Nitrogen, Ammonia as N	0.29	mg/L	0.10	83	80	120	5.8	10	
Method: D5072-92							Batch: C_R98200		
Sample ID: R08030154-002G	Sample Duplicate				Run: SUB-C98200			03/15/08 10:08	
Radon 222	235	pCi/L	100				7.2	30	
Sample ID: MB-R98200	Method Blank				Run: SUB-C98200			03/15/08 10:08	
Radon 222	-20	pCi/L							
Sample ID: LCS-R98200	Laboratory Control Sample				Run: SUB-C98200			03/15/08 10:08	
Radon 222	304	pCi/L	100	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Revised Date: 08/04/08

Report Date: 05/08/08

Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R98618		
Sample ID: MB-080325A	Method Blank		Run: SUB-C98618				03/25/08 13:28		
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	ND	mg/L	0.003						
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-080325A	Laboratory Fortified Blank		Run: SUB-C98618				03/25/08 13:31		
Silica	1.0	mg/L	0.10	103	85	125			
Aluminum	1.0	mg/L	0.10	100	85	125			
Barium	1.0	mg/L	0.10	100	85	125			
Boron	1.0	mg/L	0.10	102	85	125			
Calcium	48	mg/L	0.50	97	85	125			
Chromium	1.00	mg/L	0.050	100	85	125			
Iron	0.99	mg/L	0.030	99	85	125			
Magnesium	48	mg/L	0.50	97	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.00	mg/L	0.10	100	85	125			
Potassium	48	mg/L	0.50	96	85	125			
Sodium	47	mg/L	0.77	94	85	125			
Vanadium	1.00	mg/L	0.10	100	85	125			
Zinc	1.00	mg/L	0.010	100	85	125			
Sample ID: C08030721-004EMS2	Sample Matrix Spike		Run: SUB-C98618				03/25/08 14:34		
Aluminum	20.2	mg/L	0.10	99	70	130			
Barium	25.8	mg/L	0.12	99	70	130			
Boron	34.5	mg/L	0.17	104	70	130			
Chromium	20.7	mg/L	0.050	102	70	130			
Iron	20.3	mg/L	0.095	99	70	130			
Manganese	20.8	mg/L	0.010	102	70	130			
Molybdenum	20.7	mg/L	0.10	102	70	130			
Vanadium	20.8	mg/L	0.10	102	70	130			
Zinc	20.4	mg/L	0.044	100	70	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R98618		
Sample ID: C08030721-004EMS2	Sample Matrix Spike		Run: SUB-C98618				03/25/08 14:34		
Calcium	1010	mg/L	2.1	98	70	130			
Magnesium	987	mg/L	0.74	97	70	130			
Potassium	1020	mg/L	0.50	98	70	130			
Silica	93.7	mg/L	0.41	99	70	130			
Sodium	3470	mg/L	15	87	70	130			
Sample ID: C08030721-004EMSD2	Sample Matrix Spike Duplicate		Run: SUB-C98618				03/25/08 14:37		
Aluminum	20.1	mg/L	0.10	99	70	130	0.3	20	
Barium	25.8	mg/L	0.12	99	70	130	0.2	20	
Boron	34.6	mg/L	0.17	105	70	130	0.4	20	
Chromium	20.3	mg/L	0.050	99	70	130	2.4	20	
Iron	20.2	mg/L	0.095	99	70	130	0.5	20	
Manganese	20.5	mg/L	0.010	100	70	130	1.5	20	
Molybdenum	20.6	mg/L	0.10	101	70	130	0.8	20	
Vanadium	20.2	mg/L	0.10	99	70	130	3.0	20	
Zinc	20.2	mg/L	0.044	99	70	130	1.1	20	
Calcium	1000	mg/L	2.1	98	70	130	0.3	20	
Magnesium	996	mg/L	0.74	98	70	130	0.9	20	
Potassium	1030	mg/L	0.50	98	70	130	0.2	20	
Silica	92.7	mg/L	0.41	94	70	130	1.1	20	
Sodium	3500	mg/L	15	90	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

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R98784		
Sample ID: LRB	Method Blank		Run: SUB-C98784				03/28/08 12:09		
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						
Nickel	ND	mg/L	0.0007						
Selenium	ND	mg/L	0.0002						
Silver	0.0007	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-C98784				03/28/08 12:15		
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Cadmium	0.0511	mg/L	0.0010	102	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0501	mg/L	0.0010	100	85	115			
Mercury	0.00511	mg/L	0.0010	102	85	115			
Nickel	0.0506	mg/L	0.0010	101	85	115			
Selenium	0.0514	mg/L	0.0010	103	85	115			
Silver	0.0191	mg/L	0.0010	92	85	115			
Thorium 232	0.0502	mg/L	0.0010	100	85	115			
Uranium	0.0502	mg/L	0.00030	100	85	115			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Revised Date: 08/04/08

Report Date: 05/08/08

Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R99837		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C99837				04/18/08 12:51		
Arsenic	ND	mg/L	6E-05						
Cadmium	3E-05	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C99837				04/18/08 12:58		
Arsenic	0.0526	mg/L	0.0010	105	85	115			
Cadmium	0.0520	mg/L	0.0010	104	85	115			
Copper	0.0539	mg/L	0.0010	108	85	115			
Lead	0.0524	mg/L	0.0010	105	85	115			
Mercury	0.00529	mg/L	0.0010	106	85	115			
Nickel	0.0530	mg/L	0.0010	106	85	115			
Selenium	0.0518	mg/L	0.0010	104	85	115			
Silver	0.0204	mg/L	0.0010	102	85	115			
Thorium 232	0.0515	mg/L	0.0010	103	85	115			
Uranium	0.0513	mg/L	0.00030	103	85	115			
<b>Sample ID: R08040002-002C</b>	Post Digestion Spike		Run: SUB-C99837				04/18/08 17:55		
Arsenic	0.0615	mg/L	0.0010	107	70	130			
Cadmium	0.0498	mg/L	0.010	99	70	130			
Copper	0.0509	mg/L	0.010	98	70	130			
Lead	0.0501	mg/L	0.050	100	70	130			
Mercury	0.00515	mg/L	0.0010	101	70	130			
Nickel	0.0543	mg/L	0.050	95	70	130			
Selenium	0.0547	mg/L	0.0010	109	70	130			
Silver	0.00890	mg/L	0.010	45	70	130			S
Thorium 232	0.0521	mg/L	0.0010	104	70	130			
Uranium	0.106	mg/L	0.00030	97	70	130			
<b>Sample ID: R08040002-002C</b>	Post Digestion Spike Duplicate		Run: SUB-C99837				04/18/08 18:01		
Arsenic	0.0598	mg/L	0.0010	104	70	130	2.8	20	
Cadmium	0.0485	mg/L	0.010	97	70	130	2.6	20	
Copper	0.0490	mg/L	0.010	94	70	130	3.8	20	
Lead	0.0506	mg/L	0.050	101	70	130	1.0	20	
Mercury	0.00528	mg/L	0.0010	103	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

Revised Date: 08/04/08

Report Date: 05/08/08

Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R99837		
<b>Sample ID: R08040002-002C</b>	Post Digestion Spike Duplicate			Run: SUB-C99837			04/18/08 18:01		
Nickel	0.0525	mg/L	0.050	92	70	130	3.3	20	
Selenium	0.0510	mg/L	0.0010	102	70	130	6.9	20	
Silver	0.00834	mg/L	0.010	42	70	130	0.0	20	S
Thorium 232	0.0523	mg/L	0.0010	104	70	130	0.5	20	
Uranium	0.106	mg/L	0.00030	99	70	130	0.8	20	
<b>Method: E300.0</b>							Batch: R33818		
<b>Sample ID: LFB0803141400-3</b>	Laboratory Fortified Blank			Run: DIONEX_080314A			03/14/08 13:36		
Chloride	4.73	mg/L	0.50	95	90	110			
Fluoride	2.02	mg/L	0.10	101	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	14.0	mg/L	1.0	93	90	110			
<b>Sample ID: LFB0803141400-4</b>	Laboratory Fortified Blank			Run: DIONEX_080314A			03/14/08 13:52		
Chloride	4.85	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	2.49	mg/L	0.10	100	90	110			
Sulfate	13.9	mg/L	1.0	93	90	110			
<b>Sample ID: R08030146-001BMS</b>	Sample Matrix Spike			Run: DIONEX_080314A			03/14/08 14:22		
Chloride	24.7	mg/L	0.50		80	120			A
Fluoride	2.04	mg/L	0.10	84	80	120			
Nitrogen, Nitrate as N	2.33	mg/L	0.10	93	80	120			
Nitrogen, Nitrite as N	2.29	mg/L	0.10	92	80	120			
Sulfate	794	mg/L	1.0		80	120			A
<b>Sample ID: R08030146-001BMDS</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080314A			03/14/08 14:38		
Chloride	24.5	mg/L	0.50		80	120	1.1	10	A
Fluoride	2.12	mg/L	0.10	88	80	120	3.8	10	
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	80	120	2.1	10	
Nitrogen, Nitrite as N	2.45	mg/L	0.10	98	80	120	6.8	10	
Sulfate	792	mg/L	1.0		80	120	0.2	10	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

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0414		
Sample ID: MB-GrAB-0414	Method Blank				Run: SUB-C98700			03/26/08 04:34	
Gross Alpha	2	pCi/L							
Gross Beta	-0.6	pCi/L							
Sample ID: UNAT-GrAB-0414	Laboratory Control Sample				Run: SUB-C98700			03/26/08 04:35	
Gross Alpha	240	pCi/L		97	70	130			
Sample ID: Cs137-GrAB-0414	Laboratory Control Sample				Run: SUB-C98700			03/26/08 04:34	
Gross Beta	88	pCi/L		94	70	130			
Sample ID: C08030506-001AMS	Sample Matrix Spike				Run: SUB-C98700			03/26/08 04:35	
Gross Alpha	280	pCi/L		107	70	130			
Sample ID: C08030506-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C98700			03/26/08 04:35	
Gross Alpha	270	pCi/L		103	70	130	3.0	12.5	
Sample ID: C08030506-001AMS	Sample Matrix Spike				Run: SUB-C98700			03/26/08 04:34	
Gross Beta	98	pCi/L		93	70	130			
Sample ID: C08030506-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C98700			03/26/08 04:34	
Gross Beta	97	pCi/L		92	70	130	0.8	15.6	
Sample ID: MB-GrAB-0414	Method Blank				Run: SUB-C99071			03/26/08 04:34	
Gross Alpha	2	pCi/L							
Gross Beta	-0.6	pCi/L							
Sample ID: UNAT-GrAB-0414	Laboratory Control Sample				Run: SUB-C99071			03/26/08 04:35	
Gross Alpha	240	pCi/L		97	70	130			
Sample ID: Cs137-GrAB-0414	Laboratory Control Sample				Run: SUB-C99071			03/26/08 04:34	
Gross Beta	88	pCi/L		94	70	130			
Sample ID: C08030506-001AMS	Sample Matrix Spike				Run: SUB-C99071			03/26/08 04:35	
Gross Alpha	280	pCi/L		107	70	130			
Sample ID: C08030506-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99071			03/26/08 04:35	
Gross Alpha	270	pCi/L		103	70	130	3.0	14.6	
Sample ID: C08030506-001AMS	Sample Matrix Spike				Run: SUB-C99071			03/26/08 04:34	
Gross Beta	98	pCi/L		93	70	130			
Sample ID: C08030506-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99071			03/26/08 04:34	
Gross Beta	97	pCi/L		92	70	130	0.8	15.8	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b> Batch: C_R98315									
<b>Sample ID: LCS-R98315</b>	Laboratory Control Sample				Run: SUB-C98315				03/14/08 16:57
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1500	pCi/L	20	105	70	130			
Potassium 40	6900	pCi/L	20	103	70	130			
<b>Sample ID: MB-R98315</b>	Method Blank				Run: SUB-C98315				03/14/08 16:57
Gross Gamma	ND	pCi/L							
<b>Sample ID: R08030154-002H</b>	Sample Duplicate				Run: SUB-C98315				03/14/08 16:57
Gross Gamma	ND	pCi/L	20				0.0	30	
<b>Method: E903.0</b> Batch: C_RA226-2672									
<b>Sample ID: C08030442-001DMS</b>	Sample Matrix Spike				Run: SUB-C98696				03/24/08 12:43
Radium 226	6.9	pCi/L		95	70	130			
<b>Sample ID: C08030442-001DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C98696				03/24/08 12:43
Radium 226	9.9	pCi/L		141	70	130	35	21.6	SR
- Spike response is outside of the acceptance range for this analysis. Since the LCS, MB, and MS are acceptable, the batch is approved.									
<b>Sample ID: MB-RA226-2672</b>	Method Blank				Run: SUB-C98696				03/24/08 14:23
Radium 226	-0.1	pCi/L							
<b>Sample ID: LCS-RA226-2672</b>	Laboratory Control Sample				Run: SUB-C98696				03/24/08 14:23
Radium 226	6.7	pCi/L		108	70	130			
<b>Method: E907.0</b> Batch: C_R99362									
<b>Sample ID: LCS-R99362</b>	Laboratory Control Sample				Run: SUB-C99362				03/31/08 14:00
Thorium 230	8.20	pCi/L	0.20	116	70	130			
<b>Sample ID: C08030555-001HMS</b>	Sample Matrix Spike				Run: SUB-C99362				03/31/08 14:00
Thorium 230	13.7	pCi/L	0.20	121	70	130			
<b>Sample ID: C08030555-001HMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C99362				03/31/08 14:00
Thorium 230	13.2	pCi/L	0.20	116	70	130	3.7	30	
<b>Sample ID: MB-R99362</b>	Method Blank				Run: SUB-C99362				03/31/08 14:00
Thorium 230	0.1	pCi/L							

### 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

Revised Date: 08/04/08  
Report Date: 05/08/08  
Work Order: R08030154

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R98516		
<b>Sample ID: C08030354-001DMS</b>	Sample Matrix Spike				Run: SUB-C98516		03/17/08 05:45		
Lead 210	500	pCi/L	1.0	82	70	130			
<b>Sample ID: C08030354-001DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C98516		03/17/08 05:45		
Lead 210	720	pCi/L	1.0	119	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: MB-R98516</b>	Method Blank				Run: SUB-C98516		03/17/08 05:45		
Lead 210	-0.6	pCi/L							
<b>Sample ID: LCS-R98516</b>	Laboratory Control Sample				Run: SUB-C98516		03/17/08 05:45		
Lead 210	100	pCi/L	1.0	89	70	130			
<b>Method: RMO-3008</b>							Batch: C_R98834		
<b>Sample ID: R08030154-002H</b>	Sample Matrix Spike				Run: SUB-C98834		03/25/08 15:00		
Polonium 210	96	pCi/L	1.0	85	70	130			
<b>Sample ID: R08030154-002H</b>	Sample Matrix Spike Duplicate				Run: SUB-C98834		03/25/08 15:00		
Polonium 210	78	pCi/L	1.0	70	70	130	20	30	
<b>Sample ID: LCS-R98834</b>	Laboratory Control Sample				Run: SUB-C98834		03/25/08 15:00		
Polonium 210	84	pCi/L	1.0	75	70	130			
<b>Sample ID: MB-R98834</b>	Method Blank				Run: SUB-C98834		03/25/08 15:00		
Polonium 210	1	pCi/L							

### 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: RESPEC		Project Name, PWS, Permit, Etc.		Sample Origin	EPA/State Compliance:		
Report Mail Address: RESPEC		Contact Name: Robert Dewey Burdock		State: SD	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Invoice Address: RESPEC		Contact Name: Phone/Fax: cory.foreman@respec.com		Email:	Sampler: (Please Print) Eric Keane		
Special Report/Formats - ELI must be notified prior to sample submittal for the following:		Invoice Contact & Phone: cory.foreman@respec.com		Purchase Order:	Quote/Bottle Order:		
<input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTWW/WTP <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			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED		
1. Dewey Burdock GWS 135		03/13/08	1215	W	SEE ATTACHED Normal Turnaround (TAT) <b>RUSH</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: GV Holloway Burdock Set 30 Holloway R.O. LABORATORY USE ONLY		
2. Dewey Burdock GWS 135		03/13/08	1145	W			
3. Dewey Burdock GWS 135		03/13/08	1145	W			
4. Dewey Burdock GWS 135		03/13/08	1145	W			
5. Dewey Burdock GWS 135		03/13/08	1145	W			
6. Dewey Burdock GWS 135		03/13/08	1145	W			
7. Dewey Burdock GWS 135		03/13/08	1145	W			
8. Dewey Burdock GWS 135		03/13/08	1145	W			
9. Dewey Burdock GWS 135		03/13/08	1145	W			
10. Dewey Burdock GWS 135		03/13/08	1145	W			
Custody Record MUST be Signed		Relinquished by (print): Eric Keane	Date/Time: 3/13/08 14:35	Signature: [Signature]	Received by (print): Linda Carson	Date/Time: 3/13/08 14:35	Signature: [Signature]
Sample Disposal: Return to Client:		Lab Disposal:		Received by (print): Linda Carson		Date/Time: 3/13/08 14:35	Signature: [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

June 15, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08030253

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 2 samples from RESPEC Inc on 3/25/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08030253-001	DewBurd GW650	03/24/08 9:00	03/25/08	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 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
R08030253-002	DewBurd GW619	03/24/08 15:40	03/25/08	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:** R08030253-001  
**Client Sample ID:** DewBurd GW650

**Report Date:** 06/15/08  
**Collection Date:** 03/24/08 09:00  
**Date Received:** 03/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	30	mg/L		5		1	A2320 B	03/28/08 13:36/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/28/08 13:36/sn
Bicarbonate as HCO3	37	mg/L		5		1	A2320 B	03/28/08 13:36/sn
Calcium	101	mg/L		0.5		2	E200.7	04/11/08 09:55/eli-c
Chloride	19	mg/L		1		1	E300.0	03/26/08 16:24/jmh
Fluoride	0.1	mg/L		0.1		1	E300.0	03/26/08 16:24/jmh
Magnesium	62.3	mg/L		0.5		2	E200.7	04/11/08 09:55/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	03/28/08 14:15/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/26/08 16:24/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/26/08 16:24/jmh
Potassium	14.5	mg/L		0.5		2	E200.7	04/11/08 09:55/eli-c
Silica	0.9	mg/L		0.5		2	E200.7	04/11/08 09:55/eli-c
Sodium	121	mg/L		0.5		2	E200.7	04/11/08 09:55/eli-c
Sulfate	801	mg/L	D	3		50	E300.0	03/26/08 16:08/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1540	umhos/cm		5.0		1	A2510 B	03/26/08 11:16/jmh
Oxidation-Reduction Potential	120	mV				1	A2580 B	03/25/08 00:00/sn
pH	7.40	s.u.		0.01		1	A4500-H B	03/26/08 15:41/jmh
Sodium Adsorption Ratio (SAR)	2.3	Unitless		0.10		1	Calculation	04/11/08 09:55/krs
Solids, Total Dissolved TDS @ 180 C	1300	mg/L		5		1	A2540 C	03/31/08 08:42/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 09:55/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/28/08 20:02/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 09:55/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	04/11/08 09:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/28/08 20:02/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 09:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/28/08 20:02/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	04/11/08 09:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/28/08 20:02/eli-c
Manganese	0.43	mg/L		0.01		2	E200.7	04/11/08 09:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/28/08 20:02/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 09:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/28/08 20:02/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	04/01/08 13:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 20:02/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: R08030253-001  
Client Sample ID: DewBurd GW650

Report Date: 06/15/08  
Collection Date: 03/24/08 09:00  
Date Received: 03/25/08  
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	04/28/08 20:02/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/28/08 20:02/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 09:55/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 09:55/eli-c
METALS - SUSPENDED								
Uranium	0.0033	mg/L		0.0003		1	E200.8	04/13/08 13:28/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/01/08 09:22/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/01/08 14:49/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2.9	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Lead 210	24	pCi/L	B	1.0		1	E909.0M	04/02/08 10:10/eli-c
Gross Alpha precision (±)	2.5	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta	12.5	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta precision (±)	3.3	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta MDC	5.1	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Polonium 210	0.4	pCi/L		1.0		1	RMO-3008	04/02/08 14:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	04/02/08 14:00/eli-c
Lead 210 precision (±)	2.6	pCi/L				1	E909.0M	04/02/08 10:10/eli-c
Radium 226	1.4	pCi/L				1	E903.0	04/07/08 17:42/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/07/08 17:42/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	12	pCi/L	B	1.0		1	E909.0M	04/03/08 08:05/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	04/03/08 08:05/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.63	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	0.7	pCi/L				1	E903.0	04/13/08 02:59/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	04/13/08 02:59/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	04/13/08 02:59/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.  
B - The analyte was detected in the method blank.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030253-001  
Client Sample ID: DewBurd GW650

Report Date: 06/15/08  
Collection Date: 03/24/08 09:00  
Date Received: 03/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Thorium 230	0.8	pCi/L		0.2		1	E907.0	04/02/08 15:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	04/02/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	202	pCi/L		100		1	D5072-92	03/29/08 15:38/eli-c
Radon 222 precision (±)	88.2	pCi/L				1	D5072-92	03/29/08 15:38/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/11/08 05:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/18/08 19:50/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 05:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/11/08 05:43/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	04/11/08 17:16/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	04/11/08 05:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 05:43/eli-c
Copper	0.08	mg/L		0.01		1	E200.8	04/11/08 22:11/eli-c
Iron	7.59	mg/L		0.03		2	E200.7	04/11/08 17:16/eli-c
Lead	0.050	mg/L		0.001		1	E200.8	04/11/08 05:43/eli-c
Manganese	0.56	mg/L		0.01		1	E200.8	04/11/08 05:43/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	04/10/08 13:55/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	04/11/08 05:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 05:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/11/08 22:11/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 15:17/eli-c
Strontium	2.1	mg/L		0.1		1	E200.8	04/11/08 05:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/11/08 05:43/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	04/11/08 05:43/eli-c
Zinc	0.07	mg/L	D	0.03		1	E200.8	04/11/08 05:43/eli-c
DATA QUALITY								
A/C Balance (± 5)	-5.85	%				1	A1030 E	05/13/08 10:00/krs
Anions	17.8	meq/L				1	A1030 E	05/13/08 10:00/krs
Cations	15.9	meq/L				1	A1030 E	05/13/08 10:00/krs
Solids, Total Dissolved Calculated	1140	mg/L				1	A1030 E	05/13/08 10:00/krs
TDS Balance (0.80 - 1.20)	1.11	dec. %				1	A1030 E	05/13/08 10:00/krs

Report 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: R08030253-002  
Client Sample ID: DewBurd GW619

Report Date: 06/15/08  
Collection Date: 03/24/08 15:40  
Date Received: 03/25/08  
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	03/28/08 13:48/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/28/08 13:48/sn
Bicarbonate as HCO3	141	mg/L		5		1	A2320 B	03/28/08 13:48/sn
Calcium	343	mg/L		0.5		2	E200.7	04/11/08 10:02/eli-c
Chloride	12	mg/L		1		1	E300.0	03/26/08 16:55/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/26/08 16:55/jmh
Magnesium	125	mg/L		0.5		2	E200.7	04/11/08 10:02/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	03/28/08 14:18/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/26/08 16:55/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/26/08 16:55/jmh
Potassium	16.5	mg/L		0.5		2	E200.7	04/11/08 10:02/eli-c
Silica	8.0	mg/L		0.5		2	E200.7	04/11/08 10:02/eli-c
Sodium	90.3	mg/L		0.5		2	E200.7	04/11/08 10:02/eli-c
Sulfate	1310	mg/L	D	3		50	E300.0	03/26/08 16:39/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2180	umhos/cm		5.0		1	A2510 B	03/26/08 11:17/jmh
Oxidation-Reduction Potential	-80.2	mV				1	A2580 B	03/25/08 00:00/sn
pH	7.25	s.u.		0.01		1	A4500-H B	03/26/08 15:42/jmh
Sodium Adsorption Ratio (SAR)	1.1	Unitless		0.10		1	Calculation	04/11/08 10:02/krs
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	03/31/08 08:43/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 10:02/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/28/08 20:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 10:02/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 10:02/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/28/08 20:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 10:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/28/08 20:09/eli-c
Iron	3.22	mg/L		0.03		2	E200.7	04/11/08 10:02/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/28/08 20:09/eli-c
Manganese	1.62	mg/L		0.01		2	E200.7	04/11/08 10:02/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/28/08 20:09/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 10:02/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/28/08 20:09/eli-c
Selenium	ND	mg/L		0.005		1	A3114 B	04/02/08 11:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 20:09/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: R08030253-002  
Client Sample ID: DewBurd GW619

Report Date: 06/15/08  
Collection Date: 03/24/08 15:40  
Date Received: 03/25/08  
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	04/28/08 20:09/eli-c
Uranium	0.0015	mg/L		0.0003		1	E200.8	04/28/08 20:09/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 10:02/eli-c
Zinc	0.03	mg/L		0.01		2	E200.7	04/11/08 10:02/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/13/08 13:34/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/02/08 09:52/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/02/08 11:22/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	438	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Lead 210	19	pCi/L	B	1.0		1	E909.0M	04/02/08 10:10/eli-c
Gross Alpha precision (±)	19.4	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Alpha MDC	6.7	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta	175	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta precision (±)	7.7	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Gross Beta MDC	8.5	pCi/L				1	E900.0	04/08/08 23:36/eli-c
Polonium 210	1.9	pCi/L		1.0		1	RMO-3008	04/02/08 14:00/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008	04/02/08 14:00/eli-c
Lead 210 precision (±)	2.3	pCi/L				1	E909.0M	04/02/08 10:10/eli-c
Radium 226	99.7	pCi/L				1	E903.0	04/07/08 17:42/eli-c
Radium 226 precision (±)	1.7	pCi/L				1	E903.0	04/07/08 17:42/eli-c
Thorium 230	0.0	pCi/L		0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	25	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	9.9	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	11	pCi/L	B	1.0		1	E909.0M	04/03/08 08:05/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	04/03/08 08:05/eli-c
Polonium 210	0.1	pCi/L		1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	11.4	pCi/L				1	E903.0	04/13/08 04:29/eli-c
Radium 226 precision (±)	1.1	pCi/L				1	E903.0	04/13/08 04:29/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/13/08 04:29/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.  
B - The analyte was detected in the method blank.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030253-002  
Client Sample ID: DewBurd GW619

Report Date: 06/15/08  
Collection Date: 03/24/08 15:40  
Date Received: 03/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/02/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/02/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	5580	pCi/L		100		1	D5072-92	03/29/08 15:38/eli-c
Radon 222 precision (±)	140	pCi/L				1	D5072-92	03/29/08 15:38/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/11/08 05:50/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/18/08 19:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 05:50/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/11/08 05:50/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 17:19/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	04/11/08 05:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 05:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/11/08 22:18/eli-c
Iron	11.9	mg/L		0.03		2	E200.7	04/11/08 17:19/eli-c
Lead	0.005	mg/L		0.001		1	E200.8	04/11/08 05:50/eli-c
Manganese	1.82	mg/L		0.01		1	E200.8	04/11/08 05:50/eli-c
Mercury	ND	mg/L		0.0001		1	E245.1	04/10/08 13:57/eli-b
Molybdenum	ND	mg/L		0.01		1	E200.8	04/11/08 05:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 05:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/11/08 22:18/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 15:24/eli-c
Strontium	5.2	mg/L		0.1		1	E200.8	04/11/08 05:50/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/11/08 05:50/eli-c
Uranium	0.0018	mg/L		0.0003		1	E200.8	04/11/08 05:50/eli-c
Zinc	0.18	mg/L	D	0.03		1	E200.8	04/11/08 05:50/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.41	%				1	A1030 E	05/13/08 10:02/krs
Anions	29.9	meq/L				1	A1030 E	05/13/08 10:02/krs
Cations	32.0	meq/L				1	A1030 E	05/13/08 10:02/krs
Solids, Total Dissolved Calculated	1980	mg/L				1	A1030 E	05/13/08 10:02/krs
TDS Balance (0.80 - 1.20)	1.05	dec. %				1	A1030 E	05/13/08 10:02/krs

Report 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 6 of 6

## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B		Batch: 080326_1_COND-PROBE-W							
Sample ID: LCS1-1_080326	Laboratory Control Sample					Run: PH_COND2-R_080326A			03/26/08 11:04
Conductivity @ 25 C	147	umhos/cm	5.0	98	90	110			
Sample ID: LCS2-1_080326	Laboratory Control Sample					Run: PH_COND2-R_080326A			03/26/08 11:05
Conductivity @ 25 C	4700	umhos/cm	5.0	94	90	110			
Sample ID: LCS_COND-1_080326	Laboratory Control Sample					Run: PH_COND2-R_080326A			03/26/08 11:05
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080326	Method Blank					Run: PH_COND2-R_080326A			03/26/08 11:06
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08030228-001ADUP	Sample Duplicate					Run: PH_COND2-R_080326A			03/26/08 11:08
Conductivity @ 25 C	3490	umhos/cm	5.0				0.0	10	
Method: A2540 C		Batch: 080331A-SLDS-TDS-W							
Sample ID: LCS1_080331A	Laboratory Control Sample					Run: BAL-4-R_080331A			03/31/08 08:28
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	100	90	110			
Sample ID: MBLK1_080331A	Method Blank					Run: BAL-4-R_080331A			03/31/08 08:30
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08030253-002AMS	Sample Matrix Spike					Run: BAL-4-R_080331A			03/31/08 08:44
Solids, Total Dissolved TDS @ 180 C	2300	mg/L	5.0	106	80	120			
Sample ID: R08030253-002AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080331A			03/31/08 08:44
Solids, Total Dissolved TDS @ 180 C	2300	mg/L	5.0	117	80	120	1.0	10	
Method: A2580 B		Batch: R33973							
Sample ID: LCS_032508	Laboratory Control Sample					Run: PH_COND1-R_080325A			03/25/08 00:00
Oxidation-Reduction Potential	490	mV		102	95	105			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE-3114-080401B		
Sample ID: MBLK	Method Blank					Run: SUB-C98917			04/01/08 13:12
Selenium	ND	mg/L	6E-05						
Sample ID: 288-48-5	Laboratory Control Sample					Run: SUB-C98917			04/01/08 13:14
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: C08031120-001EMS	Sample Matrix Spike					Run: SUB-C98917			04/01/08 13:21
Selenium	0.054	mg/L	0.0010	108	85	115			
Sample ID: C08031120-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C98917			04/01/08 13:23
Selenium	0.054	mg/L	0.0010	107	85	115	0.7	10	
Method: A3114 B							Batch: C_SE-3114-080402B		
Sample ID: MBLK	Method Blank					Run: SUB-C98973			04/02/08 11:16
Selenium	ND	mg/L	6E-05						
Sample ID: 288-48-5	Laboratory Control Sample					Run: SUB-C98973			04/02/08 11:18
Selenium	0.051	mg/L	0.0010	102	90	110			
Sample ID: C08040020-001LMS	Sample Matrix Spike					Run: SUB-C98973			04/02/08 11:24
Selenium	0.051	mg/L	0.0010	99	85	115			
Sample ID: C08040020-001LMSD	Sample Matrix Spike Duplicate					Run: SUB-C98973			04/02/08 11:27
Selenium	0.052	mg/L	0.0010	102	85	115	2.3	10	
Method: A3114 B							Batch: C_SEIV-3114-080401		
Sample ID: MBLK	Method Blank					Run: SUB-C98894			04/01/08 09:16
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-48-5	Laboratory Control Sample					Run: SUB-C98894			04/01/08 09:18
Selenium-IV	0.046	mg/L	0.0010	92	90	110			
Sample ID: C08031120-001EMS	Sample Matrix Spike					Run: SUB-C98894			04/01/08 09:24
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
Sample ID: C08031120-001EMSD	Sample Matrix Spike Duplicate					Run: SUB-C98894			04/01/08 09:27
Selenium-IV	0.045	mg/L	0.0010	91	85	115	1.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SEIV-3114-080402		
Sample ID: MBLK	Method Blank					Run: SUB-C98966			04/02/08 09:47
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-48-5	Laboratory Control Sample					Run: SUB-C98966			04/02/08 09:50
Selenium-IV	0.051	mg/L	0.0010	101	90	110			
Sample ID: C08040020-001LMS	Sample Matrix Spike					Run: SUB-C98966			04/02/08 09:56
Selenium-IV	0.056	mg/L	0.0010	112	85	115			
Sample ID: C08040020-001LMSD	Sample Matrix Spike Duplicate					Run: SUB-C98966			04/02/08 09:58
Selenium-IV	0.055	mg/L	0.0010	109	85	115	2.0	10	
Method: A4500-H B							Batch: 080326_1_PH-W		
Sample ID: LCS_pH-1_080326	Laboratory Control Sample					Run: PH_COND2-R_080326B			03/26/08 15:31
pH	6.94	s.u.	0.010	101	98.55	101.45			
Sample ID: R08030252-001CDUP	Sample Duplicate					Run: PH_COND2-R_080326B			03/26/08 15:35
pH	6.69	s.u.	0.010				0.1	1.25	
Method: A4500-NH3 G							Batch: A2008-03-28_2_NH3_01		
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080328A			03/28/08 12:26
Nitrogen, Ammonia as N	0.23	mg/L	0.10	92	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080328A			03/28/08 12:27
Nitrogen, Ammonia as N	0.23	mg/L	0.10	90	90	110			
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080328A			03/28/08 12:37
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: R08030253-002BMS	Sample Matrix Spike					Run: TECHAA2-R_080328A			03/28/08 14:19
Nitrogen, Ammonia as N	0.46	mg/L	0.10	86	80	120			
Sample ID: R08030253-002BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080328A			03/28/08 14:21
Nitrogen, Ammonia as N	0.47	mg/L	0.10	91	80	120	2.4	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92							Batch: C_R98853		
Sample ID: C08031182-005DDUP	Sample Duplicate					Run: SUB-C98853			03/29/08 15:38
Radon 222	111	pCi/L	100				0.0	30	
Sample ID: MB-R98853	Method Blank					Run: SUB-C98853			03/29/08 15:38
Radon 222	-20	pCi/L							
Sample ID: LCS-R98853	Laboratory Control Sample					Run: SUB-C98853			03/29/08 15:38
Radon 222	300	pCi/L	100	104	70	130			
Method: E200.7							Batch: C_18151		
Sample ID: MB-18151	Method Blank					Run: SUB-C99540			04/11/08 17:09
Boron	ND	mg/L	0.006						
Iron	ND	mg/L	0.005						
Sample ID: LCS-18151	Laboratory Control Sample					Run: SUB-C99540			04/11/08 17:13
Boron	0.479	mg/L	0.10	94	85	115			
Iron	0.485	mg/L	0.030	96	85	115			
Sample ID: R08030253-002D	Sample Matrix Spike					Run: SUB-C99540			04/11/08 17:23
Boron	0.562	mg/L	0.10	96	70	130			
Iron	12.2	mg/L	0.030		70	130			A
Sample ID: R08030253-002D	Sample Matrix Spike Duplicate					Run: SUB-C99540			04/11/08 17:26
Boron	0.553	mg/L	0.10	94	70	130	1.7	20	
Iron	12.1	mg/L	0.030		70	130	1.0	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: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99540		
Sample ID: MB-080411A	Method Blank		Run: SUB-C99540				04/11/08 09:38		
Silica	ND	mg/L	0.06						
Aluminum	ND	mg/L	0.008						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.004						
Calcium	ND	mg/L	0.04						
Chromium	ND	mg/L	0.003						
Iron	0.003	mg/L	0.002						
Magnesium	ND	mg/L	0.04						
Manganese	0.0005	mg/L	0.0004						
Molybdenum	0.01	mg/L	0.01						
Potassium	ND	mg/L	0.08						
Sodium	ND	mg/L	0.06						
Vanadium	0.008	mg/L	0.006						
Zinc	ND	mg/L	0.004						
Sample ID: LFB-080411A							04/11/08 09:42		
Laboratory Fortified Blank		Run: SUB-C99540							
Silica	0.96	mg/L	0.10	96	85	125			
Aluminum	0.92	mg/L	0.10	92	85	125			
Barium	0.91	mg/L	0.10	91	85	125			
Boron	0.93	mg/L	0.10	93	85	125			
Calcium	49	mg/L	0.50	98	85	125			
Chromium	0.92	mg/L	0.050	92	85	125			
Iron	0.92	mg/L	0.030	91	85	125			
Magnesium	49	mg/L	0.50	98	85	125			
Manganese	0.90	mg/L	0.010	90	85	125			
Molybdenum	0.98	mg/L	0.10	96	85	125			
Potassium	45	mg/L	0.50	91	85	125			
Sodium	47	mg/L	0.50	94	85	125			
Vanadium	0.96	mg/L	0.10	95	85	125			
Zinc	0.93	mg/L	0.010	93	85	125			
Sample ID: C08031105-001DMS2							04/11/08 09:48		
Sample Matrix Spike		Run: SUB-C99540							
Aluminum	1.78	mg/L	0.10	87	70	130			
Barium	1.84	mg/L	0.10	88	70	130			
Boron	2.03	mg/L	0.10	90	70	130			
Chromium	1.80	mg/L	0.050	88	70	130			
Iron	1.80	mg/L	0.030	88	70	130			
Manganese	1.81	mg/L	0.010	87	70	130			
Molybdenum	1.93	mg/L	0.10	94	70	130			
Vanadium	1.89	mg/L	0.10	93	70	130			
Zinc	2.06	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99540		
Sample ID: C08031105-001DMS2	Sample Matrix Spike			Run: SUB-C99540			04/11/08 09:48		
Calcium	245	mg/L	1.0	94	70	130			
Magnesium	148	mg/L	1.0	96	70	130			
Potassium	110	mg/L	1.0	95	70	130			
Silica	20.7	mg/L	0.12		70	130			A
Sodium	167	mg/L	1.0	96	70	130			
Sample ID: C08031105-001DMSD2	Sample Matrix Spike Duplicate			Run: SUB-C99540			04/11/08 09:52		
Aluminum	1.79	mg/L	0.10	88	70	130	0.8	20	
Barium	1.87	mg/L	0.10	90	70	130	2.0	20	
Boron	2.05	mg/L	0.10	91	70	130	1.0	20	
Chromium	1.82	mg/L	0.050	89	70	130	1.1	20	
Iron	1.81	mg/L	0.030	89	70	130	0.7	20	
Manganese	1.83	mg/L	0.010	88	70	130	0.8	20	
Molybdenum	1.96	mg/L	0.10	96	70	130	1.6	20	
Vanadium	1.90	mg/L	0.10	93	70	130	0.5	20	
Zinc	2.08	mg/L	0.010	92	70	130	1.0	20	
Calcium	239	mg/L	1.0	88	70	130	2.6	20	
Magnesium	142	mg/L	1.0	90	70	130	4.2	20	
Potassium	104	mg/L	1.0	89	70	130	5.5	20	
Silica	20.8	mg/L	0.12		70	130	0.5	20	A
Sodium	161	mg/L	1.0	91	70	130	3.2	20	
Sample ID: C08040269-001CMS2	Sample Matrix Spike			Run: SUB-C99540			04/11/08 13:38		
Aluminum	0.890	mg/L	0.10	84	70	130			
Barium	0.973	mg/L	0.10	86	70	130			
Boron	0.888	mg/L	0.10	85	70	130			
Calcium	124	mg/L	0.50	80	70	130			
Chromium	0.875	mg/L	0.050	86	70	130			
Iron	0.945	mg/L	0.030	86	70	130			
Magnesium	66.1	mg/L	0.50	87	70	130			
Manganese	0.921	mg/L	0.010	85	70	130			
Molybdenum	0.903	mg/L	0.10	89	70	130			
Potassium	46.0	mg/L	0.50	87	70	130			
Sodium	59.6	mg/L	0.50	88	70	130			
Vanadium	0.916	mg/L	0.10	90	70	130			
Zinc	0.922	mg/L	0.010	90	70	130			
Sample ID: C08040269-001CMSD2	Sample Matrix Spike Duplicate			Run: SUB-C99540			04/11/08 13:41		
Aluminum	0.904	mg/L	0.10	86	70	130	1.5	20	
Barium	0.974	mg/L	0.10	86	70	130	0.1	20	
Boron	0.902	mg/L	0.10	87	70	130	1.5	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99540		
Sample ID: C08040269-001CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C99540				04/11/08 13:41		
Calcium	125	mg/L	0.50	82	70	130	0.6	20	
Chromium	0.881	mg/L	0.050	86	70	130	0.7	20	
Iron	0.957	mg/L	0.030	87	70	130	1.3	20	
Magnesium	66.6	mg/L	0.50	88	70	130	0.8	20	
Manganese	0.929	mg/L	0.010	86	70	130	0.9	20	
Molybdenum	0.935	mg/L	0.10	92	70	130	3.6	20	
Potassium	46.5	mg/L	0.50	88	70	130	1.3	20	
Sodium	60.4	mg/L	0.50	89	70	130	1.4	20	
Vanadium	0.925	mg/L	0.10	91	70	130	1.0	20	
Zinc	0.913	mg/L	0.010	90	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18151		
<b>Sample ID: R08030253-002D</b>	Post Digestion Spike			Run: SUB-C100012			04/22/08 07:47		
Antimony	0.0214	mg/L	0.050	107	70	130			
Barium	0.0329	mg/L	0.10	106	70	130			
Beryllium	0.0208	mg/L	0.010	104	70	130			
Cadmium	0.0197	mg/L	0.010	98	70	130			
Chromium	0.0194	mg/L	0.050	97	70	130			
Copper	0.0337	mg/L	0.010	87	70	130			
Lead	0.0258	mg/L	0.050	102	70	130			
Manganese	1.67	mg/L	0.010		70	130			A
Molybdenum	0.0211	mg/L	0.10	104	70	130			
Nickel	0.0209	mg/L	0.050	90	70	130			
Selenium	0.141	mg/L	0.0010	705	70	130			S
Silver	0.0202	mg/L	0.010	101	70	130			
Strontium	4.79	mg/L	0.10		70	130			A
Thallium	0.0208	mg/L	0.10	104	70	130			
Uranium	0.0228	mg/L	0.00030	105	70	130			
Zinc	0.197	mg/L	0.010		70	130			A
<b>Sample ID: R08030253-002D</b>	Post Digestion Spike Duplicate			Run: SUB-C100012			04/22/08 07:54		
Antimony	0.0209	mg/L	0.050	105	70	130	0.0	20	
Barium	0.0323	mg/L	0.10	103	70	130	0.0	20	
Beryllium	0.0209	mg/L	0.010	105	70	130	0.7	20	
Cadmium	0.0663	mg/L	0.010	331	70	130	110	20	SR
Chromium	0.0191	mg/L	0.050	95	70	130	0.0	20	
Copper	0.0665	mg/L	0.010	251	70	130	66	20	SR
Lead	0.0257	mg/L	0.050	102	70	130	0.0	20	
Manganese	1.65	mg/L	0.010		70	130	0.9	20	A
Molybdenum	0.0207	mg/L	0.10	102	70	130	0.0	20	
Nickel	0.0220	mg/L	0.050	96	70	130	0.0	20	
Selenium	0.150	mg/L	0.0010	747	70	130	5.8	20	S
Silver	0.0205	mg/L	0.010	102	70	130	1.2	20	
Strontium	4.90	mg/L	0.10		70	130	2.3	20	A
Thallium	0.0206	mg/L	0.10	103	70	130	0.0	20	
Uranium	0.0233	mg/L	0.00030	108	70	130	2.2	20	
Zinc	0.201	mg/L	0.010		70	130	2.2	20	A
<b>Sample ID: MB-18151</b>	Method Blank			Run: SUB-C100330			04/28/08 15:04		
Antimony	ND	mg/L	0.0002						
Barium	ND	mg/L	0.0003						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	0.0002	mg/L	5E-05						

### 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.

R - RPD exceeds advisory limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18151
Sample ID: MB-18151	Method Blank		Run: SUB-C100330				04/28/08 15:04		
Copper	0.01	mg/L	0.0002						
Lead	0.006	mg/L							
Manganese	0.0002	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Silver	0.0002	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	6E-05	mg/L	3E-05						
Zinc	0.01	mg/L	0.0003						
Sample ID: LCS-18151	Laboratory Control Sample		Run: SUB-C100330				04/28/08 15:11		
Copper	0.583	mg/L	0.010	115	85	115			
Molybdenum	0.562	mg/L	0.10	112	85	115			
Nickel	0.554	mg/L	0.050	111	85	115			
Silver	0.218	mg/L	0.010	109	85	115			
Strontium	0.565	mg/L	0.10	113	85	115			
Sample ID: R08030253-002D	Sample Matrix Spike		Run: SUB-C100330				04/28/08 15:31		
Antimony	0.592	mg/L	0.050	118	70	130			
Barium	0.106	mg/L	0.10	19	70	130			S
Beryllium	0.596	mg/L	0.010	119	70	130			
Cadmium	0.574	mg/L	0.010	115	70	130			
Chromium	0.564	mg/L	0.050	113	70	130			
Copper	0.579	mg/L	0.010	115	70	130			
Lead	0.369	mg/L	0.050	73	70	130			
Manganese	2.48	mg/L	0.010	165	70	130			S
Molybdenum	0.556	mg/L	0.10	111	70	130			
Nickel	0.552	mg/L	0.050	110	70	130			
Selenium	0.669	mg/L	0.0020	134	70	130			S
Silver	0.0902	mg/L	0.010	45	70	130			S
Strontium	6.18	mg/L	0.10		70	130			A
Thallium	0.580	mg/L	0.10	116	70	130			
Uranium	0.582	mg/L	0.00032	116	70	130			
Zinc	0.791	mg/L	0.010	123	70	130			
Sample ID: R08030253-002D	Sample Matrix Spike Duplicate		Run: SUB-C100330				04/28/08 15:38		
Antimony	0.569	mg/L	0.050	114	70	130	3.9	20	
Barium	0.105	mg/L	0.10	19	70	130	0.2	20	S
Beryllium	0.579	mg/L	0.010	116	70	130	3.0	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18151		
Sample ID: R08030253-002D	Sample Matrix Spike Duplicate			Run: SUB-C100330			04/28/08 15:38		
Cadmium	0.558	mg/L	0.010	112	70	130	2.9	20	
Chromium	0.551	mg/L	0.050	110	70	130	2.3	20	
Copper	0.565	mg/L	0.010	112	70	130	2.5	20	
Lead	0.363	mg/L	0.050	72	70	130	1.6	20	
Manganese	2.49	mg/L	0.010	169	70	130	0.6	20	S
Molybdenum	0.541	mg/L	0.10	108	70	130	2.6	20	
Nickel	0.541	mg/L	0.050	108	70	130	2.1	20	
Selenium	0.658	mg/L	0.0020	132	70	130	1.6	20	S
Silver	0.0829	mg/L	0.010	41	70	130	8.4	20	S
Strontium	5.97	mg/L	0.10		70	130	3.4	20	A
Thallium	0.567	mg/L	0.10	113	70	130	2.3	20	
Uranium	0.566	mg/L	0.00032	113	70	130	2.7	20	
Zinc	0.777	mg/L	0.010	120	70	130	1.8	20	
Sample ID: MB-18151	Method Blank			Run: SUB-C99461			04/11/08 03:42		
Antimony	ND	mg/L	0.0002						
Barium	ND	mg/L	0.0003						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	ND	mg/L	5E-05						
Copper	0.0001	mg/L	0.0001						
Lead	ND	mg/L	5E-05						
Manganese	ND	mg/L	3E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0007						
Silver	ND	mg/L	4E-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: LCS1-18151	Laboratory Control Sample			Run: SUB-C99461			04/11/08 03:48		
Antimony	0.0213	mg/L	0.050	106	80	120			
Barium	0.0209	mg/L	0.10	105	80	120			
Beryllium	0.0218	mg/L	0.010	109	80	120			
Cadmium	0.0204	mg/L	0.010	102	80	120			
Chromium	0.0220	mg/L	0.050	110	80	120			
Lead	0.0203	mg/L	0.050	101	80	120			
Manganese	0.0221	mg/L	0.010	110	80	120			
Molybdenum	0.0213	mg/L	0.10	107	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  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18151		
Sample ID: LCS1-18151	Laboratory Control Sample			Run: SUB-C99461			04/11/08 03:48		
Nickel	0.0201	mg/L	0.050	100	80	120			
Silver	0.0213	mg/L	0.010	106	80	120			
Strontium	0.0109	mg/L	0.10	109	80	120			
Thallium	0.0206	mg/L	0.10	103	80	120			
Uranium	0.0208	mg/L	0.00030	104	80	120			
Zinc	0.0457	mg/L	0.010	96	80	120			
Sample ID: R08030253-002D	Post Digestion Spike			Run: SUB-C99461			04/11/08 05:57		
Antimony	0.0209	mg/L	0.050	105	70	130			
Barium	0.0321	mg/L	0.10	103	70	130			
Beryllium	0.0201	mg/L	0.010	101	70	130			
Cadmium	0.0191	mg/L	0.010	95	70	130			
Chromium	0.0209	mg/L	0.050	104	70	130			
Copper	0.0490	mg/L	0.010	216	70	130			S
Lead	0.0256	mg/L	0.050	104	70	130			
Manganese	1.79	mg/L	0.010		70	130			A
Molybdenum	0.0227	mg/L	0.10	112	70	130			
Nickel	0.0253	mg/L	0.050	97	70	130			
Selenium	0.106	mg/L	0.0010	106	70	130			
Strontium	5.13	mg/L	0.10		70	130			A
Thallium	0.0208	mg/L	0.10	104	70	130			
Uranium	0.0232	mg/L	0.00030	107	70	130			
Zinc	0.201	mg/L	0.010		70	130			A
Sample ID: R08030253-002D	Post Digestion Spike Duplicate			Run: SUB-C99461			04/11/08 06:04		
Antimony	0.0209	mg/L	0.050	104	70	130	0.0	20	
Barium	0.0318	mg/L	0.10	101	70	130	0.0	20	
Beryllium	0.0204	mg/L	0.010	102	70	130	1.4	20	
Cadmium	0.0194	mg/L	0.010	96	70	130	1.6	20	
Chromium	0.0209	mg/L	0.050	105	70	130	0.0	20	
Copper	0.0510	mg/L	0.010	226	70	130	4.0	20	S
Lead	0.0258	mg/L	0.050	105	70	130	0.0	20	
Manganese	1.77	mg/L	0.010		70	130	1.5	20	A
Molybdenum	0.0221	mg/L	0.10	109	70	130	0.0	20	
Nickel	0.0257	mg/L	0.050	98	70	130	0.0	20	
Selenium	0.136	mg/L	0.0010	136	70	130	25	20	SR
Strontium	4.92	mg/L	0.10		70	130	4.2	20	A
Thallium	0.0206	mg/L	0.10	103	70	130	0.0	20	
Uranium	0.0234	mg/L	0.00030	108	70	130	0.7	20	
Zinc	0.200	mg/L	0.010		70	130	0.4	20	A

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

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

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18151		
<b>Sample ID: MB-18151</b>	Method Blank		Run: SUB-C99538				04/11/08 19:49		
Antimony	ND	mg/L	0.0002						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	5E-05	mg/L	5E-05						
Copper	0.0009	mg/L	0.0001						
Lead	9E-06	mg/L							
Manganese	0.0005	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	6E-05						
Silver	ND	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	0.0002	mg/L	4E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.02	mg/L	0.0003						
<b>Sample ID: LCS1-18151</b>	Laboratory Control Sample		Run: SUB-C99538				04/11/08 20:16		
Antimony	0.0209	mg/L	0.050	104	80	120			
Barium	0.0217	mg/L	0.10	108	80	120			
Beryllium	0.0238	mg/L	0.010	119	80	120			
Cadmium	0.0213	mg/L	0.010	107	80	120			
Chromium	0.0214	mg/L	0.050	107	80	120			
Copper	0.0205	mg/L	0.010	98	80	120			
Lead	0.0207	mg/L	0.050	103	80	120			
Manganese	0.0222	mg/L	0.010	108	80	120			
Molybdenum	0.0213	mg/L	0.10	106	80	120			
Nickel	0.0203	mg/L	0.050	102	80	120			
Silver	0.0213	mg/L	0.010	106	80	120			
Strontium	0.0113	mg/L	0.10	113	80	120			
Thallium	0.0208	mg/L	0.10	103	80	120			
Uranium	0.0229	mg/L	0.00030	114	80	120			
Zinc	0.0408	mg/L	0.010	107	80	120			
<b>Sample ID: R08030253-002D</b>	Post Digestion Spike		Run: SUB-C99538				04/11/08 22:25		
Antimony	0.0216	mg/L	0.050	108	70	130			
Barium	0.0331	mg/L	0.10	106	70	130			
Beryllium	0.0206	mg/L	0.010	103	70	130			
Cadmium	0.0202	mg/L	0.010	101	70	130			
Chromium	0.0206	mg/L	0.050	101	70	130			
Copper	0.0360	mg/L	0.010	150	70	130			S
Lead	0.0258	mg/L	0.050	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: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18151		
<b>Sample ID: R08030253-002D</b>	Post Digestion Spike			Run: SUB-C99538			04/11/08 22:25		
Manganese	1.79	mg/L	0.010		70	130			A
Molybdenum	0.0214	mg/L	0.10	105	70	130			
Nickel	0.0209	mg/L	0.050	95	70	130			
Selenium	0.167	mg/L	0.0010	167	70	130			S
Strontium	4.98	mg/L	0.10		70	130			A
Thallium	0.0208	mg/L	0.10	104	70	130			
Uranium	0.0244	mg/L	0.00030	113	70	130			
Zinc	0.200	mg/L	0.010		70	130			A
<b>Sample ID: R08030253-002D</b>	Post Digestion Spike Duplicate			Run: SUB-C99538			04/11/08 22:31		
Antimony	0.0217	mg/L	0.050	108	70	130	0.0	20	
Barium	0.0334	mg/L	0.10	108	70	130	0.0	20	
Beryllium	0.0193	mg/L	0.010	96	70	130	6.6	20	
Cadmium	0.0195	mg/L	0.010	97	70	130	3.3	20	
Chromium	0.0201	mg/L	0.050	99	70	130	0.0	20	
Copper	0.0332	mg/L	0.010	136	70	130	7.9	20	S
Lead	0.0260	mg/L	0.050	105	70	130	0.0	20	
Manganese	1.75	mg/L	0.010		70	130	2.4	20	A
Molybdenum	0.0206	mg/L	0.10	101	70	130	0.0	20	
Nickel	0.0198	mg/L	0.050	90	70	130	0.0	20	
Selenium	0.150	mg/L	0.0010	150	70	130	11	20	S
Strontium	4.88	mg/L	0.10		70	130	2.0	20	A
Thallium	0.0207	mg/L	0.10	103	70	130	0.0	20	
Uranium	0.0240	mg/L	0.00030	111	70	130	1.7	20	
Zinc	0.195	mg/L	0.010		70	130	2.9	20	A
<b>Method: E200.8</b>							Batch: C_18171		
<b>Sample ID: MB-18171</b>	Method Blank			Run: SUB-C99526			04/13/08 13:14		
Uranium	0.00010	mg/L	2E-05						
<b>Sample ID: LCS1-18171</b>	Laboratory Control Sample			Run: SUB-C99526			04/13/08 13:21		
Uranium	0.0509	mg/L	0.00030	97	80	120			
LCS1 was not spiked with thorium.									
<b>Sample ID: R08030252-005K</b>	Post Digestion Spike			Run: SUB-C99526			04/13/08 14:13		
Uranium	0.0246	mg/L	0.00030	96	70	130			
<b>Sample ID: R08030252-005K</b>	Post Digestion Spike Duplicate			Run: SUB-C99526			04/13/08 14:40		
Uranium	0.0243	mg/L	0.00030	95	70	130	1.1	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18340
Sample ID: MB-18340	Method Blank								04/18/08 19:36
Arsenic	0.0007	mg/L	5E-05						
Sample ID: LCS-18340	Laboratory Control Sample								04/18/08 19:43
Arsenic	0.489	mg/L	0.0010	98	85	115			
Sample ID: C08031187-001DMS	Sample Matrix Spike								04/18/08 22:46
Arsenic	0.497	mg/L	0.0010	98	70	130			
Sample ID: C08031187-001DMSD	Sample Matrix Spike Duplicate								04/18/08 22:53
Arsenic	0.498	mg/L	0.0010	98	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: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100330		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C100330				04/28/08 11:48		
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						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C100330				04/28/08 11:55		
Arsenic	0.0529	mg/L	0.0010	106	85	115			
Cadmium	0.0525	mg/L	0.0010	105	85	115			
Copper	0.0533	mg/L	0.0010	106	85	115			
Lead	0.0528	mg/L	0.0010	106	85	115			
Mercury	0.00553	mg/L	0.0010	111	85	115			
Nickel	0.0533	mg/L	0.0010	107	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Thorium 232	0.0525	mg/L	0.0010	105	85	115			
Uranium	0.0525	mg/L	0.00030	105	85	115			
<b>Sample ID: C08040444-001BMS4</b>	Post Digestion Spike		Run: SUB-C100330				04/28/08 14:03		
Arsenic	0.0610	mg/L	0.0010	103	70	130			
Cadmium	0.0500	mg/L	0.010	100	70	130			
Copper	0.0513	mg/L	0.010	97	70	130			
Lead	0.0533	mg/L	0.050	104	70	130			
Mercury	0.00541	mg/L	0.0010	108	70	130			
Nickel	0.0489	mg/L	0.050	98	70	130			
Silver	0.0124	mg/L	0.010	62	70	130			S
Thorium 232	0.0532	mg/L	0.0010	106	70	130			
Uranium	0.0773	mg/L	0.00030	107	70	130			
<b>Sample ID: C08040444-001BMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C100330				04/28/08 14:10		
Arsenic	0.0624	mg/L	0.0010	106	70	130	2.3	20	
Cadmium	0.0500	mg/L	0.010	100	70	130	0.0	20	
Copper	0.0529	mg/L	0.010	101	70	130	3.1	20	
Lead	0.0531	mg/L	0.050	104	70	130	0.4	20	
Mercury	0.00548	mg/L	0.0010	110	70	130	1.4	20	
Nickel	0.0504	mg/L	0.050	101	70	130	3.1	20	
Silver	0.0104	mg/L	0.010	52	70	130	18	20	S
Thorium 232	0.0529	mg/L	0.0010	106	70	130	0.6	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: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100330		
Sample ID: C08040444-001BMSD4	Post Digestion Spike Duplicate			Run: SUB-C100330			04/28/08 14:10		
Uranium	0.0767	mg/L	0.00030	105	70	130	0.8	20	
Sample ID: C08040192-003CMS4	Post Digestion Spike			Run: SUB-C100330			04/28/08 20:57		
Arsenic	0.0519	mg/L	0.0010	102	70	130			
Cadmium	0.0491	mg/L	0.010	98	70	130			
Copper	0.0490	mg/L	0.010	97	70	130			
Lead	0.0515	mg/L	0.050	103	70	130			
Mercury	0.00545	mg/L	0.0010	109	70	130			
Nickel	0.0490	mg/L	0.050	98	70	130			
Silver	0.0134	mg/L	0.010	67	70	130			S
Thorium 232	0.0529	mg/L	0.0010	106	70	130			
Uranium	0.0533	mg/L	0.00030	106	70	130			
Sample ID: C08040192-003CMSD4	Post Digestion Spike Duplicate			Run: SUB-C100330			04/28/08 21:24		
Arsenic	0.0522	mg/L	0.0010	103	70	130	0.6	20	
Cadmium	0.0491	mg/L	0.010	98	70	130	0.0	20	
Copper	0.0491	mg/L	0.010	98	70	130	0.2	20	
Lead	0.0511	mg/L	0.050	102	70	130	0.7	20	
Mercury	0.00549	mg/L	0.0010	110	70	130	0.7	20	
Nickel	0.0486	mg/L	0.050	97	70	130	0.0	20	
Silver	0.0120	mg/L	0.010	60	70	130	11	20	S
Thorium 232	0.0534	mg/L	0.0010	107	70	130	0.9	20	
Uranium	0.0536	mg/L	0.00030	107	70	130	0.5	20	
Method: E245.1							Batch: C_B_31842		
Sample ID: MB-31842	Method Blank			Run: SUB-C99444			04/10/08 12:28		
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-31842	Laboratory Fortified Blank			Run: SUB-C99444			04/10/08 12:31		
Mercury	0.0018	mg/L	0.0010	89	85	115			
Sample ID: B08040061-002BMS	Sample Matrix Spike			Run: SUB-C99444			04/10/08 13:33		
Mercury	0.0020	mg/L	0.0010	98	70	130			
Sample ID: B08040061-002BMSD	Sample Matrix Spike Duplicate			Run: SUB-C99444			04/10/08 13:35		
Mercury	0.0021	mg/L	0.0010	103	70	130	4.5	30	
Method: E245.1							Analytical Run: SUB-C99444		
Sample ID: QCS	Initial Calibration Verification Standard						04/10/08 12:12		
Mercury	0.0020	mg/L	0.0010	98	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: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>									Batch: R33953
<b>Sample ID: LFB0803265758-3</b>	Laboratory Fortified Blank			Run: DIONEX_080326A			03/26/08 11:31		
Chloride	4.93	mg/L	0.50	99	90	110			
Fluoride	2.06	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
<b>Sample ID: LFB0803265758-4</b>	Laboratory Fortified Blank			Run: DIONEX_080326A			03/26/08 11:46		
Chloride	4.92	mg/L	0.50	98	90	110			
Fluoride	2.06	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
<b>Sample ID: R08030252-005CMS</b>	Sample Matrix Spike			Run: DIONEX_080326A			03/26/08 15:22		
Chloride	262	mg/L	5.4	92	80	120			
Fluoride	106	mg/L	0.56	101	80	120			
Nitrogen, Nitrate as N	115	mg/L	1.3	92	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1920	mg/L	3.4	95	80	120			
<b>Sample ID: R08030252-005CMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080326A			03/26/08 15:38		
Chloride	252	mg/L	5.4	88	80	120	4.0	10	
Fluoride	102	mg/L	0.56	97	80	120	4.0	10	
Nitrogen, Nitrate as N	110	mg/L	1.3	88	80	120	4.6	10	
Nitrogen, Nitrite as N	119	mg/L	2.9	95	80	120	4.6	10	
Sulfate	1830	mg/L	3.4	83	80	120	4.5	10	
<b>Sample ID: R08030251-001BMS</b>	Sample Matrix Spike			Run: DIONEX_080326A			03/26/08 18:27		
Chloride	189	mg/L	2.2	96	80	120			
Fluoride	42.9	mg/L	0.22	102	80	120			
Nitrogen, Nitrate as N	47.0	mg/L	0.50	90	80	120			
Nitrogen, Nitrite as N	60.5	mg/L	1.2	121	80	120			S
Sulfate	1020	mg/L	1.3	71	80	120			S
<b>Sample ID: R08030251-001BMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080326A			03/26/08 18:43		
Chloride	185	mg/L	2.2	92	80	120	2.5	10	
Fluoride	41.9	mg/L	0.22	100	80	120	2.3	10	
Nitrogen, Nitrate as N	45.6	mg/L	0.50	87	80	120	3.0	10	
Nitrogen, Nitrite as N	58.9	mg/L	1.2	118	80	120	2.8	10	
Sulfate	998	mg/L	1.3	64	80	120	2.0	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0421		
Sample ID: MB-GrAB-0421	Method Blank					Run: SUB-C99588			04/08/08 23:35
Gross Alpha	-0.3	pCi/L							U
Gross Beta	-0.8	pCi/L							U
Sample ID: UNAT-GrAB-0421	Laboratory Control Sample					Run: SUB-C99588			04/08/08 23:36
Gross Alpha	290	pCi/L		120	70	130			
Sample ID: Cs137-GrAB-0421	Laboratory Control Sample					Run: SUB-C99588			04/08/08 23:35
Gross Beta	98	pCi/L		105	70	130			
Sample ID: C08031229-001AMS	Sample Matrix Spike					Run: SUB-C99588			04/08/08 23:35
Gross Alpha	280	pCi/L		113	70	130			
Sample ID: C08031229-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C99588			04/08/08 23:35
Gross Alpha	300	pCi/L		121	70	130	7.5	14.3	
Sample ID: C08031229-001AMS	Sample Matrix Spike					Run: SUB-C99588			04/08/08 23:35
Gross Beta	99	pCi/L		106	70	130			
Sample ID: C08031229-001AMSD	Sample Matrix Spike Duplicate					Run: SUB-C99588			04/08/08 23:36
Gross Beta	96	pCi/L		102	70	130	3.7	15.6	
Sample ID: C08031215-001AIDUP	Sample Duplicate					Run: SUB-C99588			04/09/08 12:08
Gross Alpha	180	pCi/L					4.7	22.9	
Gross Beta	92.9	pCi/L					4.8	21.2	

### 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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R99476		
Sample ID: LCS-R99476	Laboratory Control Sample			Run: SUB-C99476			04/04/08 16:45		
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1200	pCi/L	20	83	70	130			
Sample ID: MB-R99476	Method Blank			Run: SUB-C99476			04/04/08 16:45		
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							
Sample ID: C08031229-001ADUP	Sample Duplicate			Run: SUB-C99476			04/04/08 16:45		
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	
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	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/15/08

Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R99476		
Sample ID: C08031229-001ADUP	Sample Duplicate		Run: SUB-C99476				04/04/08 16:45		
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	
Sample ID: C08040148-004HDUP	Sample Duplicate		Run: SUB-C99476				04/04/08 16:45		
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	270	pCi/L	20				16	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	310	pCi/L	20				9.9	30	
Manganese 54	ND	pCi/L	20				0.0	30	
Potassium 40	ND	pCi/L	20				0.0	30	
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	580	pCi/L	20				3.1	30	
Sample ID: C08040255-001HDUP	Sample Duplicate		Run: SUB-C99476				04/04/08 16:45		
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	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E901.1</b>							Batch: C_R99476		
Sample ID: C08040255-001HDUP	Sample Duplicate			Run: SUB-C99476			04/04/08 16:45		
Manganese 54	ND	pCi/L	20				0.0	30	
Potassium 40	ND	pCi/L	20				0.0	30	
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	
<b>Method: E903.0</b>							Batch: C_R99766		
Sample ID: C08031096-006AMS	Sample Matrix Spike			Run: SUB-C99766			04/12/08 23:58		
Radium 226	73.3	pCi/Filter		106	70	130			
Sample ID: C08031096-006AMSD	Sample Matrix Spike Duplicate			Run: SUB-C99766			04/13/08 01:28		
Radium 226	71.9	pCi/Filter		104	70	130	1.8	25.2	
Sample ID: LCS-18171	Laboratory Control Sample			Run: SUB-C99766			04/13/08 22:32		
Radium 226	12	pCi/L		89	70	130			
Sample ID: MB-18171	Method Blank			Run: SUB-C99766			04/14/08 00:02		
Radium 226	0.5	pCi/L							
<b>Method: E903.0</b>							Batch: C_RA226-2696		
Sample ID: MB-RA226-2696	Method Blank			Run: SUB-C99285			04/07/08 15:04		
Radium 226	-0.2	pCi/L						U	
Sample ID: C08031105-001IMS	Sample Matrix Spike			Run: SUB-C99285			04/07/08 17:42		
Radium 226	24	pCi/L		91	70	130			
Sample ID: C08031105-001IMSD	Sample Matrix Spike Duplicate			Run: SUB-C99285			04/07/08 17:42		
Radium 226	24	pCi/L		94	70	130	1.1	18.6	
Sample ID: LCS-RA226-2696	Laboratory Control Sample			Run: SUB-C99285			04/07/08 23:55		
Radium 226	5.9	pCi/L		96	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									Batch: C_18171
Sample ID: C08031096-005AMS	Sample Matrix Spike				Run: SUB-C99557				04/02/08 15:30
Thorium 230	47.2	pCi/Filter	0.20	93	70	130			
Sample ID: C08031096-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99557				04/02/08 15:30
Thorium 230	47.3	pCi/Filter	0.20	94	70	130	0.2		30
Sample ID: LCS-18171	Laboratory Control Sample				Run: SUB-C99557				04/02/08 15:30
Thorium 230	43.2	pCi/Filter	0.20	89	70	130			
Sample ID: MB-18171	Method Blank				Run: SUB-C99557				04/02/08 15:30
Thorium 230	0.2	pCi/Filter							
Method: E907.0									Batch: C_R99556
Sample ID: LCS-R99556	Laboratory Control Sample				Run: SUB-C99556				04/07/08 14:30
Thorium 230	6.83	pCi/L	0.20	98	70	130			
Sample ID: R08030253-001H	Sample Matrix Spike				Run: SUB-C99556				04/07/08 14:30
Thorium 230	9.88	pCi/L	0.20	97	70	130			
Sample ID: R08030253-001H	Sample Matrix Spike Duplicate				Run: SUB-C99556				04/07/08 14:30
Thorium 230	9.25	pCi/L	0.20	90	70	130	6.6		30
Sample ID: MB-R99556	Method Blank				Run: SUB-C99556				04/07/08 14:30
Thorium 230	ND	pCi/L							
Method: E909.0M									Batch: C_18171
Sample ID: C08031249-001AMS	Sample Matrix Spike				Run: SUB-C99565				04/03/08 08:05
Lead 210	1010	pCi/Filter	1.0	76	70	130			
Sample ID: C08031249-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99565				04/03/08 08:05
Lead 210	1350	pCi/Filter	1.0	105	70	130	29		30
Sample ID: MB-R99565	Method Blank				Run: SUB-C99565				04/03/08 08:05
Lead 210	30	pCi/L							
Sample ID: LCS-R99565	Laboratory Control Sample				Run: SUB-C99565				04/03/08 08:05
Lead 210	100	pCi/L	1.0	87	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: 06/15/08  
Work Order: R08030253

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_R99229		
Sample ID: R08030253-001H	Sample Matrix Spike				Run: SUB-C99229		04/02/08 10:10		
Lead 210	190	pCi/L	1.0	82	70	130			
Sample ID: R08030253-001H	Sample Matrix Spike Duplicate				Run: SUB-C99229		04/02/08 10:10		
Lead 210	190	pCi/L	1.0	84	70	130	2.5	30	
Sample ID: C08031265-004DDUP	Sample Duplicate				Run: SUB-C99229		04/02/08 10:10		
Lead 210	26	pCi/L	1.0				1.2	30	
Sample ID: MB-R99229	Method Blank				Run: SUB-C99229		04/02/08 10:10		
Lead 210	10	pCi/L							
Sample ID: LCS-R99229	Laboratory Control Sample				Run: SUB-C99229		04/02/08 10:10		
Lead 210	120	pCi/L	1.0	92	70	130			
Method: RMO-3008							Batch: C_R99661		
Sample ID: C08040148-009IMS	Sample Matrix Spike				Run: SUB-C99661		04/07/08 17:00		
Polonium 210	82	pCi/L	1.0	96	70	130			
Sample ID: C08040148-009IMSD	Sample Matrix Spike Duplicate				Run: SUB-C99661		04/07/08 17:00		
Polonium 210	78	pCi/L	1.0	92	70	130	4.5	30	
Sample ID: LCS-18171	Laboratory Control Sample				Run: SUB-C99661		04/07/08 17:00		
Polonium 210	190	pCi/L	1.0	108	70	130			
Sample ID: MB-18182	Method Blank				Run: SUB-C99661		04/07/08 17:00		
Polonium 210	1	pCi/L							
Method: RMO-3008							Batch: C_R99720		
Sample ID: C08030949-011DMS	Sample Matrix Spike				Run: SUB-C99720		04/02/08 14:00		
Polonium 210	15	pCi/L	1.0	42	70	130			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: C08030949-011DMSD	Sample Matrix Spike Duplicate				Run: SUB-C99720		04/02/08 14:00		
Polonium 210	21	pCi/L	1.0	79	70	130	36	30	R
Sample ID: LCS-R99720	Laboratory Control Sample				Run: SUB-C99720		04/02/08 14:00		
Polonium 210	14	pCi/L	1.0	73	70	130			
Sample ID: MB-R99720	Method Blank				Run: SUB-C99720		04/02/08 14:00		
Polonium 210	0.8	pCi/L							

### Qualifiers:

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

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



## Chain of Custody and Analytical Request Record

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

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>RESPEC</b>		Project Name, PWS, Permit, Etc. <b>River Trail 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>		Phone/Fax: <b>605.342.1225</b>	Email: <b>Cory.Foreman@respec.com</b>
Invoice Address: <b>RESPEC</b>		Invoice Contact & Phone:		Purchase Order:	Sampler: (Please Print) <b>Eric Krantz</b>
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"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> State: <input type="checkbox"/> Other: <input type="checkbox"/></div>					
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED
1. Dew Burd GW 650		07/24/08	0900	W	
2. Dew Burd GW 650		07/24/08	1030	W	
3. Dew Burd GW 650		07/24/08	11:10	W	
4. Dew Burd GW 650		07/24/08	11:55	W	
5. Dew Burd GW 650		07/24/08	12:45	W	
6. Dew Burd GW 650		07/24/08	15:40	W	
7. Dew Burd GW 650		07/24/08	16:25	W	
8. Dew Burd GW 650		07/24/08	17:10	W	
9. Dew Burd GW 650					
10. Dew Burd GW 650					
Custody Record Must be Signed		Relinquished by (print): <b>Eric Krantz</b>	Date/Time: <b>07/25/08 0810</b>	Signature: <b>[Signature]</b>	Received by (print): <b>Eric Krantz</b>
Sample Disposal:		Return to Client:	Lab Disposal:	Received by Laboratory: <b>Eric Krantz</b>	Date/Time: <b>07/25/08 0810</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.: R08030315

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 9 samples from RESPEC Inc on 3/31/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08030315-001	DewBurd GW694	03/30/08 10:11	03/31/08	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
R08030315-002	DewBurd GW698	03/30/08 14:04	03/31/08	Aqueous	Same As Above
R08030315-003	DewBurd GW698	03/30/08 14:10	03/31/08	Aqueous	Same As Above
R08030315-004	DewBurd GW16	03/30/08 15:19	03/31/08	Aqueous	Same As Above





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Gillette, WY 888-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-680-2218

**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08030315

**Report Date:** 07/29/08

## 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.

- change GW 700 to GW 3026 per Eric Krantz 5/20/2008 per Eric 6/27/2008 change 695 to 697 done 6/27/2008 LL

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: C08040148

Prep Comments for Sample R08030315-009J, Test PRP-200.2: The prep HoldTime was exceeded by 30.9 days.

Prep Comments for Sample R08030315-009K, Test PRP-200.2: The prep HoldTime was exceeded by 37.8 days.

End of comments imported for SUBBED Workorder: C08040148



# LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030315-001  
Client Sample ID: DewBurd GW694

Report Date: 07/29/08  
Collection Date: 03/30/08 10:11  
Date Received: 03/31/08  
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>	204	mg/L		5		1	A2320 B	04/01/08 12:41/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/01/08 12:41/mb
Bicarbonate as HCO <sub>3</sub>	249	mg/L		5		1	A2320 B	04/01/08 12:41/mb
Calcium	91.6	mg/L		0.5		2	E200.7	04/11/08 12:34/eli-c
Chloride	11	mg/L		1		1	E300.0	03/31/08 20:47/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/31/08 20:47/jmh
Magnesium	35.4	mg/L		0.5		2	E200.7	04/11/08 12:34/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH <sub>3</sub> G	04/04/08 10:27/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/31/08 20:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/31/08 20:47/jmh
Potassium	12.3	mg/L		0.5		2	E200.7	04/11/08 12:34/eli-c
Silica	8.1	mg/L		0.5		2	E200.7	04/11/08 12:34/eli-c
Sodium	165	mg/L		0.5		2	E200.7	04/11/08 12:34/eli-c
Sulfate	531	mg/L	D	3		50	E300.0	03/31/08 20:32/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1370	umhos/cm		5.0		1	A2510 B	04/01/08 11:44/jmh
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.65	s.u.		0.01		1	A4500-H B	04/01/08 11:16/jmh
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	970	mg/L		5		1	A2540 C	03/31/08 13:47/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 12:34/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/15/08 23:50/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 12:34/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 12:34/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 23:50/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 12:34/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 23:50/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/11/08 12:34/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 23:50/eli-c
Manganese	0.14	mg/L		0.01		2	E200.7	04/11/08 12:34/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/15/08 23:50/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 12:34/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 23:50/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 23:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/15/08 03:50/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:** R08030315-001  
**Client Sample ID:** DewBurd GW694

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 10:11  
**Date Received:** 03/31/08  
**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	04/15/08 23:50/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 12:34/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 12:34/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	04/15/08 22:16/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 09:31/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	8.8	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	4.1	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	10.3	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	-9.8	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	2.6	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	1.8	pCi/L		1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	1.6	pCi/L				1	E903.0	04/20/08 01:14/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	04/20/08 01:14/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/20/08 01:14/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.71	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	1	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/09/08 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:** R08030315-001  
**Client Sample ID:** DewBurd GW694

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 10:11  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	313	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	79.4	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 02:08/eli-c
Arsenic	0.005	mg/L	D	0.003		1	E200.8	04/15/08 02:08/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 14:56/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 02:08/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 14:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 02:08/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 14:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 02:08/eli-c
Iron	0.18	mg/L		0.03		2	E200.7	04/10/08 14:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 02:08/eli-c
Manganese	0.20	mg/L		0.01		2	E200.7	04/10/08 14:56/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:21/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 02:08/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 02:08/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/15/08 02:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 02:08/eli-c
Strontium	2.7	mg/L		0.1		1	E200.8	04/15/08 02:08/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 02:08/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	04/15/08 02:08/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	04/15/08 02:08/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.48					1	A1030 E	06/17/08 00:00/ADM
Anions	15.4	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	15.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	990	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	06/17/08 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.  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-002  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 14:04  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	124	mg/L		5		1	A2320 B	04/01/08 12:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 12:59/mb
Bicarbonate as HCO3	151	mg/L		5		1	A2320 B	04/01/08 12:59/mb
Calcium	338	mg/L		0.5		2	E200.7	04/11/08 12:44/eli-c
Chloride	12	mg/L		1		1	E300.0	03/31/08 21:18/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	03/31/08 21:18/jmh
Magnesium	125	mg/L		0.5		2	E200.7	04/11/08 12:44/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:28/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/31/08 21:18/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/31/08 21:18/jmh
Potassium	14.6	mg/L		0.5		2	E200.7	04/11/08 12:44/eli-c
Silica	9.5	mg/L		0.5		2	E200.7	04/11/08 12:44/eli-c
Sodium	84.6	mg/L		0.5		2	E200.7	04/11/08 12:44/eli-c
Sulfate	1300	mg/L	D	3		50	E300.0	03/31/08 21:03/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2390	umhos/cm		5.0		1	A2510 B	04/01/08 11:44/jmh
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/04/08 00:00/jmh
pH	6.91	s.u.		0.01		1	A4500-H B	04/01/08 11:17/jmh
Sodium Adsorption Ratio (SAR)	1.0	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	03/31/08 13:48/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 12:44/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 00:17/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 12:44/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 12:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 00:17/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 12:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 00:17/eli-c
Iron	1.56	mg/L		0.03		2	E200.7	04/11/08 12:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 00:17/eli-c
Manganese	2.18	mg/L		0.01		2	E200.7	04/11/08 12:44/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 00:17/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 12:44/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 00:17/eli-c
Selenium	0.001	mg/L		0.001		1	A3114 B	04/07/08 12:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 03:56/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/15/08 03:56/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:** R08030315-002  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 14:04  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.109	mg/L		0.0003		1	E200.8	04/16/08 00:17/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 12:44/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	04/11/08 12:44/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0024	mg/L		0.0003		1	E200.8	04/15/08 22:22/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 09:38/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1750	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	41.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	8.4	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	657	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	13.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	9.3	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	-14	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	3.1	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	387	pCi/L				1	E903.0	04/20/08 01:21/eli-c
Radium 226 precision (±)	13.8	pCi/L				1	E903.0	04/20/08 01:21/eli-c
Radium 226 MDC	1.0	pCi/L				1	E903.0	04/20/08 01:21/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	790	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	49	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	0.7	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.74	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	15.3	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 precision (±)	1.2	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	04/09/08 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:** R08030315-002  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 14:04  
**Date Received:** 03/31/08  
**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	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	32200	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	266	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 02:15/eli-c
Arsenic	0.004	mg/L	D	0.003		1	E200.8	04/15/08 02:15/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:00/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 02:15/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 02:15/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 02:15/eli-c
Iron	4.06	mg/L		0.03		2	E200.7	04/10/08 15:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 02:15/eli-c
Manganese	2.31	mg/L		0.01		2	E200.7	04/10/08 15:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:23/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 02:15/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 02:15/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	04/15/08 02:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 02:15/eli-c
Strontium	4.9	mg/L		0.1		1	E200.8	04/15/08 02:15/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 02:15/eli-c
Uranium	0.123	mg/L		0.0003		1	E200.8	04/15/08 02:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 02:15/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.58					1	A1030 E	06/17/08 00:00/ADM
Anions	29.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	31.4	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	1970	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.13					1	A1030 E	06/17/08 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  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 14:10  
**Date Received:** 03/31/08  
**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	04/01/08 13:05/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 13:05/mb
Bicarbonate as HCO3	149	mg/L		5		1	A2320 B	04/01/08 13:05/mb
Calcium	340	mg/L		0.5		2	E200.7	04/11/08 12:51/eli-c
Chloride	11	mg/L		1		1	E300.0	03/31/08 21:49/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/31/08 21:49/jmh
Magnesium	126	mg/L		0.5		2	E200.7	04/11/08 12:51/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:29/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/31/08 21:49/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/31/08 21:49/jmh
Potassium	14.4	mg/L		0.5		2	E200.7	04/11/08 12:51/eli-c
Silica	9.5	mg/L		0.5		2	E200.7	04/11/08 12:51/eli-c
Sodium	83.7	mg/L		0.5		2	E200.7	04/11/08 12:51/eli-c
Sulfate	1430	mg/L	D	3		50	E300.0	03/31/08 21:33/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2400	umhos/cm		5.0		1	A2510 B	04/01/08 11:45/jmh
Oxidation-Reduction Potential	190	mV				1	A2580 B	04/04/08 00:00/jmh
pH	6.91	s.u.		0.01		1	A4500-H B	04/01/08 11:18/jmh
Sodium Adsorption Ratio (SAR)	0.98	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	03/31/08 13:49/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 12:51/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 01:52/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 12:51/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 12:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 01:52/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 12:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 01:52/eli-c
Iron	1.58	mg/L		0.03		2	E200.7	04/11/08 12:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 01:52/eli-c
Manganese	2.22	mg/L		0.01		2	E200.7	04/11/08 12:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 01:52/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 12:51/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 01:52/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 04:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 01:52/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: R08030315-003  
Client Sample ID: DewBurd GW698

Report Date: 07/29/08  
Collection Date: 03/30/08 14:10  
Date Received: 03/31/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.109	mg/L		0.0003		1	E200.8	04/16/08 01:52/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 12:51/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 12:51/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0024	mg/L		0.0003		1	E200.8	04/15/08 22:50/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 09:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1880	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	43.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	8.5	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	659	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	13.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	9.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	-9.6	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	398	pCi/L				1	E903.0	04/20/08 01:28/eli-c
Radium 226 precision (±)	14.2	pCi/L				1	E903.0	04/20/08 01:28/eli-c
Radium 226 MDC	1.1	pCi/L				1	E903.0	04/20/08 01:28/eli-c
Thorium 230	-0.1	pCi/L	U	0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	840	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	54	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	1.1	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	0.8	pCi/L	U	1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.64	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	12.4	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 precision (±)	1.1	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	04/09/08 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:** R08030315-003  
**Client Sample ID:** DewBurd GW698

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 14:10  
**Date Received:** 03/31/08  
**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	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	29400	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	255	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 02:22/eli-c
Arsenic	0.003	mg/L	D	0.003		1	E200.8	04/15/08 02:22/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:03/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 02:22/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 02:22/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:03/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 02:22/eli-c
Iron	3.99	mg/L		0.03		2	E200.7	04/10/08 15:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 02:22/eli-c
Manganese	2.29	mg/L		0.01		2	E200.7	04/10/08 15:03/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:26/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 02:22/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 02:22/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	04/15/08 02:22/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 02:22/eli-c
Strontium	4.8	mg/L		0.1		1	E200.8	04/15/08 02:22/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 02:22/eli-c
Uranium	0.122	mg/L		0.0003		1	E200.8	04/15/08 02:22/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 02:22/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.60					1	A1030 E	06/17/08 00:00/ADM
Anions	32.6	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	31.6	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	2110	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.07					1	A1030 E	06/17/08 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: R08030315-004  
Client Sample ID: DewBurd GW16

Report Date: 07/29/08  
Collection Date: 03/30/08 15:19  
Date Received: 03/31/08  
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>	148	mg/L		5		1	A2320 B	04/01/08 13:21/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/01/08 13:21/mb
Bicarbonate as HCO <sub>3</sub>	180	mg/L		5		1	A2320 B	04/01/08 13:21/mb
Calcium	113	mg/L		0.5		2	E200.7	04/11/08 12:55/eli-c
Chloride	5	mg/L		1		1	E300.0	03/31/08 22:51/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	03/31/08 22:51/jmh
Magnesium	46.8	mg/L		0.5		2	E200.7	04/11/08 12:55/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	04/04/08 10:31/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/31/08 22:51/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/31/08 22:51/jmh
Potassium	15.1	mg/L		0.5		2	E200.7	04/11/08 12:55/eli-c
Silica	7.0	mg/L		0.5		2	E200.7	04/11/08 12:55/eli-c
Sodium	48.0	mg/L		0.5		2	E200.7	04/11/08 12:55/eli-c
Sulfate	449	mg/L	D	3		50	E300.0	03/31/08 22:04/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1050	umhos/cm		5.0		1	A2510 B	04/01/08 11:46/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.57	s.u.		0.01		1	A4500-H B	04/01/08 11:19/jmh
Sodium Adsorption Ratio (SAR)	0.96	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	780	mg/L		5		1	A2540 C	03/31/08 13:49/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 12:55/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 01:59/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 12:55/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 12:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 01:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 12:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 01:59/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/11/08 12:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 01:59/eli-c
Manganese	0.13	mg/L		0.01		2	E200.7	04/11/08 12:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 01:59/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 12:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 01:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 04:37/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 01:59/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  
D - RL increased due to sample matrix interference.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-004  
**Client Sample ID:** DewBurd GW16

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 15:19  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0007	mg/L		0.0003		1	E200.8	04/16/08 01:59/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 12:55/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	04/11/08 12:55/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/15/08 22:56/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 09:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	85.7	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	5.9	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	47.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	3.5	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	-27	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	4.1	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	15.3	pCi/L				1	E903.0	04/20/08 02:58/eli-c
Radium 226 precision (±)	0.8	pCi/L				1	E903.0	04/20/08 02:58/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/20/08 02:58/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	600	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	47	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	0.8	pCi/L	U	1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.57	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	1.4	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/09/08 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:** R08030315-004  
**Client Sample ID:** DewBurd GW16

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 15:19  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/09/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	28200	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	249	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 02:28/eli-c
Arsenic	0.004	mg/L	D	0.003		1	E200.8	04/15/08 02:28/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:06/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 02:28/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 02:28/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:06/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 02:28/eli-c
Iron	0.25	mg/L		0.03		2	E200.7	04/10/08 15:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 02:28/eli-c
Manganese	0.14	mg/L		0.01		2	E200.7	04/10/08 15:06/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:28/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 02:28/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 02:28/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/15/08 02:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 02:28/eli-c
Strontium	2.7	mg/L		0.1		1	E200.8	04/15/08 02:28/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 02:28/eli-c
Uranium	0.0007	mg/L		0.0003		1	E200.8	04/15/08 02:28/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	04/15/08 02:28/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.00					1	A1030 E	06/17/08 00:00/ADM
Anions	12.5	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	12.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	786	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	06/17/08 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:** R08030315-005  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 15:10  
**Date Received:** 03/31/08  
**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	04/01/08 13:25/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 13:25/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	04/01/08 13:25/mb
Calcium	ND	mg/L		0.5		2	E200.7	04/11/08 12:58/eli-c
Chloride	ND	mg/L		1		1	E300.0	03/31/08 23:06/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	03/31/08 23:06/jmh
Magnesium	ND	mg/L		0.5		2	E200.7	04/11/08 12:58/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:34/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/31/08 23:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/31/08 23:06/jmh
Potassium	ND	mg/L		0.5		2	E200.7	04/11/08 12:58/eli-c
Silica	ND	mg/L		0.5		2	E200.7	04/11/08 12:58/eli-c
Sodium	ND	mg/L		0.5		2	E200.7	04/11/08 12:58/eli-c
Sulfate	ND	mg/L		1		1	E300.0	03/31/08 23:06/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	5.7	umhos/cm		5.0		1	A2510 B	04/01/08 11:49/jmh
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/04/08 00:00/jmh
pH	5.37	s.u.		0.01		1	A4500-H B	04/01/08 11:21/jmh
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	06/17/08 00:00/ADM
Solids, Total Dissolved TDS @ 180 C	28	mg/L		5		1	A2540 C	03/31/08 13:50/mb
- SAR calculations may not be appropriate for near blank results.								
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 12:58/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 02:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 12:58/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 12:58/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 02:06/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 12:58/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 02:06/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/11/08 12:58/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 02:06/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	04/11/08 12:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 02:06/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 12:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 02:06/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 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.

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-005  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 15:10  
**Date Received:** 03/31/08  
**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		04/16/08 02:06/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8		04/16/08 02:06/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7		04/11/08 12:58/eli-c
Zinc	ND	mg/L		0.01		2	E200.7		04/11/08 12:58/eli-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003		1	E200.8		04/15/08 23:03/eli-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001		1	A3114 B		04/07/08 09:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B		04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	-0.3	pCi/L	U			1	E900.0		04/12/08 02:38/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0		04/12/08 02:38/eli-c
Gross Alpha MDC	1.0	pCi/L				1	E900.0		04/12/08 02:38/eli-c
Gross Beta	-4	pCi/L				1	E900.0		04/12/08 02:38/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0		04/12/08 02:38/eli-c
Gross Beta MDC	2.6	pCi/L				1	E900.0		04/12/08 02:38/eli-c
Lead 210	-4.2	pCi/L	U	1.0		1	E909.0M		04/08/08 08:15/eli-c
Lead 210 precision (±)	1.8	pCi/L				1	E909.0M		04/08/08 08:15/eli-c
Polonium 210	2.1	pCi/L		1.0		1	RMO-3008		04/03/08 14:30/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008		04/03/08 14:30/eli-c
Radium 226	0.2	pCi/L	U			1	E903.0		04/20/08 04:29/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0		04/20/08 04:29/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0		04/20/08 04:29/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0		04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0		04/07/08 14:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1		04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1		04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED									
Lead 210	-3.8	pCi/L	U	1.0		1	E909.0M		04/10/08 09:00/eli-c
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M		04/10/08 09:00/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008		04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008		04/07/08 17:00/eli-c
Radium 226	1.1	pCi/L				1	E903.0		04/22/08 12:16/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0		04/22/08 12:16/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0		04/22/08 12:16/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.  
U - Not detected at minimum detectable concentration

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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-005  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 15:10  
**Date Received:** 03/31/08  
**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	04/09/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/09/08 15:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	126	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	74.1	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 02:35/eli-c
Arsenic	0.003	mg/L	D	0.003		1	E200.8	04/15/08 02:35/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:10/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 02:35/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 02:35/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 02:35/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/10/08 15:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 02:35/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	04/10/08 15:10/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:31/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 02:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 02:35/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/15/08 02:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 02:35/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	04/15/08 02:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 02:35/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/15/08 02:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 02:35/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:** R08030315-006  
**Client Sample ID:** DewBurd GW697

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 16:36  
**Date Received:** 03/31/08  
**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	04/01/08 13:30/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 13:30/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	04/01/08 13:30/mb
Calcium	49.2	mg/L		0.5		2	E200.7	04/11/08 13:01/el-c
Chloride	10	mg/L		1		1	E300.0	04/01/08 00:08/fmh
Fluoride	0.5	mg/L		0.1		1	E300.0	04/01/08 00:08/fmh
Magnesium	16.9	mg/L		0.5		2	E200.7	04/11/08 13:01/el-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:38/fmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/01/08 00:08/fmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/01/08 00:08/fmh
Potassium	8.1	mg/L		0.5		2	E200.7	04/11/08 13:01/el-c
Silica	7.4	mg/L		0.5		2	E200.7	04/11/08 13:01/el-c
Sodium	197	mg/L		0.5		2	E200.7	04/11/08 13:01/el-c
Sulfate	452	mg/L	D	3		50	E300.0	03/31/08 23:52/fmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1250	umhos/cm		5.0		1	A2510 B	04/01/08 11:50/fmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	04/04/08 00:00/fmh
pH	7.83	s.u.		0.01		1	A4500-H B	04/01/08 11:22/fmh
Sodium Adsorption Ratio (SAR)	6.2	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	800	mg/L		5		1	A2540 C	03/31/08 13:50/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 13:01/el-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/16/08 02:12/el-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 13:01/el-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 13:01/el-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 02:12/el-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 13:01/el-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 02:12/el-c
Iron	0.03	mg/L		0.03		2	E200.7	04/11/08 13:01/el-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 02:12/el-c
Manganese	0.05	mg/L		0.01		2	E200.7	04/11/08 13:01/el-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 02:12/el-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 13:01/el-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 02:12/el-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:23/el-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 04:50/el-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 02:12/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:** R08030315-006  
**Client Sample ID:** DewBurd GW697

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 16:36  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL		DF	Method	Analysis Date / By
METALS - DISSOLVED									
Uranium	ND	mg/L		0.0003			1	E200.8	04/16/08 02:12/el-c
Vanadium	ND	mg/L		0.1			2	E200.7	04/11/08 13:01/el-c
Zinc	ND	mg/L		0.01			2	E200.7	04/11/08 13:01/el-c
METALS - SUSPENDED									
Uranium	ND	mg/L		0.0003			1	E200.8	04/15/08 23:10/el-c
METALS - SPECIATED									
Selenium-IV	ND	mg/L		0.001			1	A3114 B	04/07/08 09:48/el-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	04/07/08 15:12/el-c
RADIONUCLIDES - DISSOLVED									
Gross Alpha	6.1	pCi/L					1	E900.0	04/12/08 22:49/el-c
Gross Alpha precision (±)	2.6	pCi/L					1	E900.0	04/12/08 22:49/el-c
Gross Alpha MDC	3.5	pCi/L					1	E900.0	04/12/08 22:49/el-c
Gross Beta	6.8	pCi/L					1	E900.0	04/12/08 22:49/el-c
Gross Beta precision (±)	2.2	pCi/L					1	E900.0	04/12/08 22:49/el-c
Gross Beta MDC	3.5	pCi/L					1	E900.0	04/12/08 22:49/el-c
Lead 210	-23	pCi/L	U	1.0			1	E909.0M	04/08/08 08:15/el-c
Lead 210 precision (±)	3.8	pCi/L					1	E909.0M	04/08/08 08:15/el-c
Polonium 210	1.1	pCi/L		1.0			1	RMO-3008	04/03/08 14:30/el-c
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	04/03/08 14:30/el-c
Radium 226	1.5	pCi/L					1	E903.0	04/20/08 05:59/el-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	04/20/08 05:59/el-c
Radium 226 MDC	0.2	pCi/L					1	E903.0	04/20/08 05:59/el-c
Thorium 230	0.4	pCi/L		0.2			1	E907.0	04/07/08 14:30/el-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	04/07/08 14:30/el-c
Gross Gamma	0.0	pCi/L	U	20			1	E901.1	04/04/08 16:45/el-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	04/04/08 16:45/el-c
RADIONUCLIDES - SUSPENDED									
Lead 210	-2.8	pCi/L	U	1.0			1	E909.0M	04/10/08 09:00/el-c
Lead 210 precision (±)	0.8	pCi/L					1	E909.0M	04/10/08 09:00/el-c
Polonium 210	0.9	pCi/L	U	1.0			1	RMO-3008	04/07/08 17:00/el-c
Polonium 210 precision (±)	0.57	pCi/L					1	RMO-3008	04/07/08 17:00/el-c
Radium 226	0.6	pCi/L					1	E903.0	04/22/08 12:16/el-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	04/22/08 12:16/el-c
Radium 226 MDC	0.3	pCi/L					1	E903.0	04/22/08 12:16/el-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	04/09/08 15:00/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:** R08030315-006  
**Client Sample ID:** DewBurd GW697

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 16:36  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	323	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	76.0	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 03:09/eli-c
Arsenic	ND	mg/L	D	0.003		1	E200.8	04/15/08 03:09/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:13/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 03:09/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 03:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:13/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 03:09/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	04/10/08 15:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 03:09/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	04/10/08 15:13/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:38/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 03:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 03:09/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	04/15/08 03:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 03:09/eli-c
Strontium	1.1	mg/L		0.1		1	E200.8	04/15/08 03:09/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 03:09/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/15/08 03:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 03:09/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.53					1	A1030 E	06/17/08 00:00/ADM
Anions	13.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	12.6	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	853	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	06/17/08 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: R08030315-007  
Client Sample ID: DewBurd GW689

Report Date: 07/29/08  
Collection Date: 03/30/08 17:25  
Date Received: 03/31/08  
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>	150	mg/L		5	1	A2320 B	04/01/08 13:34/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5	1	A2320 B	04/01/08 13:34/mb
Bicarbonate as HCO <sub>3</sub>	183	mg/L		5	1	A2320 B	04/01/08 13:34/mb
Calcium	43.8	mg/L		0.5	2	E200.7	04/11/08 13:05/el-c
Chloride	7	mg/L		1	1	E300.0	04/01/08 00:38/jmh
Fluoride	0.5	mg/L		0.1	1	E300.0	04/01/08 00:38/jmh
Magnesium	15.6	mg/L		0.5	2	E200.7	04/11/08 13:05/el-c
Nitrogen, Ammonia as N	ND	mg/L		0.1	1	A4500-NH <sub>3</sub> G	04/04/08 10:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1	1	E300.0	04/01/08 00:38/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1	1	E300.0	04/01/08 00:38/jmh
Potassium	7.4	mg/L		0.5	2	E200.7	04/11/08 13:05/el-c
Silica	7.7	mg/L		0.5	2	E200.7	04/11/08 13:05/el-c
Sodium	165	mg/L		0.5	2	E200.7	04/11/08 13:05/el-c
Sulfate	421	mg/L	D	3	50	E300.0	04/01/08 00:23/jmh
<b>PHYSICAL PROPERTIES</b>							
Conductivity @ 25 C	1080	umhos/cm		5.0	1	A2510 B	04/01/08 11:52/jmh
Oxidation-Reduction Potential	190	mV			1	A2580 B	04/04/08 00:00/jmh
pH	7.85	s.u.		0.01	1	A4500-H B	04/01/08 11:22/jmh
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.10	1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	720	mg/L		5	1	A2540 C	03/31/08 13:51/mb
<b>METALS - DISSOLVED</b>							
Aluminum	ND	mg/L		0.1	2	E200.7	04/11/08 13:05/el-c
Arsenic	ND	mg/L		0.001	1	E200.8	04/16/08 02:19/el-c
Barium	ND	mg/L		0.1	2	E200.7	04/11/08 13:05/el-c
Boron	ND	mg/L		0.1	2	E200.7	04/11/08 13:05/el-c
Cadmium	ND	mg/L		0.005	1	E200.8	04/16/08 02:19/el-c
Chromium	ND	mg/L		0.05	2	E200.7	04/11/08 13:05/el-c
Copper	ND	mg/L		0.01	1	E200.8	04/16/08 02:19/el-c
Iron	ND	mg/L		0.03	2	E200.7	04/11/08 13:05/el-c
Lead	ND	mg/L		0.001	1	E200.8	04/16/08 02:19/el-c
Manganese	0.03	mg/L		0.01	2	E200.7	04/11/08 13:05/el-c
Mercury	ND	mg/L		0.001	1	E200.8	04/16/08 02:19/el-c
Molybdenum	ND	mg/L		0.1	2	E200.7	04/11/08 13:05/el-c
Nickel	ND	mg/L		0.05	1	E200.8	04/16/08 02:19/el-c
Selenium	ND	mg/L		0.001	1	A3114 B	04/07/08 12:30/el-c
Silver	ND	mg/L		0.005	1	E200.8	04/15/08 04:57/el-c
Thorium 232	ND	mg/L		0.005	1	E200.8	04/16/08 02:19/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:** R08030315-007  
**Client Sample ID:** DewBurd GW689

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 17:25  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0032	mg/L		0.0003		1	E200.8	04/16/08 02:19/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 13:05/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 13:05/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	0.0005	mg/L		0.0003		1	E200.8	04/15/08 23:17/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 09:59/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	64.3	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	5.1	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	21.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	3.1	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	-31	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	4.4	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	7.9	pCi/L				1	E903.0	04/20/08 07:30/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	04/20/08 07:30/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/20/08 07:30/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	86	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	25	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	0.5	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	2.0	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/22/08 12:16/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/09/08 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:** R08030315-007  
**Client Sample ID:** DewBurd GW689

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 17:25  
**Date Received:** 03/31/08  
**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	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1950	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	94.4	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 03:16/eli-c
Arsenic	ND	mg/L	D	0.003		1	E200.8	04/15/08 03:16/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:17/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 03:16/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 03:16/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:17/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 03:16/eli-c
Iron	0.72	mg/L		0.03		2	E200.7	04/10/08 15:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 03:16/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	04/10/08 15:17/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:40/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 03:16/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 03:16/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/15/08 03:16/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 03:16/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	04/15/08 03:16/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 03:16/eli-c
Uranium	0.0041	mg/L		0.0003		1	E200.8	04/15/08 03:16/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 03:16/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-4.96					1	A1030 E	06/17/08 00:00/ADM
Anions	12.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	10.8	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	771	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	06/17/08 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: R08030315-008  
Client Sample ID: DewBurd GW681

Report Date: 07/29/08  
Collection Date: 03/30/08 17:50  
Date Received: 03/31/08  
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>	172	mg/L		5		1	A2320 B	04/01/08 13:45/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/01/08 13:45/mb
Bicarbonate as HCO <sub>3</sub>	210	mg/L		5		1	A2320 B	04/01/08 13:45/mb
Calcium	59.9	mg/L		0.5		2	E200.7	04/11/08 13:18/eli-c
Chloride	17	mg/L		1		1	E300.0	04/01/08 01:40/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	04/01/08 01:40/jmh
Magnesium	23.9	mg/L		0.5		2	E200.7	04/11/08 13:18/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	04/04/08 10:40/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/01/08 01:40/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/01/08 01:40/jmh
Potassium	9.2	mg/L		0.5		2	E200.7	04/11/08 13:18/eli-c
Silica	7.2	mg/L		0.5		2	E200.7	04/11/08 13:18/eli-c
Sodium	197	mg/L		0.5		2	E200.7	04/11/08 13:18/eli-c
Sulfate	478	mg/L	D	3		50	E300.0	04/01/08 01:25/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1320	umhos/cm		5.0		1	A2510 B	04/01/08 11:54/jmh
Oxidation-Reduction Potential	170	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.80	s.u.		0.01		1	A4500-H B	04/01/08 11:24/jmh
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.10		1	Calculation	06/17/08 18:29/ADM
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	03/31/08 13:53/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 13:18/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/16/08 02:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 13:18/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 13:18/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 02:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 13:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 02:26/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/11/08 13:18/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 02:26/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	04/11/08 13:18/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 02:26/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/11/08 13:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 02:26/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 05:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 02:26/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:** R08030315-008  
**Client Sample ID:** DewBurd GW681

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 17:50  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
METALS - DISSOLVED								
Uranium	0.0092	mg/L		0.0003		1	E200.8	04/16/08 02:26/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 13:18/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 13:18/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/15/08 23:23/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:01/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2170	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	30.8	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	659	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	8.1	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	3.3	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	414	pCi/L				1	E903.0	04/20/08 07:36/eli-c
Radium 226 precision (±)	14.8	pCi/L				1	E903.0	04/20/08 07:36/eli-c
Radium 226 MDC	1.1	pCi/L				1	E903.0	04/20/08 07:36/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	2300	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	82	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	16.8	pCi/L		1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	1.8	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.57	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	3.5	pCi/L				1	E903.0	04/22/08 13:51/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	04/22/08 13:51/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	04/22/08 13:51/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	04/09/08 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: R08030315-008  
Client Sample ID: DewBurd GW681

Report Date: 07/29/08  
Collection Date: 03/30/08 17:50  
Date Received: 03/31/08  
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	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	254000	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	711	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 03:23/eli-c
Arsenic	0.005	mg/L	D	0.003		1	E200.8	04/15/08 03:23/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:20/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 03:23/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 03:23/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 03:23/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/10/08 15:20/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 03:23/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	04/10/08 15:20/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:47/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/15/08 03:23/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 03:23/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/15/08 03:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 03:23/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	04/15/08 03:23/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 03:23/eli-c
Uranium	0.0099	mg/L		0.0003		1	E200.8	04/15/08 03:23/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 03:23/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.500					1	A1030 E	06/17/08 00:00/ADM
Anions	13.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	13.8	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	908	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	06/17/08 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:** R08030315-009  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 18:45  
**Date Received:** 03/31/08  
**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>	130	mg/L		5		1	A2320 B	04/01/08 13:40/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/01/08 13:40/mb
Bicarbonate as HCO <sub>3</sub>	158	mg/L		5		1	A2320 B	04/01/08 13:40/mb
Calcium	284	mg/L		0.5		2	E200.7	04/11/08 13:21/el-c
Chloride	37	mg/L	D	5		50	E300.0	04/01/08 00:54/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	04/01/08 01:09/jmh
Magnesium	67.9	mg/L		0.5		2	E200.7	04/11/08 13:21/el-c
Nitrogen, Ammonia as N	1.2	mg/L		0.1		2	A4500-NH <sub>3</sub> G	04/04/08 11:02/jmh
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	04/01/08 01:09/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/01/08 01:09/jmh
Potassium	21.3	mg/L		0.5		2	E200.7	04/11/08 13:21/el-c
Silica	5.7	mg/L		0.5		2	E200.7	04/11/08 13:21/el-c
Sodium	271	mg/L		0.5		2	E200.7	04/11/08 13:21/el-c
Sulfate	1470	mg/L	D	3		50	E300.0	04/01/08 00:54/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2770	umhos/cm		5.0		1	A2510 B	04/01/08 11:53/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.63	s.u.		0.01		1	A4500-H B	04/01/08 11:23/jmh
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.10		1	Calculation	06/17/08 18:29/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	03/31/08 13:51/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	04/11/08 13:21/el-c
Arsenic	0.004	mg/L		0.001		1	E200.8	04/16/08 02:33/el-c
Barium	ND	mg/L		0.1		2	E200.7	04/11/08 13:21/el-c
Boron	ND	mg/L		0.1		2	E200.7	04/11/08 13:21/el-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 02:33/el-c
Chromium	ND	mg/L		0.05		2	E200.7	04/11/08 13:21/el-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 02:33/el-c
Iron	0.10	mg/L		0.03		2	E200.7	04/11/08 13:21/el-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 02:33/el-c
Manganese	0.42	mg/L		0.01		2	E200.7	04/11/08 13:21/el-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 02:33/el-c
Molybdenum	0.2	mg/L		0.1		2	E200.7	04/11/08 13:21/el-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 05:11/el-c
Selenium	0.006	mg/L		0.001		1	A3114 B	04/07/08 12:34/el-c
Silver	ND	mg/L		0.005		1	E200.8	04/16/08 02:33/el-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 02:33/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:** R08030315-009  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 18:45  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0151	mg/L		0.0003		1	E200.8	04/16/08 02:33/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/11/08 13:21/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/11/08 13:21/eli-c
- The Uranium result was confirmed by re-analysis.								
<b>METALS - SUSPENDED</b>								
Uranium	0.0040	mg/L		0.0003		1	E200.8	04/15/08 23:30/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:04/eli-c
Selenium-VI	0.006	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	47.6	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha precision (±)	8.9	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Alpha MDC	9.2	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta	21.1	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta precision (±)	5.9	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Gross Beta MDC	9.3	pCi/L				1	E900.0	04/12/08 22:49/eli-c
Lead 210	ND	pCi/L	U	1.0		1	E909.0M	04/08/08 08:15/eli-c
Lead 210 precision (±)	2.1	pCi/L				1	E909.0M	04/08/08 08:15/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	04/03/08 14:30/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	04/03/08 14:30/eli-c
Radium 226	3.6	pCi/L				1	E903.0	04/20/08 09:07/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	04/20/08 09:07/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/20/08 09:07/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/07/08 14:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/07/08 14:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-3.0	pCi/L	U	1.0		1	E909.0M	04/10/08 09:00/eli-c
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	04/10/08 09:00/eli-c
Polonium 210	1.9	pCi/L		1.0		1	RMO-3008	04/07/08 17:00/eli-c
Polonium 210 precision (±)	0.88	pCi/L				1	RMO-3008	04/07/08 17:00/eli-c
Radium 226	3.3	pCi/L				1	E903.0	04/22/08 13:51/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	04/22/08 13:51/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	04/22/08 13:51/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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# LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030315-009  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 07/29/08  
**Collection Date:** 03/30/08 18:45  
**Date Received:** 03/31/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Thorium 230	1	pCi/L		0.2		1	E907.0	04/09/08 15:00/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	04/09/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	440	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	76.3	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/15/08 03:29/eli-c
Arsenic	0.023	mg/L		0.001		1	E200.8	04/15/08 03:29/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/10/08 15:23/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/15/08 03:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 15:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/15/08 03:29/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/10/08 15:23/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/15/08 03:29/eli-c
Iron	1.75	mg/L		0.03		2	E200.7	04/10/08 15:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/15/08 03:29/eli-c
Manganese	0.13	mg/L		0.01		2	E200.7	04/10/08 15:23/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:50/eli-b
Molybdenum	0.3	mg/L		0.1		1	E200.8	04/15/08 03:29/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/15/08 03:29/eli-c
Selenium	0.007	mg/L		0.001		1	E200.8	04/15/08 03:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/15/08 03:29/eli-c
Strontium	4.8	mg/L		0.1		1	E200.8	04/15/08 03:29/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/15/08 03:29/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	06/06/08 16:14/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/15/08 03:29/eli-c
- The Uranium result was confirmed by re-digestion, and re-analysis.								
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-2.96					1	A1030 E	06/17/08 00:00/ADM
Anions	34.2	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	32.2	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	2240	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	06/17/08 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.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2320 B</b>		Batch: 080401A-ALK-SEL-W							
<b>Sample ID: LCS1_080401A</b>	Laboratory Control Sample				Run: PH_COND1-R_080401A		04/01/08 12:24		
Alkalinity, Total as CaCO <sub>3</sub>	972	mg/L	5.0	97	90	110			
<b>Sample ID: MBLK1_080401A</b>	Method Blank				Run: PH_COND1-R_080401A		04/01/08 12:36		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
<b>Sample ID: R08030315-001ADUP</b>	Sample Duplicate				Run: PH_COND1-R_080401A		04/01/08 00:00		
Alkalinity, Total as CaCO <sub>3</sub>	204	mg/L	5.0				0.0	10	
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	249	mg/L	5.0				0.0	10	
<b>Sample ID: R08030315-003AMS</b>	Sample Matrix Spike				Run: PH_COND1-R_080401A		04/01/08 13:14		
Alkalinity, Total as CaCO <sub>3</sub>	226	mg/L	5.0	98	80	120			
<b>Method: A2510 B</b>		Batch: 080401_1_COND-PROBE-W							
<b>Sample ID: LCS1-1_080401</b>	Laboratory Control Sample				Run: PH_COND2-R_080401A		04/01/08 11:30		
Conductivity @ 25 C	147	umhos/cm	5.0	98	90	110			
<b>Sample ID: LCS2-1_080401</b>	Laboratory Control Sample				Run: PH_COND2-R_080401A		04/01/08 11:32		
Conductivity @ 25 C	4640	umhos/cm	5.0	93	90	110			
<b>Sample ID: LCS_COND-1_080401</b>	Laboratory Control Sample				Run: PH_COND2-R_080401A		04/01/08 11:33		
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
<b>Sample ID: MBLK-1_080401</b>	Method Blank				Run: PH_COND2-R_080401A		04/01/08 11:34		
Conductivity @ 25 C	ND	umhos/cm	5						
<b>Sample ID: R08030315-005ADUP</b>	Sample Duplicate				Run: PH_COND2-R_080401A		04/01/08 11:49		
Conductivity @ 25 C	5.58	umhos/cm	5.0				2.0	10	
<b>Method: A2540 C</b>		Batch: 080331A-SLDS-TDS-W							
<b>Sample ID: LCS1_080331A</b>	Laboratory Control Sample				Run: BAL-4-R_080331A		03/31/08 08:28		
Solids, Total Dissolved TDS @ 180 C	200	mg/L	5.0	100	90	110			
<b>Sample ID: MBLK1_080331A</b>	Method Blank				Run: BAL-4-R_080331A		03/31/08 08:30		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
<b>Sample ID: R08030315-001AMS</b>	Sample Matrix Spike				Run: BAL-4-R_080331A		03/31/08 13:47		
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	113	80	120			
<b>Sample ID: R08030315-001AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080331A		03/31/08 13:48		
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	5.0	119	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: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SE-3114-080407A		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C99208			04/07/08 12:04
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-54-6</b>	Laboratory Control Sample					Run: SUB-C99208			04/07/08 12:06
Selenium	0.050	mg/L	0.0010	100	90	110			
<b>Sample ID: R08030315-001E</b>	Sample Matrix Spike					Run: SUB-C99208			04/07/08 12:10
Selenium	0.050	mg/L	0.0010	98	85	115			
<b>Sample ID: R08030315-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C99208			04/07/08 12:12
Selenium	0.051	mg/L	0.0010	99	85	115	1.4	10	
<b>Sample ID: C08040192-002EMS</b>	Sample Matrix Spike					Run: SUB-C99208			04/07/08 12:41
Selenium	0.050	mg/L	0.0010	99	85	115			
<b>Sample ID: C08040192-002EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99208			04/07/08 12:43
Selenium	0.051	mg/L	0.0010	101	85	115	2.0	10	
<b>Method: A3114 B</b>							Batch: C_SEIV-3114-080407		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C99195			04/07/08 09:27
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-54-6</b>	Laboratory Control Sample					Run: SUB-C99195			04/07/08 09:29
Selenium-IV	0.045	mg/L	0.0010	91	90	110			
<b>Sample ID: R08030315-001E</b>	Sample Matrix Spike					Run: SUB-C99195			04/07/08 09:33
Selenium-IV	0.045	mg/L	0.0010	90	85	115			
<b>Sample ID: R08030315-001E</b>	Sample Matrix Spike Duplicate					Run: SUB-C99195			04/07/08 09:36
Selenium-IV	0.044	mg/L	0.0010	89	85	115	0.9	10	
<b>Sample ID: C08040192-002EMS</b>	Sample Matrix Spike					Run: SUB-C99195			04/07/08 10:10
Selenium-IV	0.043	mg/L	0.0010	86	85	115			
<b>Sample ID: C08040192-002EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99195			04/07/08 10:12
Selenium-IV	0.045	mg/L	0.0010	90	85	115	4.7	10	
<b>Method: A4500-H B</b>							Batch: 080401_1_PH-W		
<b>Sample ID: LCS_pH-1_080401</b>	Laboratory Control Sample					Run: PH_COND2-R_080401A			04/01/08 11:13
pH	6.93	s.u.	0.010	101	98.55	101.45			
<b>Sample ID: R08030302-001BDUP</b>	Sample Duplicate					Run: PH_COND2-R_080401A			04/01/08 11:15
pH	7.20	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G			Batch: A2008-04-04_2_NH3_01						
Sample ID: MBLK-2	Method Blank								
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Run: TECHAA2-R_080404A			04/04/08 09:05						
Sample ID: LFB-3	Laboratory Fortified Blank								
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Run: TECHAA2-R_080404A			04/04/08 09:06						
Sample ID: LFB-4	Laboratory Fortified Blank								
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Run: TECHAA2-R_080404A			04/04/08 09:08						
Sample ID: R08030315-005BMS	Sample Matrix Spike								
Nitrogen, Ammonia as N	0.22	mg/L	0.10	86	80	120			
Run: TECHAA2-R_080404A			04/04/08 10:35						
Sample ID: R08030315-005BMSD	Sample Matrix Spike Duplicate								
Nitrogen, Ammonia as N	0.20	mg/L	0.10	81	80	120	6.2	10	
Run: TECHAA2-R_080404A			04/04/08 10:36						
Sample ID: R08040003-001CMS	Sample Matrix Spike								
Nitrogen, Ammonia as N	0.19	mg/L	0.10	76	80	120			S
Run: TECHAA2-R_080404A			04/04/08 10:49						
Sample ID: R08040003-001CMSD	Sample Matrix Spike Duplicate								
Nitrogen, Ammonia as N	0.19	mg/L	0.10	74	80	120	3.2	10	S
Run: TECHAA2-R_080404A			04/04/08 10:50						
Method: D6072-92			Batch: C_R99230						
Sample ID: R08030315-002G	Sample Duplicate								
Radon 222	29900	pCi/L	100				7.3	30	
Run: SUB-C99230			04/03/08 18:27						
Sample ID: C08040148-009GDUP	Sample Duplicate								
Radon 222	464	pCi/L	100				5.5	30	
Run: SUB-C99230			04/03/08 18:27						
Sample ID: MB-R99230	Method Blank								
Radon 222	-10	pCi/L							U
Run: SUB-C99230			04/03/08 18:27						
Sample ID: LCS-R99230	Laboratory Control Sample								
Radon 222	298	pCi/L	100	98	70	130			
Run: SUB-C99230			04/03/08 18:27						

### 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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18205		
<b>Sample ID: MB-18205</b>	Method Blank		Run: SUB-C99463				04/10/08 14:13		
Barium	ND	mg/L	0.004						
Boron	ND	mg/L	0.006						
Chromium	0.005	mg/L	0.003						
Iron	0.007	mg/L	0.005						
Manganese	ND	mg/L	0.0008						
<b>Sample ID: LCS-18205</b>	Laboratory Control Sample		Run: SUB-C99463				04/10/08 14:16		
Barium	0.484	mg/L	0.10	97	85	115			
Boron	0.478	mg/L	0.10	96	85	115			
Chromium	0.493	mg/L	0.050	98	85	115			
Iron	0.489	mg/L	0.030	96	85	115			
Manganese	0.478	mg/L	0.010	96	85	115			
<b>Sample ID: R08030315-009D</b>	Sample Matrix Spike		Run: SUB-C99463				04/10/08 15:27		
Barium	0.481	mg/L	0.10	93	70	130			
Boron	0.520	mg/L	0.10	91	70	130			
Chromium	0.466	mg/L	0.050	93	70	130			
Iron	2.27	mg/L	0.030	103	70	130			
Manganese	0.594	mg/L	0.010	93	70	130			
<b>Sample ID: R08030315-009D</b>	Sample Matrix Spike Duplicate		Run: SUB-C99463				04/10/08 15:30		
Barium	0.474	mg/L	0.10	92	70	130	1.5	20	
Boron	0.511	mg/L	0.10	89	70	130	1.8	20	
Chromium	0.460	mg/L	0.050	92	70	130	1.3	20	
Iron	2.28	mg/L	0.030	105	70	130	0.5	20	
Manganese	0.583	mg/L	0.010	91	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>					Batch: C_R99540				
<b>Sample ID: MB-080411A</b>	<b>Method Blank</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 09:38</b>		
Silica	ND	mg/L	0.06						
Aluminum	ND	mg/L	0.008						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.004						
Calcium	ND	mg/L	0.04						
Chromium	ND	mg/L	0.003						
Copper	ND	mg/L	0.005						
Iron	0.003	mg/L	0.002						
Magnesium	ND	mg/L	0.04						
Manganese	0.0005	mg/L	0.0004						
Molybdenum	0.01	mg/L	0.01						
Potassium	ND	mg/L	0.08						
Sodium	ND	mg/L	0.06						
Vanadium	0.008	mg/L	0.006						
Zinc	ND	mg/L	0.004						
<b>Sample ID: LFB-080411A</b>	<b>Laboratory Fortified Blank</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 09:42</b>		
Silica	0.96	mg/L	0.10	96	85	125			
Aluminum	0.92	mg/L	0.10	92	85	125			
Barium	0.91	mg/L	0.10	91	85	125			
Boron	0.93	mg/L	0.10	93	85	125			
Calcium	49	mg/L	0.50	98	85	125			
Chromium	0.92	mg/L	0.050	92	85	125			
Copper	0.89	mg/L	0.010	89	85	125			
Iron	0.92	mg/L	0.030	91	85	125			
Magnesium	49	mg/L	0.50	98	85	125			
Manganese	0.90	mg/L	0.010	90	85	125			
Molybdenum	0.98	mg/L	0.10	96	85	125			
Potassium	45	mg/L	0.50	91	85	125			
Sodium	47	mg/L	0.50	94	85	125			
Vanadium	0.96	mg/L	0.10	95	85	125			
Zinc	0.93	mg/L	0.010	93	85	125			
<b>Sample ID: C08040269-001CM S2</b>	<b>Sample Matrix Spike</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 13:38</b>		
Aluminum	0.890	mg/L	0.10	84	70	130			
Barium	0.973	mg/L	0.10	86	70	130			
Boron	0.888	mg/L	0.10	85	70	130			
Calcium	124	mg/L	0.50	80	70	130			
Chromium	0.875	mg/L	0.050	86	70	130			
Copper	0.855	mg/L	0.010	83	70	130			
Iron	0.945	mg/L	0.030	86	70	130			
Magnesium	66.1	mg/L	0.50	87	70	130			
Manganese	0.921	mg/L	0.010	85	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: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R99540		
<b>Sample ID: C08040269-001CM S2</b>	<b>Sample Matrix Spike</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 13:38</b>		
Molybdenum	0.903	mg/L	0.10	89	70	130			
Potassium	46.0	mg/L	0.50	87	70	130			
Sodium	59.6	mg/L	0.50	88	70	130			
Vanadium	0.916	mg/L	0.10	90	70	130			
Zinc	0.922	mg/L	0.010	90	70	130			
<b>Sample ID: C08040269-001CM SD2</b>	<b>Sample Matrix Spike Duplicate</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 13:41</b>		
Aluminum	0.904	mg/L	0.10	86	70	130	1.5	20	
Barium	0.974	mg/L	0.10	86	70	130	0.1	20	
Boron	0.902	mg/L	0.10	87	70	130	1.5	20	
Calcium	125	mg/L	0.50	82	70	130	0.6	20	
Chromium	0.881	mg/L	0.050	86	70	130	0.7	20	
Copper	0.859	mg/L	0.010	83	70	130	0.5	20	
Iron	0.957	mg/L	0.030	87	70	130	1.3	20	
Magnesium	66.6	mg/L	0.50	88	70	130	0.8	20	
Manganese	0.929	mg/L	0.010	86	70	130	0.9	20	
Molybdenum	0.935	mg/L	0.10	92	70	130	3.6	20	
Potassium	46.5	mg/L	0.50	88	70	130	1.3	20	
Sodium	60.4	mg/L	0.50	89	70	130	1.4	20	
Vanadium	0.925	mg/L	0.10	91	70	130	1.0	20	
Zinc	0.913	mg/L	0.010	90	70	130	1.0	20	
<b>Sample ID: R08030315-001C</b>	<b>Sample Matrix Spike</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 12:38</b>		
Aluminum	1.72	mg/L	0.10	84	70	130			
Barium	1.76	mg/L	0.10	87	70	130			
Boron	1.82	mg/L	0.10	86	70	130			
Chromium	1.73	mg/L	0.050	85	70	130			
Copper	1.68	mg/L	0.011	82	70	130			
Iron	1.75	mg/L	0.030	85	70	130			
Manganese	1.86	mg/L	0.010	84	70	130			
Molybdenum	1.87	mg/L	0.10	90	70	130			
Vanadium	1.83	mg/L	0.10	90	70	130			
Zinc	1.82	mg/L	0.010	89	70	130			
Calcium	180	mg/L	1.0	87	70	130			
Magnesium	126	mg/L	1.0	89	70	130			
Potassium	101	mg/L	1.0	87	70	130			
Silica	10.1	mg/L	0.12	98	70	130			
Sodium	246	mg/L	1.0	80	70	130			
<b>Sample ID: R08030315-001C</b>	<b>Sample Matrix Spike Duplicate</b>			<b>Run: SUB-C99540</b>			<b>04/11/08 12:41</b>		
Aluminum	1.73	mg/L	0.10	85	70	130	0.7	20	
Barium	1.77	mg/L	0.10	87	70	130	0.6	20	
Boron	1.84	mg/L	0.10	87	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99540		
Sample ID: R08030315-001C	Sample Matrix Spike Duplicate			Run: SUB-C99540			04/11/08 12:41		
Chromium	1.75	mg/L	0.050	86	70	130	0.8	20	
Copper	1.69	mg/L	0.011	83	70	130	0.4	20	
Iron	1.78	mg/L	0.030	87	70	130	1.7	20	
Manganese	1.87	mg/L	0.010	85	70	130	0.7	20	
Molybdenum	1.88	mg/L	0.10	90	70	130	0.5	20	
Vanadium	1.84	mg/L	0.10	90	70	130	0.4	20	
Zinc	1.83	mg/L	0.010	90	70	130	0.9	20	
Calcium	181	mg/L	1.0	87	70	130	0.5	20	
Magnesium	127	mg/L	1.0	90	70	130	0.8	20	
Potassium	102	mg/L	1.0	88	70	130	1.5	20	
Silica	10.2	mg/L	0.12	104	70	130	1.2	20	
Sodium	249	mg/L	1.0	83	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18205		
<b>Sample ID: MB-18205</b>	Method Blank		Run: SUB-C99595				04/15/08 01:41		
Antimony	0.0002	mg/L	0.0002						
Arsenic	0.002	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Copper	0.0004	mg/L	0.0002						
Lead	2E-05	mg/L							
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	0.0002						
Selenium	ND	mg/L	0.0002						
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						
Zinc	0.001	mg/L	0.0003						
<b>Sample ID: LCS1-18205</b>	Laboratory Control Sample		Run: SUB-C99595				04/15/08 01:48		
Antimony	0.0214	mg/L	0.050	106	80	120			
Arsenic	0.0225	mg/L	0.0010	102	80	120			
Beryllium	0.0207	mg/L	0.010	103	80	120			
Cadmium	0.0208	mg/L	0.010	104	80	120			
Copper	0.0206	mg/L	0.010	101	80	120			
Lead	0.0206	mg/L	0.050	103	80	120			
Molybdenum	0.0211	mg/L	0.10	106	80	120			
Nickel	0.0202	mg/L	0.050	101	80	120			
Selenium	0.104	mg/L	0.0010	104	80	120			
Silver	0.0215	mg/L	0.010	107	80	120			
Strontium	0.0108	mg/L	0.10	108	80	120			
Thallium	0.0182	mg/L	0.10	91	80	120			
Uranium	0.0205	mg/L	0.00030	102	80	120			
Zinc	0.0216	mg/L	0.010	102	80	120			
<b>Sample ID: R08030315-009D</b>	Post Digestion Spike		Run: SUB-C99595				04/15/08 03:36		
Antimony	0.0228	mg/L	0.050	102	70	130			
Arsenic	0.0424	mg/L	0.0010	96	70	130			
Beryllium	0.0189	mg/L	0.010	95	70	130			
Cadmium	0.0186	mg/L	0.010	93	70	130			
Copper	0.0215	mg/L	0.010	93	70	130			
Lead	0.0200	mg/L	0.050	99	70	130			
Molybdenum	0.328	mg/L	0.10		70	130			A
Nickel	0.0262	mg/L	0.050	95	70	130			
Selenium	0.105	mg/L	0.0010	98	70	130			
Silver	0.0189	mg/L	0.010	95	70	130			
Strontium	4.87	mg/L	0.10		70	130			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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18205		
<b>Sample ID: R08030315-009D</b>	Post Digestion Spike			Run: SUB-C99595			04/15/08 03:36		
Thallium	0.0180	mg/L	0.10	90	70	130			
Uranium	0.0305	mg/L	0.00030	106	70	130			
Zinc	0.0230	mg/L	0.010	76	70	130			
<b>Sample ID: R08030315-009D</b>	Post Digestion Spike Duplicate			Run: SUB-C99595			04/15/08 03:43		
Antimony	0.0246	mg/L	0.050	111	70	130	0.0	20	
Arsenic	0.0443	mg/L	0.0010	105	70	130	4.5	20	
Beryllium	0.0215	mg/L	0.010	107	70	130	13	20	
Cadmium	0.0199	mg/L	0.010	99	70	130	6.9	20	
Copper	0.0228	mg/L	0.010	100	70	130	6.2	20	
Lead	0.0215	mg/L	0.050	106	70	130	0.0	20	
Molybdenum	0.334	mg/L	0.10		70	130	1.6	20	A
Nickel	0.0283	mg/L	0.050	105	70	130	0.0	20	
Selenium	0.114	mg/L	0.0010	107	70	130	8.4	20	
Silver	0.0203	mg/L	0.010	101	70	130	6.8	20	
Strontium	4.94	mg/L	0.10		70	130	1.6	20	A
Thallium	0.0196	mg/L	0.10	98	70	130	0.0	20	
Uranium	0.0321	mg/L	0.00030	114	70	130	5.3	20	
Zinc	0.0248	mg/L	0.010	85	70	130	7.5	20	
<b>Method: E200.8</b>							Batch: C_18209		
<b>Sample ID: MB-18209</b>	Method Blank			Run: SUB-C99620			04/15/08 22:02		
Uranium	0.0002	mg/L	2E-05						
<b>Sample ID: LCS1-18209</b>	Laboratory Control Sample			Run: SUB-C99620			04/15/08 22:09		
Uranium	0.0599	mg/L	0.00030	114	80	120			
<b>Sample ID: R08030315-009I</b>	Post Digestion Spike			Run: SUB-C99620			04/15/08 23:37		
Uranium	0.0644	mg/L	0.00030	121	70	130			
<b>Sample ID: R08030315-009I</b>	Post Digestion Spike Duplicate			Run: SUB-C99620			04/15/08 23:43		
Uranium	0.0638	mg/L	0.00030	120	70	130	1.0	20	
<b>Method: E200.8</b>							Batch: C_18768		
<b>Sample ID: MB-18768</b>	Method Blank			Run: SUB-C102298			06/06/08 16:00		
Uranium	ND	mg/L	3E-05						
<b>Sample ID: C08051073-001MMS3</b>	Sample Matrix Spike			Run: SUB-C102298			06/06/08 18:56		
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		
Uranium	0.572	mg/L	0.00032	113	70	130	2.6	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R99595		
Sample ID: LRB	Method Blank		Run: SUB-C99595				04/14/08 18:01		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Nickel	ND	mg/L	0.0007						
Silver	0.0001	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-C99595				04/14/08 18:08		
Arsenic	0.0495	mg/L	0.0010	99	85	115			
Cadmium	0.0504	mg/L	0.0010	101	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0495	mg/L	0.0010	99	85	115			
Nickel	0.0498	mg/L	0.0010	100	85	115			
Silver	0.0198	mg/L	0.0010	98	85	115			
Thorium 232	0.0492	mg/L	0.0010	98	85	115			
Uranium	0.0500	mg/L	0.00030	100	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R99620		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C99620				04/15/08 12:38		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Copper	0.0002	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	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-C99620				04/15/08 12:44		
Arsenic	0.0526	mg/L	0.0010	105	85	115			
Cadmium	0.0524	mg/L	0.0010	105	85	115			
Copper	0.0533	mg/L	0.0010	106	85	115			
Lead	0.0528	mg/L	0.0010	106	85	115			
Mercury	0.00540	mg/L	0.0010	108	85	115			
Nickel	0.0528	mg/L	0.0010	106	85	115			
Silver	0.0204	mg/L	0.0010	102	85	115			
Thorium 232	0.0505	mg/L	0.0010	101	85	115			
Uranium	0.0514	mg/L	0.00030	103	85	115			
<b>Sample ID: R08030315-009C</b>	Post Digestion Spike		Run: SUB-C99620				04/16/08 02:39		
Arsenic	0.0564	mg/L	0.0010	104	70	130			
Cadmium	0.0471	mg/L	0.010	94	70	130			
Copper	0.0492	mg/L	0.010	95	70	130			
Lead	0.0509	mg/L	0.050	102	70	130			
Mercury	0.00516	mg/L	0.0010	103	70	130			
Nickel	0.0550	mg/L	0.050	94	70	130			
Thorium 232	0.0512	mg/L	0.0010	102	70	130			
Uranium	0.0658	mg/L	0.00030	101	70	130			
<b>Sample ID: R08030315-009C</b>	Post Digestion Spike Duplicate		Run: SUB-C99620				04/16/08 02:46		
Arsenic	0.0559	mg/L	0.0010	103	70	130	0.8	20	
Cadmium	0.0475	mg/L	0.010	95	70	130	0.9	20	
Copper	0.0488	mg/L	0.010	95	70	130	0.8	20	
Lead	0.0508	mg/L	0.050	102	70	130	0.2	20	
Mercury	0.00518	mg/L	0.0010	104	70	130	0.3	20	
Nickel	0.0549	mg/L	0.050	94	70	130	0.2	20	
Thorium 232	0.0514	mg/L	0.0010	103	70	130	0.3	20	
Uranium	0.0658	mg/L	0.00030	101	70	130	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1							Batch: C_B_31868		
Sample ID: MB-31868	Method Blank				Run: SUB-C99522		04/11/08 12:57		
Mercury	ND	mg/L	5E-05						
Sample ID: B08040977-001AMS	Sample Matrix Spike				Run: SUB-C99522		04/11/08 13:09		
Mercury	0.0035	mg/L	0.0010	88	70	130			
Sample ID: B08040977-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C99522		04/11/08 13:11		
Mercury	0.0035	mg/L	0.0010	88	70	130	0.0	30	
Sample ID: LFB-31868	Laboratory Fortified Blank				Run: SUB-C99522		04/11/08 14:33		
Mercury	0.0021	mg/L	0.0010	106	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: R34015		
Sample ID: LFB0803310804-3	Laboratory Fortified Blank			Run: DIONEX_080331A			03/31/08 19:15		
Chloride	4.63	mg/L	0.50	93	90	110			
Fluoride	2.00	mg/L	0.10	100	90	110			
Nitrogen, Nitrate as N	2.27	mg/L	0.10	91	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: LFB0803310804-4	Laboratory Fortified Blank			Run: DIONEX_080331A			03/31/08 19:30		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	2.06	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.32	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N	2.48	mg/L	0.10	99	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
Sample ID: R08030322-001AMS	Sample Matrix Spike			Run: DIONEX_080331A			03/31/08 20:01		
Chloride	44.4	mg/L	0.54	69	80	120			S
Fluoride	10.5	mg/L	0.10	101	80	120			
Nitrogen, Nitrate as N	25.4	mg/L	0.13	94	80	120			
Nitrogen, Nitrite as N	11.5	mg/L	0.29	92	80	120			
Sulfate	109	mg/L	1.0	83	80	120			
Sample ID: R08030322-001AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080331A			03/31/08 20:16		
Chloride	43.3	mg/L	0.54	65	80	120	2.3	10	S
Fluoride	10.1	mg/L	0.10	96	80	120	4.2	10	
Nitrogen, Nitrate as N	25.0	mg/L	0.13	90	80	120	1.7	10	
Nitrogen, Nitrite as N	10.9	mg/L	0.29	87	80	120	5.1	10	
Sulfate	106	mg/L	1.0	80	80	120	2.5	10	
Sample ID: R08030315-005AMS	Sample Matrix Spike			Run: DIONEX_080331A			03/31/08 23:21		
Chloride	4.79	mg/L	0.50	96	80	120			
Fluoride	2.04	mg/L	0.10	102	80	120			
Nitrogen, Nitrate as N	2.31	mg/L	0.10	92	80	120			
Nitrogen, Nitrite as N	2.46	mg/L	0.10	98	80	120			
Sulfate	13.6	mg/L	1.0	91	80	120			
Sample ID: R08030315-005AMSD	Sample Matrix Spike Duplicate			Run: DIONEX_080331A			03/31/08 23:37		
Chloride	4.78	mg/L	0.50	96	80	120	0.2	10	
Fluoride	2.04	mg/L	0.10	102	80	120	0.0	10	
Nitrogen, Nitrate as N	2.32	mg/L	0.10	93	80	120	0.4	10	
Nitrogen, Nitrite as N	2.47	mg/L	0.10	99	80	120	0.4	10	
Sulfate	13.6	mg/L	1.0	91	80	120	0.1	10	

### Qualifiers:

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

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0423		
<b>Sample ID: MB-GrAB-0423</b>	Method Blank				Run: SUB-C99537			04/12/08 02:38	
Gross Alpha	1	pCi/L							
Gross Beta	6	pCi/L							
<b>Sample ID: UNAT-GrAB-0423</b>	Laboratory Control Sample				Run: SUB-C99537			04/12/08 02:39	
Gross Alpha	250	pCi/L		100	70	130			
<b>Sample ID: Cs137-GrAB-0423</b>	Laboratory Control Sample				Run: SUB-C99537			04/12/08 02:38	
Gross Beta	96	pCi/L		94	70	130			
<b>Sample ID: R08030315-005H</b>	Sample Matrix Spike				Run: SUB-C99537			04/12/08 02:38	
Gross Alpha	230	pCi/L		93	70	130			
<b>Sample ID: R08030315-005H</b>	Sample Matrix Spike Duplicate				Run: SUB-C99537			04/12/08 02:38	
Gross Alpha	250	pCi/L		104	70	130	12	14.4	
<b>Sample ID: R08030315-005H</b>	Sample Matrix Spike				Run: SUB-C99537			04/12/08 02:38	
Gross Beta	100	pCi/L		112	70	130			
<b>Sample ID: R08030315-005H</b>	Sample Matrix Spike Duplicate				Run: SUB-C99537			04/12/08 02:39	
Gross Beta	92	pCi/L		101	70	130	11	15.8	
<b>Method: E901.1</b>							Batch: C_R99476		
<b>Sample ID: LCS-R99476</b>	Laboratory Control Sample				Run: SUB-C99476			04/04/08 16:45	
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1200	pCi/L	20	83	70	130			
<b>Sample ID: MB-R99476</b>	Method Blank				Run: SUB-C99476			04/04/08 16:45	
Gross Gamma	ND	pCi/L						U	
<b>Sample ID: C08040148-004HDUP</b>	Sample Duplicate				Run: SUB-C99476			04/04/08 16:45	
Gross Gamma	580	pCi/L	20				3.1	30	
<b>Method: E903.0</b>							Batch: C_18209		
<b>Sample ID: R08030315-007I</b>	Sample Matrix Spike				Run: SUB-C100023			04/22/08 12:16	
Radium 226	32	pCi/L		94	70	130			
<b>Sample ID: R08030315-007I</b>	Sample Matrix Spike Duplicate				Run: SUB-C100023			04/22/08 13:51	
Radium 226	27	pCi/L		79	70	130	17	21.7	
<b>Sample ID: LCS-18209</b>	Laboratory Control Sample				Run: SUB-C100023			04/22/08 13:51	
Radium 226	22	pCi/L		75	70	130			
<b>Sample ID: MB-18209</b>	Method Blank				Run: SUB-C100023			04/22/08 13:51	
Radium 226	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: 07/29/08  
Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_RA226-2718		
Sample ID: TAP WATER-MS Radium 226	Sample Matrix Spike 6.0	pCi/L		92	70	130			04/20/08 12:08
Sample ID: TAP WATER-MSD Radium 226	Sample Matrix Spike Duplicate 6.5	pCi/L		99	70	130	7.5	25.7	04/20/08 13:38
Sample ID: MB-RA226-2718 Radium 226	Method Blank -0.02	pCi/L							04/20/08 15:08 U
Sample ID: LCS-RA226-2718 Radium 226	Laboratory Control Sample 6.5	pCi/L		102	70	130			04/20/08 16:39
<b>Method: E907.0</b>							Batch: C_18209		
Sample ID: R08030315-0051 Thorium 230	Sample Matrix Spike 43.2	pCi/L	0.20	90	70	130			04/09/08 15:00
Sample ID: R08030315-0051 Thorium 230	Sample Matrix Spike Duplicate 39.3	pCi/L	0.20	81	70	130	9.4	30	04/09/08 15:00
Sample ID: LCS-R99592 Thorium 230	Laboratory Control Sample 48.5	pCi/L	0.20	97	70	130			04/09/08 15:00
Sample ID: MB-R99592 Thorium 230	Method Blank 0.9	pCi/L							04/09/08 15:00
<b>Method: E907.0</b>							Batch: C_R99556		
Sample ID: LCS-R99556 Thorium 230	Laboratory Control Sample 6.83	pCi/L	0.20	98	70	130			04/07/08 14:30
Sample ID: C08031120-001HMS Thorium 230	Sample Matrix Spike 9.88	pCi/L	0.20	97	70	130			04/07/08 14:30
Sample ID: C08031120-001HMSD Thorium 230	Sample Matrix Spike Duplicate 9.25	pCi/L	0.20	90	70	130	6.6	30	04/07/08 14:30
Sample ID: MB-R99556 Thorium 230	Method Blank ND	pCi/L							04/07/08 14:30

### 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: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>									Batch: C_18209
<b>Sample ID: C08031014-022BMS</b>	Sample Matrix Spike						Run: SUB-C99887		04/10/08 09:00
Lead 210	244	pCi/g-dry	0.10	19	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: C08031014-022BMSD</b>	Sample Matrix Spike Duplicate						Run: SUB-C99887		04/10/08 09:00
Lead 210	270	pCi/g-dry	0.10	107	70	130	10	30	
- 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-R99887</b>	Method Blank						Run: SUB-C99887		04/10/08 09:00
Lead 210	ND	pCi/L							
<b>Sample ID: LCS-R99887</b>	Laboratory Control Sample						Run: SUB-C99887		04/10/08 09:00
Lead 210	110	pCi/L	1.0	92	70	130			
<b>Method: E909.0M</b>									Batch: C_R99610
<b>Sample ID: R08030315-003H</b>	Sample Matrix Spike						Run: SUB-C99610		04/08/08 08:15
Lead 210	930	pCi/L	1.0	159	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: R08030315-003H</b>	Sample Matrix Spike Duplicate						Run: SUB-C99610		04/08/08 08:15
Lead 210	920	pCi/L	1.0	157	70	130	0.7	30	S
<b>Sample ID: MB-R99610</b>	Method Blank						Run: SUB-C99610		04/08/08 08:15
Lead 210		pCi/L							
<b>Sample ID: LCS-R99610</b>	Laboratory Control Sample						Run: SUB-C99610		04/08/08 08:15
Lead 210	130	pCi/L	1.0	106	70	130			
<b>Method: RMO-3008</b>									Batch: C_R99661
<b>Sample ID: R08030315-009I</b>	Sample Matrix Spike						Run: SUB-C99661		04/07/08 17:00
Polonium 210	82	pCi/L	1.0	96	70	130			
<b>Sample ID: R08030315-009I</b>	Sample Matrix Spike Duplicate						Run: SUB-C99661		04/07/08 17:00
Polonium 210	78	pCi/L	1.0	92	70	130	4.5	30	
<b>Sample ID: LCS-18171</b>	Laboratory Control Sample						Run: SUB-C99661		04/07/08 17:00
Polonium 210	190	pCi/L	1.0	108	70	130			
<b>Sample ID: MB-18182</b>	Method Blank						Run: SUB-C99661		04/07/08 17:00
Polonium 210	1	pCi/L							

### 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: 07/29/08

Project: Edgemont

Work Order: R08030315

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R99723		
Sample ID: R08030315-009H	Sample Matrix Spike		Run: SUB-C99723			04/03/08 14:30			
Polonium 210	90	pCi/L	1.0	103	70	130			
Sample ID: R08030315-009H	Sample Matrix Spike Duplicate		Run: SUB-C99723			04/03/08 14:30			
Polonium 210	86	pCi/L	1.0	98	70	130	5.0	30	
Sample ID: LCS-R99723	Laboratory Control Sample		Run: SUB-C99723			04/03/08 14:30			
Polonium 210	98	pCi/L	1.0	111	70	130			
Sample ID: MB-R99723	Method Blank		Run: SUB-C99723			04/03/08 14:30			
Polonium 210	0.9	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## Chain of Custody and Analytical Request Record

Company Name: <b>ReSpec</b>	Project Name, PWS, Permit, Etc. <b>Dew Bird PowerTech</b>	Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Map Address:	Contact Name: <b>Cory Foreman</b> Phone/Fax:	Email:	Sampler: (Please Print) <b>Eric Kamaz</b>
Invoice Address: <b>LESLIE</b>	Invoice Contact & Phone: <b>" "</b>	Purchase Order:	Quote/Bottle Order:

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

☐ DW    ☐ A2LA  
☐ GSA    ☐ EDD/EDT (Electronic Data)  
☐ POTW/WWTP    Format: \_\_\_\_\_  
☐ State: \_\_\_\_\_  
☐ Other: \_\_\_\_\_

☐ LEVEL IV  
☐ NELAC

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED							Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by:
1 Dew Bird GW 694	03/30/08	10:11	W										Receipt Temp <b>4.4 °C</b> On Ice <input checked="" type="radio"/> Yes <input type="radio"/> No Custody Seal Y N Intact Y N Signature Match Y N
2 Dew Bird GW 698	03/30/08	14:04	W										
3 Dew Bird GW 698	03/30/08	14:10	W										
4 Dew Bird GW 16	03/30/08	15:19	W										
5 Dew Bird BUKOI	03/30/08	15:10	W										
6 Dew Bird GW 695	03/30/08	16:36	W										
7 Dew Bird GW 689	03/30/08	17:25	W										
8 Dew Bird GW 681	03/30/08	17:50	W										
9 Dew Bird GW 700	03/30/08	18:45	W										
10													

**LABORATORY USE ONLY**

Signature: _____	Date/Time: _____	Signature: _____
Received by (print): _____	Date/Time: _____	Received by (print): _____
Received by (phone): _____	Date/Time: _____	Received by (phone): _____

Relinquished by (print): <b>COSY FOREMAN</b>	Date/Time: <b>3/31/08</b>	Signature: <b>Flem</b>	Signature: _____
Relinquished by (phone): _____	Date/Time: _____	Relinquished by (phone): _____	Date/Time: _____

Custody Record MUST be Signed	Sample Disposal: Return to Client	Lab Disposal: _____
-------------------------------	-----------------------------------	---------------------

Received by Laboratory: **Linda Larson** / 3/31/08 10:53 AM

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



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Gillette, WY 866-606-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-680-2218

## ANALYTICAL SUMMARY REPORT

June 24, 2008

RESPEC Inc  
3824 Jet Dr  
Rapid City, SD 57701

Workorder No.: R08040002

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. Rapid City SD received the following 3 samples for RESPEC Inc on 4/1/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040002-001	DewBurd GW696	03/31/08 13:41	04/01/08	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
R08040002-002	DewBurd GW680	03/31/08 15:15	04/01/08	Aqueous	Same As Above
R08040002-003	DewBurd GW695	03/31/08 16:31	04/01/08	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. 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:

  
Branch Manager

Digitally signed by  
Linda Larson  
Date: 2011.05.11 10:52:51 -06:00



**CLIENT:** RESPEC Inc  
**Project:** Edgemont  
**Sample Delivery Group:** R08040002

**Report Date:** 06/24/08

## 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.

- Sample 697 should be 695 per Eric Krantz 6/27/2008

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).





# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040002-001

**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08

**Collection Date:** 03/31/08 13:41

**Date Received:** 04/01/08

**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	04/01/08 13:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 13:59/mb
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	04/01/08 13:59/mb
Calcium	28.0	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Chloride	15	mg/L		1		1	E300.0	04/02/08 18:26/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Magnesium	10.0	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:42/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Potassium	9.7	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Silica	8.1	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Sodium	270	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Sulfate	475	mg/L	D	3		50	E300.0	04/02/08 17:40/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1440	umhos/cm		5.0		1	A2510 B	04/05/08 14:38/jmh
Oxidation-Reduction Potential	170	mV				1	A2580 B	04/04/08 00:00/jmh
pH	8.71	s.u.		0.01		1	A4500-H B	04/05/08 14:20/jmh
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	04/07/08 08:40/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:04/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
Iron	ND	mg/L		0.03		1	E200.7	04/14/08 13:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Manganese	0.05	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/18/08 17:41/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c

**Report** RL - Analyte reporting limit.

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

D - RL increased due to sample matrix.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08040002-001

Client Sample ID: DewBurd GW696

Report Date: 06/24/08

Collection Date: 03/31/08 13:41

Date Received: 04/01/08

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	04/18/08 17:41/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 14:02/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:25/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta	-2.1	pCi/L	U			1	E900.0	04/16/08 20:36/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta MDC	4.2	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Lead 210	-11.2	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	1.9	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	0.7	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	1.0	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.5	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.4	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.6	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040002-001

**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08

**Collection Date:** 03/31/08 13:41

**Date Received:** 04/01/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
Radon 222	190	pCi/L		100			1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	63.4	pCi/L					1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	04/17/08 00:00/eli-c
Arsenic	0.003	mg/L		0.001			1	E200.8	04/17/08 00:00/eli-c
Barium	ND	mg/L		0.1			2	E200.7	04/14/08 17:03/eli-c
Beryllium	ND	mg/L		0.001			2	E200.7	04/14/08 17:03/eli-c
Boron	ND	mg/L		0.1			2	E200.7	04/14/08 17:03/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	04/17/08 00:00/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	04/14/08 17:03/eli-c
Copper	ND	mg/L		0.01			1	E200.8	04/17/08 00:00/eli-c
Iron	0.04	mg/L		0.03			2	E200.7	04/14/08 17:03/eli-c
Lead	ND	mg/L		0.001			1	E200.8	04/17/08 00:00/eli-c
Manganese	0.05	mg/L		0.01			2	E200.7	04/14/08 17:03/eli-c
Mercury	ND	mg/L		0.0001			1	E200.8	04/17/08 00:00/eli-c
Mercury	ND	mg/L		0.001			1	E245.1	04/11/08 14:07/eli-b
Molybdenum	ND	mg/L		0.1			1	E200.8	04/17/08 00:00/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	04/14/08 17:03/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	04/17/08 00:00/eli-c
Silver	ND	mg/L		0.005			1	E200.8	04/17/08 00:00/eli-c
Strontium	0.7	mg/L		0.1			1	E200.8	04/17/08 00:00/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	04/17/08 00:00/eli-c
Uranium	ND	mg/L		0.0003			1	E200.8	04/17/08 00:00/eli-c
Zinc	ND	mg/L		0.01			1	E200.8	04/17/08 00:00/eli-c
DATA QUALITY									
A/C Balance (± 5)	0.930						1	A1030 E	06/17/08 00:00/ADM
Anions	14.0	meq/L					1	A1030 E	06/17/08 00:00/ADM
Cations	14.3	meq/L					1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	941	mg/L					1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.940						1	A1030 E	06/17/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-001  
**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 13:41  
**Date Received:** 04/01/08  
**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	04/01/08 13:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 13:59/mb
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	04/01/08 13:59/mb
Calcium	28.0	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Chloride	15	mg/L		1		1	E300.0	04/02/08 18:26/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Magnesium	10.0	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:42/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:26/jmh
Potassium	9.7	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Silica	8.1	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Sodium	270	mg/L		0.5		1	E200.7	04/14/08 13:04/eli-c
Sulfate	475	mg/L	D	3		50	E300.0	04/02/08 17:40/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1440	umhos/cm		5.0		1	A2510 B	04/05/08 14:38/jmh
Oxidation-Reduction Potential	170	mV				1	A2580 B	04/04/08 00:00/jmh
pH	8.71	s.u.		0.01		1	A4500-H B	04/05/08 14:20/jmh
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	880	mg/L		5		1	A2540 C	04/07/08 08:40/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:04/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
Iron	ND	mg/L		0.03		1	E200.7	04/14/08 13:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Manganese	0.05	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/18/08 17:41/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/18/08 17:41/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/18/08 17:41/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-001  
**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 13:41  
**Date Received:** 04/01/08  
**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	04/18/08 17:41/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 13:04/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 14:02/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:25/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha MDC	3.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta	-2.1	pCi/L	U			1	E900.0	04/16/08 20:36/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta MDC	4.2	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Lead 210	-11.2	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	1.9	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	0.7	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	1.0	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.5	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.4	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.6	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/eli-c

## RADIONUCLIDES - TOTAL

**Report** 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

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-001  
**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 13:41  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	190	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	63.4	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/17/08 00:00/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	04/17/08 00:00/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/14/08 17:03/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	04/14/08 17:03/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/14/08 17:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/17/08 00:00/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/14/08 17:03/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/17/08 00:00/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	04/14/08 17:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/17/08 00:00/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	04/14/08 17:03/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	04/17/08 00:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 14:07/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/17/08 00:00/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	04/14/08 17:03/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/17/08 00:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/17/08 00:00/eli-c
Strontium	0.7	mg/L		0.1		1	E200.8	04/17/08 00:00/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/17/08 00:00/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 00:00/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/17/08 00:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.930					1	A1030 E	06/17/08 00:00/ADM
Anions	14.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	14.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	941	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.940					1	A1030 E	06/17/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



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# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040002-002

**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08

**Collection Date:** 03/31/08 15:15

**Date Received:** 04/01/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	264	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Bicarbonate as HCO3	322	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Calcium	353	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Chloride	15	mg/L		1		1	E300.0	04/02/08 18:57/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Magnesium	111	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:43/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Potassium	19.1	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Silica	8.2	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Sodium	120	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Sulfate	1280	mg/L	D	3		50	E300.0	04/02/08 18:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2560	umhos/cm		5.0		1	A2510 B	04/05/08 14:39/jmh
Oxidation-Reduction Potential	180	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.31	s.u.		0.01		1	A4500-H B	04/05/08 14:22/jmh
Sodium Adsorption Ratio (SAR)	1.4	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	04/07/08 08:40/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Arsenic	0.008	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:14/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
Iron	0.27	mg/L		0.03		1	E200.7	04/14/08 13:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Manganese	0.40	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/18/08 17:48/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 15:15  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Uranium	0.0569	mg/L		0.0003		1	E200.8	04/18/08 17:48/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Zinc	0.02	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 14:06/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6440	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha precision (±)	79.7	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha MDC	8.6	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta	2320	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta precision (±)	22.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta MDC	9.7	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	2.1	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	1150	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 precision (±)	4.9	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Gross Gamma	150	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	73	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.5	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.5	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	1.9	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/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

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 15:15  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
Radon 222	71800	pCi/L		100			1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	351	pCi/L					1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	04/17/08 00:07/eli-c
Arsenic	0.009	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Barium	ND	mg/L		0.1			2	E200.7	04/14/08 17:07/eli-c
Beryllium	ND	mg/L		0.001			2	E200.7	04/14/08 17:07/eli-c
Boron	0.1	mg/L		0.1			2	E200.7	04/14/08 17:07/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	04/17/08 00:07/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	04/14/08 17:07/eli-c
Copper	ND	mg/L		0.01			1	E200.8	04/17/08 00:07/eli-c
Iron	0.30	mg/L		0.03			2	E200.7	04/14/08 17:07/eli-c
Lead	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Manganese	0.43	mg/L		0.01			2	E200.7	04/14/08 17:07/eli-c
Mercury	ND	mg/L		0.0001			1	E200.8	04/17/08 00:07/eli-c
Mercury	ND	mg/L		0.001			1	E245.1	04/11/08 14:09/eli-b
Molybdenum	ND	mg/L		0.1			1	E200.8	04/17/08 00:07/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	04/14/08 17:07/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Silver	ND	mg/L		0.005			1	E200.8	04/17/08 00:07/eli-c
Strontium	7.3	mg/L		0.1			1	E200.8	04/17/08 00:07/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Uranium	0.0541	mg/L		0.0003			1	E200.8	04/17/08 00:07/eli-c
Zinc	0.02	mg/L		0.01			1	E200.8	04/17/08 00:07/eli-c
DATA QUALITY									
A/C Balance (± 5)	0.260						1	A1030 E	06/17/08 00:00/ADM
Anions	32.4	meq/L					1	A1030 E	06/17/08 00:00/ADM
Cations	32.5	meq/L					1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	2080	mg/L					1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.05						1	A1030 E	06/17/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 15:15  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	264	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Bicarbonate as HCO3	322	mg/L		5		1	A2320 B	04/01/08 14:21/mb
Calcium	353	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Chloride	15	mg/L		1		1	E300.0	04/02/08 18:57/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Magnesium	111	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:43/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 18:57/jmh
Potassium	19.1	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Silica	8.2	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Sodium	120	mg/L		0.5		1	E200.7	04/14/08 13:14/eli-c
Sulfate	1280	mg/L	D	3		50	E300.0	04/02/08 18:42/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2560	umhos/cm		5.0		1	A2510 B	04/05/08 14:39/jmh
Oxidation-Reduction Potential	180	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.31	s.u.		0.01		1	A4500-H B	04/05/08 14:22/jmh
Sodium Adsorption Ratio (SAR)	1.4	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	04/07/08 08:40/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Arsenic	0.008	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:14/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
Iron	0.27	mg/L		0.03		1	E200.7	04/14/08 13:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Manganese	0.40	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/18/08 17:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/18/08 17:48/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/18/08 17:48/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 15:15  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Uranium	0.0569	mg/L		0.0003		1	E200.8	04/18/08 17:48/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:14/eli-c
Zinc	0.02	mg/L		0.01		1	E200.7	04/14/08 13:14/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 14:06/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:27/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6440	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha precision (±)	79.7	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha MDC	8.6	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta	2320	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta precision (±)	22.9	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta MDC	9.7	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	2.1	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	1150	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 precision (±)	4.9	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Gross Gamma	150	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	73	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.5	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.5	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	1.9	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/eli-c

## RADIONUCLIDES - TOTAL

**Report** 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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-002  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 15:15  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - TOTAL									
Radon 222	71800	pCi/L		100			1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	351	pCi/L					1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	04/17/08 00:07/eli-c
Arsenic	0.009	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Barium	ND	mg/L		0.1			2	E200.7	04/14/08 17:07/eli-c
Beryllium	ND	mg/L		0.001			2	E200.7	04/14/08 17:07/eli-c
Boron	0.1	mg/L		0.1			2	E200.7	04/14/08 17:07/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	04/17/08 00:07/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	04/14/08 17:07/eli-c
Copper	ND	mg/L		0.01			1	E200.8	04/17/08 00:07/eli-c
Iron	0.30	mg/L		0.03			2	E200.7	04/14/08 17:07/eli-c
Lead	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Manganese	0.43	mg/L		0.01			2	E200.7	04/14/08 17:07/eli-c
Mercury	ND	mg/L		0.0001			1	E200.8	04/17/08 00:07/eli-c
Mercury	ND	mg/L		0.001			1	E245.1	04/11/08 14:09/eli-b
Molybdenum	ND	mg/L		0.1			1	E200.8	04/17/08 00:07/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	04/14/08 17:07/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Silver	ND	mg/L		0.005			1	E200.8	04/17/08 00:07/eli-c
Strontium	7.3	mg/L		0.1			1	E200.8	04/17/08 00:07/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	04/17/08 00:07/eli-c
Uranium	0.0541	mg/L		0.0003			1	E200.8	04/17/08 00:07/eli-c
Zinc	0.02	mg/L		0.01			1	E200.8	04/17/08 00:07/eli-c
DATA QUALITY									
A/C Balance (± 5)	0.260						1	A1030 E	06/17/08 00:00/ADM
Anions	32.4	meq/L					1	A1030 E	06/17/08 00:00/ADM
Cations	32.5	meq/L					1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	2080	mg/L					1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.05						1	A1030 E	06/17/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 16:31  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	176	mg/L		5		1	A2320 B	04/01/08 14:26/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/01/08 14:26/mb
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	04/01/08 14:26/mb
Calcium	48.0	mg/L		0.5		1	E200.7	04/14/08 13:30/eli-c
Chloride	14	mg/L		1		1	E300.0	04/04/08 18:38/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	04/04/08 18:38/jmh
Magnesium	17.8	mg/L		0.5		1	E200.7	04/14/08 13:30/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:45/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/04/08 18:38/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/04/08 18:38/jmh
Potassium	8.7	mg/L		0.5		1	E200.7	04/14/08 13:30/eli-c
Silica	7.4	mg/L		0.5		1	E200.7	04/14/08 13:30/eli-c
Sodium	234	mg/L		0.5		1	E200.7	04/14/08 13:30/eli-c
Sulfate	476	mg/L	D	3		50	E300.0	04/02/08 19:12/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	04/05/08 14:40/jmh
Oxidation-Reduction Potential	230	mV				1	A2580 B	04/04/08 00:00/jmh
pH	8.16	s.u.		0.01		1	A4500-H B	04/05/08 14:23/jmh
Sodium Adsorption Ratio (SAR)	7.3	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	870	mg/L		5		1	A2540 C	04/07/08 08:42/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:30/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 17:20/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:30/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 13:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 17:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:30/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:30/eli-c
Iron	0.07	mg/L		0.03		1	E200.7	04/14/08 13:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 17:20/eli-c
Manganese	0.07	mg/L		0.01		1	E200.7	04/14/08 13:30/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/16/08 17:20/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:30/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/16/08 17:20/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/16/08 17:20/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/16/08 17:20/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix.

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



# LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 16:31  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Uranium	0.0030	mg/L		0.0003		1	E200.8	04/16/08 17:20/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:30/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 13:30/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 14:10/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:29/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	52.2	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha precision (±)	5.4	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Alpha MDC	4.0	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta	16.1	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta precision (±)	2.1	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Gross Beta MDC	3.0	pCi/L				1	E900.0	04/16/08 20:36/eli-c
Lead 210	-12.4	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	2.0	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	6.3	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 04:05/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.6	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.5	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.6	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/09/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								

**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

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040002-003  
**Client Sample ID:** DewBurd GW695

**Report Date:** 06/24/08  
**Collection Date:** 03/31/08 16:31  
**Date Received:** 04/01/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - TOTAL								
Radon 222	1400	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	76.5	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/17/08 00:13/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/17/08 00:13/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/14/08 17:19/eli-c
Beryllium	ND	mg/L		0.005		1	E200.8	04/17/08 00:13/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/14/08 17:19/eli-c
Cadmium	ND	mg/L		0.001		1	E200.8	04/17/08 00:13/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/14/08 17:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/17/08 00:13/eli-c
Iron	0.11	mg/L		0.03		2	E200.7	04/14/08 17:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/17/08 00:13/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	04/14/08 17:19/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	04/17/08 00:13/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 14:11/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/17/08 00:13/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	04/14/08 17:19/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/17/08 00:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/17/08 00:13/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	04/17/08 00:13/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/17/08 00:13/eli-c
Uranium	0.0031	mg/L		0.0003		1	E200.8	04/17/08 00:13/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/17/08 00:13/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.52					1	A1030 E	06/17/08 00:00/ADM
Anions	13.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	14.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	925	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.940					1	A1030 E	06/17/08 00:00/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

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



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2320 B</b>							Batch: 080401A-ALK-SEL-W		
<b>Sample ID: LCS1_080401A</b>	Laboratory Control Sample				Run: PH_COND1-R_080401A		04/01/08 12:24		
Alkalinity, Total as CaCO <sub>3</sub>	972	mg/L	5.0	97	90	110			
<b>Sample ID: MBLK1_080401A</b>	Method Blank				Run: PH_COND1-R_080401A		04/01/08 12:36		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
<b>Sample ID: R08030315-001ADUP</b>	Sample Duplicate				Run: PH_COND1-R_080401A		04/01/08 00:00		
Alkalinity, Total as CaCO <sub>3</sub>	204	mg/L	5.0				0.0	10	
Carbonate as CO <sub>3</sub>	ND	mg/L	5.0				0.0	10	
Bicarbonate as HCO <sub>3</sub>	249	mg/L	5.0				0.0	10	
<b>Sample ID: R08030315-003AMS</b>	Sample Matrix Spike				Run: PH_COND1-R_080401A		04/01/08 13:14		
Alkalinity, Total as CaCO <sub>3</sub>	226	mg/L	5.0	98	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration





## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B		Batch: 080405_1_COND-PROBE-W							
Sample ID: LCS1-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:35		
Conductivity @ 25 C	145	umhos/cm	5.0	97	90	110			
Sample ID: LCS2-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	4950	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080405	Method Blank				Run: PH_COND2-R_080405A		04/05/08 14:37		
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08040002-001ADUP	Sample Duplicate				Run: PH_COND2-R_080405A		04/05/08 14:39		
Conductivity @ 25 C	1450	umhos/cm	5.0				0.7	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 C</b>							Batch: 080407A-SLDS-TDS-W		
<b>Sample ID: LCS1_080407A</b>	Laboratory Control Sample				Run: BAL-4-R_080407A				04/07/08 08:38
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	5.0	102	90	110			
<b>Sample ID: MBLK1_080407A</b>	Method Blank				Run: BAL-4-R_080407A				04/07/08 08:39
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
<b>Sample ID: R08040002-002AMS</b>	Sample Matrix Spike				Run: BAL-4-R_080407A				04/07/08 08:41
Solids, Total Dissolved TDS @ 180 C	4300	mg/L	5.0	104	80	120			
<b>Sample ID: R08040002-002AMSD</b>	Sample Matrix Spike Duplicate				Run: BAL-4-R_080407A				04/07/08 08:41
Solids, Total Dissolved TDS @ 180 C	4300	mg/L	5.0	107	80	120	1.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A3114 B</b>							Batch: C_SEIV-3114-080407		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C99195			04/07/08 09:27
Selenium-IV	ND	mg/L	6E-05						
<b>Sample ID: 288-54-6</b>	Laboratory Control Sample					Run: SUB-C99195			04/07/08 09:29
Selenium-IV	0.045	mg/L	0.0010	91	90	110			
<b>Sample ID: C08040192-002EMS</b>	Sample Matrix Spike					Run: SUB-C99195			04/07/08 10:10
Selenium-IV	0.043	mg/L	0.0010	86	85	115			
<b>Sample ID: C08040192-002EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99195			04/07/08 10:12
Selenium-IV	0.045	mg/L	0.0010	90	85	115	4.7	10	
<b>Method: A3114 B</b>							Batch: C_SE-3114-080407A		
<b>Sample ID: MBLK</b>	Method Blank					Run: SUB-C99208			04/07/08 12:04
Selenium	ND	mg/L	6E-05						
<b>Sample ID: 288-54-6</b>	Laboratory Control Sample					Run: SUB-C99208			04/07/08 12:06
Selenium	0.050	mg/L	0.0010	100	90	110			
<b>Sample ID: C08040192-002EMS</b>	Sample Matrix Spike					Run: SUB-C99208			04/07/08 12:41
Selenium	0.050	mg/L	0.0010	99	85	115			
<b>Sample ID: C08040192-002EMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99208			04/07/08 12:43
Selenium	0.051	mg/L	0.0010	101	85	115	2.0	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080405_1_PH-W		
Sample ID: LCS_pH-1_080405	Laboratory Control Sample		Run: PH_COND2-R_080405A				04/05/08 14:19		
pH	6.94	s.u.	0.010	101	98.55	101.45			
Sample ID: R08040002-001ADUP	Sample Duplicate		Run: PH_COND2-R_080405A				04/05/08 14:21		
pH	8.72	s.u.	0.010				0.1	1.25	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>							Batch: A2008-04-04_2_NH3_01		
<b>Sample ID: MBLK-2</b>	Method Blank					Run: TECHAA2-R_080404A			04/04/08 09:05
Nitrogen, Ammonia as N	ND	mg/L	0.01						
<b>Sample ID: LFB-3</b>	Laboratory Fortified Blank					Run: TECHAA2-R_080404A			04/04/08 09:06
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_080404A			04/04/08 09:08
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
<b>Sample ID: R08030315-005BMS</b>	Sample Matrix Spike					Run: TECHAA2-R_080404A			04/04/08 10:35
Nitrogen, Ammonia as N	0.22	mg/L	0.10	86	80	120			
<b>Sample ID: R08030315-005BMSD</b>	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080404A			04/04/08 10:36
Nitrogen, Ammonia as N	0.20	mg/L	0.10	81	80	120	6.2	10	
<b>Sample ID: R08040003-001CMS</b>	Sample Matrix Spike					Run: TECHAA2-R_080404A			04/04/08 10:49
Nitrogen, Ammonia as N	0.19	mg/L	0.10	76	80	120			S
<b>Sample ID: R08040003-001CMSD</b>	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080404A			04/04/08 10:50
Nitrogen, Ammonia as N	0.18	mg/L	0.10	74	80	120	3.2	10	S

### Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc

**Project:** Edgemont

**Report Date:** 06/24/08

**Work Order:** R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> D5072-92							Batch: C_R99230		
<b>Sample ID:</b> MB-R99230	Method Blank					Run: SUB-C99230		04/03/08 18:27	
Radon 222	-10	pCi/L							U
<b>Sample ID:</b> LCS-R99230	Laboratory Control Sample					Run: SUB-C99230		04/03/08 18:27	
Radon 222	298	pCi/L	100	98	70	130			
<b>Sample ID:</b> R08040002-003G	Sample Duplicate					Run: SUB-C99230		04/03/08 18:27	
Radon 222	1280	pCi/L	100				9.2	30	

### Qualifiers:

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MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18214		
<b>Sample ID: MB-18214</b>	Method Blank		Run: SUB-C99617				04/14/08 16:36		
Barium	ND	mg/L	0.004						
Boron	0.008	mg/L	0.006						
Chromium	ND	mg/L	0.003						
Iron	ND	mg/L	0.005						
Manganese	ND	mg/L	0.0008						
Nickel	ND	mg/L	0.02						
<b>Sample ID: LCS-18214</b>	Laboratory Control Sample		Run: SUB-C99617				04/14/08 16:39		
Barium	0.497	mg/L	0.10	99	85	115			
Boron	0.503	mg/L	0.10	101	85	115			
Chromium	0.508	mg/L	0.050	102	85	115			
Iron	0.504	mg/L	0.030	101	85	115			
Manganese	0.484	mg/L	0.010	97	85	115			
Nickel	0.474	mg/L	0.050	95	85	115			
<b>Sample ID: C08040196-003D MS</b>	Sample Matrix Spike		Run: SUB-C99617				04/14/08 17:23		
Barium	0.521	mg/L	0.10	100	70	130			
Boron	0.573	mg/L	0.10	100	70	130			
Chromium	0.502	mg/L	0.050	100	70	130			
Iron	0.621	mg/L	0.030	103	70	130			
Manganese	0.566	mg/L	0.010	98	70	130			
Nickel	0.459	mg/L	0.050	92	70	130			
<b>Sample ID: C08040196-003D MSD</b>	Sample Matrix Spike Duplicate		Run: SUB-C99617				04/14/08 17:26		
Barium	0.517	mg/L	0.10	99	70	130	0.7	20	
Boron	0.566	mg/L	0.10	99	70	130	1.3	20	
Chromium	0.501	mg/L	0.050	100	70	130	0.3	20	
Iron	0.621	mg/L	0.030	103	70	130	0.0	20	
Manganese	0.559	mg/L	0.010	96	70	130	1.2	20	
Nickel	0.481	mg/L	0.050	96	70	130	4.7	20	
<b>Method: E200.7</b>							Batch: C_R99617		
<b>Sample ID: MB-080414A</b>	Method Blank		Run: SUB-C99617				04/14/08 12:04		
Silica	ND	mg/L	0.06						
Aluminum	ND	mg/L	0.008						
Barium	ND	mg/L	0.006						
Boron	0.006	mg/L	0.004						
Calcium	ND	mg/L	0.04						
Chromium	ND	mg/L	0.003						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.002						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0004						

### Qualifiers:

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MDC - Minimum detectable concentration

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R99617		
<b>Sample ID: MB-080414A</b>	Method Blank		Run: SUB-C99617				04/14/08 12:04		
Molybdenum	ND	mg/L	0.01						
Potassium	ND	mg/L	0.08						
Sodium	ND	mg/L	0.06						
Vanadium	ND	mg/L	0.006						
Zinc	ND	mg/L	0.004						
<b>Sample ID: LFB-080414A</b>	Laboratory Fortified Blank		Run: SUB-C99617				04/14/08 12:08		
Silica	0.96	mg/L	0.10	96	85	125			
Aluminum	0.92	mg/L	0.10	92	85	125			
Barium	0.93	mg/L	0.10	93	85	125			
Boron	0.95	mg/L	0.10	94	85	125			
Calcium	51	mg/L	0.50	102	85	125			
Chromium	0.95	mg/L	0.050	95	85	125			
Copper	0.89	mg/L	0.010	89	85	125			
Iron	0.93	mg/L	0.030	93	85	125			
Magnesium	50	mg/L	0.50	100	85	125			
Manganese	0.91	mg/L	0.010	91	85	125			
Molybdenum	0.99	mg/L	0.10	99	85	125			
Potassium	47	mg/L	0.50	94	85	125			
Sodium	48	mg/L	0.50	96	85	125			
Vanadium	0.97	mg/L	0.10	97	85	125			
Zinc	0.96	mg/L	0.010	96	85	125			
<b>Sample ID: C08040196-001CMS2</b>	Sample Matrix Spike		Run: SUB-C99617				04/14/08 13:08		
Aluminum	0.872	mg/L	0.10	86	70	130			
Barium	0.916	mg/L	0.10	89	70	130			
Boron	0.930	mg/L	0.10	86	70	130			
Chromium	0.901	mg/L	0.050	88	70	130			
Copper	0.852	mg/L	0.010	84	70	130			
Iron	0.907	mg/L	0.030	87	70	130			
Manganese	0.926	mg/L	0.010	86	70	130			
Molybdenum	0.922	mg/L	0.10	90	70	130			
Vanadium	0.938	mg/L	0.10	92	70	130			
Zinc	0.978	mg/L	0.010	96	70	130			
Calcium	74.4	mg/L	1.0	91	70	130			
Magnesium	56.4	mg/L	1.0	91	70	130			
Potassium	55.4	mg/L	1.0	90	70	130			
Silica	8.74	mg/L	0.10		70	130			A
Sodium	303	mg/L	1.0		70	130			A
<b>Sample ID: C08040196-001CMSD2</b>	Sample Matrix Spike Duplicate		Run: SUB-C99617				04/14/08 13:11		
Aluminum	0.863	mg/L	0.10	85	70	130	1.1	20	
Barium	0.911	mg/L	0.10	88	70	130	0.6	20	
Boron	0.933	mg/L	0.10	86	70	130	0.3	20	

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99617		
Sample ID: C08040196-001CMSD2	Sample Matrix Spike Duplicate			Run: SUB-C99617			04/14/08 13:11		
Chromium	0.892	mg/L	0.050	88	70	130	0.9	20	
Copper	0.849	mg/L	0.010	83	70	130	0.4	20	
Iron	0.913	mg/L	0.030	88	70	130	0.7	20	
Manganese	0.922	mg/L	0.010	86	70	130	0.4	20	
Molybdenum	0.915	mg/L	0.10	90	70	130	0.8	20	
Vanadium	0.932	mg/L	0.10	91	70	130	0.7	20	
Zinc	0.969	mg/L	0.010	95	70	130	0.9	20	
Calcium	74.5	mg/L	1.0	91	70	130	0.1	20	
Magnesium	56.5	mg/L	1.0	91	70	130	0.2	20	
Potassium	55.9	mg/L	1.0	91	70	130	0.9	20	
Silica	8.79	mg/L	0.10		70	130	0.6	20	A
Sodium	303	mg/L	1.0		70	130	0.1	20	A
Sample ID: C08040167-001CMS2	Sample Matrix Spike			Run: SUB-C99617			04/14/08 14:01		
Aluminum	0.873	mg/L	0.10	85	70	130			
Barium	0.944	mg/L	0.10	89	70	130			
Boron	0.963	mg/L	0.10	92	70	130			
Chromium	0.919	mg/L	0.050	90	70	130			
Copper	0.843	mg/L	0.010	83	70	130			
Iron	0.973	mg/L	0.030	88	70	130			
Manganese	0.899	mg/L	0.010	86	70	130			
Molybdenum	0.941	mg/L	0.10	92	70	130			
Vanadium	0.939	mg/L	0.10	92	70	130			
Zinc	0.967	mg/L	0.010	95	70	130			
Calcium	104	mg/L	1.0	87	70	130			
Magnesium	54.3	mg/L	1.0	93	70	130			
Potassium	47.1	mg/L	1.0	88	70	130			
Silica	15.4	mg/L	0.10		70	130			A
Sodium	60.9	mg/L	1.0	89	70	130			
Sample ID: C08040167-001CMSD2	Sample Matrix Spike Duplicate			Run: SUB-C99617			04/14/08 14:04		
Aluminum	0.875	mg/L	0.10	86	70	130	0.2	20	
Barium	0.940	mg/L	0.10	89	70	130	0.3	20	
Boron	0.970	mg/L	0.10	93	70	130	0.7	20	
Chromium	0.917	mg/L	0.050	90	70	130	0.2	20	
Copper	0.848	mg/L	0.010	83	70	130	0.6	20	
Iron	0.977	mg/L	0.030	88	70	130	0.4	20	
Manganese	0.898	mg/L	0.010	86	70	130	0.1	20	
Molybdenum	0.939	mg/L	0.10	92	70	130	0.2	20	
Vanadium	0.934	mg/L	0.10	92	70	130	0.5	20	
Zinc	0.957	mg/L	0.010	94	70	130	1.1	20	
Calcium	104	mg/L	1.0	87	70	130	0.3	20	
Magnesium	54.2	mg/L	1.0	92	70	130	0.2	20	

### Qualifiers:

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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

**Client:** RESPEC Inc

**Project:** Edgemont

**Report Date:** 06/24/08

**Work Order:** R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E200.7							Batch: C_R99617		
<b>Sample ID:</b> C08040167-001CMSD2	Sample Matrix Spike Duplicate				Run: SUB-C99617			04/14/08 14:04	
Potassium	47.1	mg/L	1.0	88	70	130	0.0	20	
Sodium	61.0	mg/L	1.0	89	70	130	0.2	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18214		
<b>Sample ID: MB-18214</b>	Method Blank		Run: SUB-C99752				04/16/08 21:17		
Antimony	ND	mg/L	0.0002						
Arsenic	7E-05	mg/L	5E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Copper	ND	mg/L	0.0002						
Lead	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Silver	9E-05	mg/L	4E-05						
Strontium	0.00010	mg/L	8E-05						
Thallium	7E-05	mg/L	3E-05						
Uranium	0.0001	mg/L	3E-05						
Zinc	0.003	mg/L	0.0003						
<b>Sample ID: LCS-18214</b>	Laboratory Control Sample		Run: SUB-C99752				04/16/08 21:24		
Antimony	0.510	mg/L	0.050	102	85	115			
Arsenic	0.525	mg/L	0.0010	105	85	115			
Beryllium	0.544	mg/L	0.010	109	85	115			
Cadmium	0.522	mg/L	0.010	104	85	115			
Copper	0.513	mg/L	0.010	103	85	115			
Lead	0.514	mg/L	0.050	103	85	115			
Molybdenum	0.508	mg/L	0.10	102	85	115			
Selenium	0.528	mg/L	0.0020	106	85	115			
Silver	0.159	mg/L	0.010	79	85	115			S
Strontium	0.519	mg/L	0.10	104	85	115			
Thallium	0.511	mg/L	0.10	102	85	115			
Uranium	0.550	mg/L	0.00032	110	85	115			
Zinc	0.546	mg/L	0.010	109	85	115			
- The LCS Silver recovery was outside of the recommended acceptance range. The MS and MSD recoveries were within acceptance range, and so the batch is accepted.									
<b>Sample ID: C08040196-003D MS4</b>	Post Digestion Spike		Run: SUB-C99752				04/17/08 00:20		
Antimony	0.0212	mg/L	0.050	106	70	130			
Arsenic	0.0230	mg/L	0.0010	106	70	130			
Beryllium	0.0204	mg/L	0.010	102	70	130			
Cadmium	0.0196	mg/L	0.010	98	70	130			
Copper	0.0203	mg/L	0.010	97	70	130			
Lead	0.0204	mg/L	0.050	102	70	130			
Molybdenum	0.0255	mg/L	0.10	106	70	130			
Selenium	0.0971	mg/L	0.0010	97	70	130			
Silver	0.0200	mg/L	0.010	100	70	130			
Strontium	0.931	mg/L	0.10		70	130			A
Thallium	0.0196	mg/L	0.10	98	70	130			
Uranium	0.0246	mg/L	0.00030	107	70	130			
Zinc	0.0258	mg/L	0.010	96	70	130			

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S - Spike recovery outside of advisory limits.

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

MDC - Minimum detectable concentration



## QA/QC Summary Report

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Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18214		
Sample ID: C08040196-003D MS4	Post Digestion Spike			Run: SUB-C99752			04/17/08 00:20		
Sample ID: C08040196-003D MSD4	Post Digestion Spike Duplicate			Run: SUB-C99752			04/17/08 00:27		
Antimony	0.0215	mg/L	0.050	107	70	130	0.0	20	A
Arsenic	0.0222	mg/L	0.0010	102	70	130	3.7	20	
Beryllium	0.0204	mg/L	0.010	102	70	130	0.5	20	
Cadmium	0.0198	mg/L	0.010	99	70	130	1.0	20	
Copper	0.0200	mg/L	0.010	96	70	130	1.2	20	
Lead	0.0207	mg/L	0.050	103	70	130	0.0	20	
Molybdenum	0.0260	mg/L	0.10	108	70	130	0.0	20	
Selenium	0.0971	mg/L	0.0010	97	70	130	0.0	20	
Silver	0.0205	mg/L	0.010	102	70	130	2.5	20	
Strontium	0.941	mg/L	0.10		70	130	1.0	20	
Thallium	0.0202	mg/L	0.10	101	70	130	0.0	20	
Uranium	0.0249	mg/L	0.00030	109	70	130	1.2	20	
Zinc	0.0254	mg/L	0.010	94	70	130	1.4	20	
Method: E200.8							Batch: C_R99752		
Sample ID: LRB	Method Blank			Run: SUB-C99752			04/16/08 13:31		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Thorium 232	4E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank			Run: SUB-C99752			04/16/08 13:38		
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Cadmium	0.0508	mg/L	0.0010	102	85	115			
Lead	0.0511	mg/L	0.0010	102	85	115			
Mercury	0.00523	mg/L	0.0010	105	85	115			
Nickel	0.0510	mg/L	0.0010	102	85	115			
Silver	0.0202	mg/L	0.0010	101	85	115			
Thorium 232	0.0506	mg/L	0.0010	101	85	115			
Uranium	0.0512	mg/L	0.00030	102	85	115			
Sample ID: C08031017-007CMS	Sample Matrix Spike			Run: SUB-C99752			04/16/08 18:08		
Arsenic	0.223	mg/L	0.0010	89	70	130			
Cadmium	0.209	mg/L	0.010	84	70	130			
Lead	0.223	mg/L	0.050	89	70	130			
Mercury	0.0238	mg/L	0.0010	95	70	130			
Nickel	0.502	mg/L	0.050	89	70	130			

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## QA/QC Summary Report

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Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R99752		
Sample ID: C08031017-007CMS	Sample Matrix Spike		Run: SUB-C99752			04/16/08 18:08			
Silver	0.0513	mg/L	0.010	51	70	130			S
Thorium 232	0.211	mg/L	0.0010	84	70	130			
Uranium	0.601	mg/L	0.00030	93	70	130			
Sample ID: C08031017-007CMSD	Sample Matrix Spike Duplicate		Run: SUB-C99752			04/16/08 18:14			
Arsenic	0.250	mg/L	0.0010	99	70	130	11	20	
Cadmium	0.236	mg/L	0.010	94	70	130	12	20	
Lead	0.253	mg/L	0.050	101	70	130	13	20	
Mercury	0.0275	mg/L	0.0010	110	70	130	14	20	
Nickel	0.521	mg/L	0.050	96	70	130	3.6	20	
Silver	0.0686	mg/L	0.010	69	70	130	29	20	SR
Thorium 232	0.246	mg/L	0.0010	98	70	130	15	20	
Uranium	0.622	mg/L	0.00030	101	70	130	3.4	20	
Method: E200.8							Batch: C_18234		
Sample ID: MB-18234	Method Blank		Run: SUB-C99827			04/17/08 13:25			
Uranium	0.0008	mg/L	2E-05						
Sample ID: LCS1-18234	Laboratory Control Sample		Run: SUB-C99827			04/17/08 13:29			
Uranium	0.0512	mg/L	0.00030	97	80	120			
Sample ID: R08040058-001I	Post Digestion Spike		Run: SUB-C99827			04/17/08 14:18			
Uranium	0.0126	mg/L	0.00030	95	70	130			
Sample ID: R08040058-001I	Post Digestion Spike Duplicate		Run: SUB-C99827			04/17/08 14:22			
Uranium	0.0126	mg/L	0.00030	95	70	130	0.1	20	

### Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R99837		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C99837				04/18/08 12:51		
Arsenic	ND	mg/L	6E-05						
Cadmium	3E-05	mg/L	1E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C99837				04/18/08 12:58		
Arsenic	0.0526	mg/L	0.0010	105	85	115			
Cadmium	0.0520	mg/L	0.0010	104	85	115			
Lead	0.0524	mg/L	0.0010	105	85	115			
Mercury	0.00529	mg/L	0.0010	106	85	115			
Nickel	0.0530	mg/L	0.0010	106	85	115			
Silver	0.0204	mg/L	0.0010	102	85	115			
Thorium 232	0.0515	mg/L	0.0010	103	85	115			
Uranium	0.0513	mg/L	0.00030	103	85	115			
<b>Sample ID: R08040002-002C</b>	Post Digestion Spike		Run: SUB-C99837				04/18/08 17:55		
Arsenic	0.0615	mg/L	0.0010	107	70	130			
Cadmium	0.0498	mg/L	0.010	99	70	130			
Lead	0.0501	mg/L	0.050	100	70	130			
Mercury	0.00515	mg/L	0.0010	101	70	130			
Nickel	0.0543	mg/L	0.050	95	70	130			
Silver	0.00890	mg/L	0.010	45	70	130			S
Thorium 232	0.0520	mg/L	0.0010	104	70	130			
Uranium	0.106	mg/L	0.00030	97	70	130			
<b>Sample ID: R08040002-002C</b>	Post Digestion Spike Duplicate		Run: SUB-C99837				04/18/08 18:01		
Arsenic	0.0598	mg/L	0.0010	104	70	130	2.8	20	
Cadmium	0.0485	mg/L	0.010	97	70	130	2.6	20	
Lead	0.0506	mg/L	0.050	101	70	130	1.0	20	
Mercury	0.00528	mg/L	0.0010	103	70	130	2.5	20	
Nickel	0.0525	mg/L	0.050	92	70	130	3.3	20	
Silver	0.00834	mg/L	0.010	42	70	130	0.0	20	S
Thorium 232	0.0523	mg/L	0.0010	104	70	130	0.5	20	
Uranium	0.106	mg/L	0.00030	99	70	130	0.8	20	

### Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>							Batch: C_B_31868		
<b>Sample ID: MB-31868</b>	Method Blank					Run: SUB-C99522			04/11/08 12:57
Mercury	ND	mg/L	5E-05						
<b>Sample ID: B08040977-001AMS</b>	Sample Matrix Spike					Run: SUB-C99522			04/11/08 13:09
Mercury	0.0035	mg/L	0.0010	88	70	130			
<b>Sample ID: B08040977-001AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99522			04/11/08 13:11
Mercury	0.0035	mg/L	0.0010	88	70	130	0.0	30	
<b>Sample ID: LFB-31868</b>	Laboratory Fortified Blank					Run: SUB-C99522			04/11/08 14:33
Mercury	0.0021	mg/L	0.0010	106	85	115			
<b>Sample ID: B08041116-007DMS</b>	Sample Matrix Spike					Run: SUB-C99522			04/11/08 13:42
Mercury	0.0036	mg/L	0.0010	90	70	130			
<b>Sample ID: B08041116-007DMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99522			04/11/08 13:45
Mercury	0.0036	mg/L	0.0010	89	70	130	1.1	30	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



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## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b> Batch: R34041									
<b>Sample ID: LFB0804024817-3</b>	Laboratory Fortified Blank				Run: DIONEX_080402A				04/02/08 17:09
Chloride	4.58	mg/L	0.50	92	90	110			
Fluoride	1.95	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.46	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.35	mg/L	0.10	94	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
<b>Sample ID: LFB0804024817-4</b>	Laboratory Fortified Blank				Run: DIONEX_080402A				04/02/08 17:24
Chloride	4.72	mg/L	0.50	94	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.28	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.43	mg/L	0.10	97	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
<b>Sample ID: R08040002-001AMS</b>	Sample Matrix Spike				Run: DIONEX_080402A				04/02/08 17:55
Chloride	250	mg/L	5.4	89	80	120			
Fluoride	103	mg/L	0.56	103	80	120			
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120			
Nitrogen, Nitrite as N	123	mg/L	2.9	98	80	120			
Sulfate	1100	mg/L	3.4	83	80	120			
<b>Sample ID: R08040002-001AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_080402A				04/02/08 18:11
Chloride	245	mg/L	5.4	87	80	120	2.1	10	
Fluoride	101	mg/L	0.56	101	80	120	2.3	10	
Nitrogen, Nitrate as N	112	mg/L	1.3	90	80	120	3.1	10	
Nitrogen, Nitrite as N	119	mg/L	2.9	95	80	120	2.8	10	
Sulfate	1100	mg/L	3.4	83	80	120	0.1	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration





## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R34057		
<b>Sample ID: LFB0804043239-3</b>	Laboratory Fortified Blank			Run: DIONEX_080404A			04/04/08 18:07		
Chloride	4.88	mg/L	0.50	98	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.30	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.49	mg/L	0.10	100	90	110			
<b>Sample ID: LFB0804043239-4</b>	Laboratory Fortified Blank			Run: DIONEX_080404A			04/04/08 18:22		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	2.03	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.48	mg/L	0.10	99	90	110			
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
<b>Sample ID: R08040058-001AMS</b>	Sample Matrix Spike			Run: DIONEX_080404A			04/04/08 19:09		
Chloride	257	mg/L	5.4	91	80	120			
Fluoride	108	mg/L	0.56	108	80	120			
Nitrogen, Nitrate as N	116	mg/L	1.3	92	80	120			
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120			
<b>Sample ID: R08040058-001AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080404A			04/04/08 19:24		
Chloride	247	mg/L	5.4	86	80	120	4.2	10	
Fluoride	103	mg/L	0.56	103	80	120	4.7	10	
Nitrogen, Nitrate as N	110	mg/L	1.3	88	80	120	4.9	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	4.5	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_GrAB-0425		
<b>Sample ID: MB-GrAB-0425</b>	Method Blank					Run: SUB-C99839			04/16/08 03:08
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-3	pCi/L							U
<b>Sample ID: UNAT-GrAB-0425</b>	Laboratory Control Sample					Run: SUB-C99839			04/16/08 03:08
Gross Alpha	250	pCi/L		103	70	130			
<b>Sample ID: Cs137-GrAB-0425</b>	Laboratory Control Sample					Run: SUB-C99839			04/16/08 03:08
Gross Beta	100	pCi/L		109	70	130			
<b>Sample ID: C08040142-001CMS</b>	Sample Matrix Spike					Run: SUB-C99839			04/16/08 03:08
Gross Alpha	280	pCi/L		113	70	130			
<b>Sample ID: C08040142-001CMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99839			04/16/08 03:08
Gross Alpha	210	pCi/L		87	70	130	26	14.9	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: C08040142-001CMS</b>	Sample Matrix Spike					Run: SUB-C99839			04/16/08 03:08
Gross Beta	100	pCi/L		109	70	130			
<b>Sample ID: C08040142-001CMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99839			04/16/08 03:08
Gross Beta	100	pCi/L		110	70	130	1.2	15.9	
<b>Sample ID: R08040002-002H</b>	Sample Duplicate					Run: SUB-C99839			04/16/08 20:36
Gross Alpha	6200	pCi/L					3.2	12.5	
Gross Beta	2400	pCi/L					1.6	12	

### Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.



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Gillette, WY 800-888-7175 • Rapid City, SD 800-872-1225 • College Station, TX 800-888-2218

## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1							Batch: C_R99476		
Sample ID: LCS-R99476	Laboratory Control Sample				Run: SUB-C99476		04/04/08 16:45		
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1200	pCi/L	20	83	70	130			
Sample ID: MB-R99476	Method Blank				Run: SUB-C99476		04/04/08 16:45		
Gross Gamma	ND	pCi/L							U
Sample ID: C08040148-004HDUP	Sample Duplicate				Run: SUB-C99476		04/04/08 16:45		
Gross Gamma	580	pCi/L	20				3.1	30	

### Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



## QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040002

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b> Batch: C_18234									
<b>Sample ID: C08040215-001AMS</b> Radium 226	Sample Matrix Spike 120	pCi/Filter		94	70	130			04/21/08 14:47
<b>Sample ID: C08040215-001AMSD</b> Radium 226	Sample Matrix Spike Duplicate 113	pCi/Filter		88	70	130	5.9	21.7	04/21/08 14:47
<b>Sample ID: LCS-18234</b> Radium 226	Laboratory Control Sample 11	pCi/L		76	70	130			04/21/08 16:36
<b>Sample ID: MB-18234</b> Radium 226	Method Blank 2	pCi/L							04/21/08 16:36
<b>Method: E903.0</b> Batch: C_RA226-2728									
<b>Sample ID: C08040239-004BMS</b> Radium 226	Sample Matrix Spike 6.1	pCi/L		89	70	130			04/23/08 04:05
<b>Sample ID: C08040239-004BMDS</b> Radium 226	Sample Matrix Spike Duplicate 5.9	pCi/L		86	70	130	3.0	22.3	04/23/08 04:05
<b>Sample ID: MB-RA226-2728</b> Radium 226	Method Blank 0.3	pCi/L							04/23/08 04:06
<b>Sample ID: LCS-RA226-2728</b> Radium 226	Laboratory Control Sample 6.0	pCi/L		90	70	130			04/23/08 14:56

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - 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>Dew Burdock</b>		Sample Origin: State: <b>SD</b>		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: <b>LESIEC</b>		Contact Name: <b>Cory Foreman</b>		Email: <b>cforeman@respec.com</b>		Sampler: (Please Print) <b>Eric Krantz</b>	
Invoice Address: <b>LESIEC</b>		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:		ANALYSIS REQUESTED		Contact ELI prior to RUSH sample submittal for charges and scheduling - See instruction page		Shipped by:	
<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"/> NELAC <input type="checkbox"/> State: <input type="checkbox"/> Other: _____		Number of Containers		SEE ATTACHED		Cooler ID(s):	
Sample Type: AWSVB0		Vegetation Bioassay Other		Normal Turnaround (TAT)		Receipt Temp: <b>4.1 °C</b>	
MATRIX		W		R U S H		On Ice: <input checked="" type="radio"/> Yes <input type="radio"/> No	
1 Dew Burd GW696		03/31/08 13:41		3E Return Set 14 w/m		Custody Seal Y N	
2 Dew Burd GW680		03/31/08 15:15		Set 8 Pig Test		Intact Y N	
3 Dew Burd GW697		03/31/08 16:31		Set 7 Return SE		Signature Y N	
4						Match	
5							
6							
7							
8							
9							
10							
Custody Record MUST be Signed		Relinquished by (print): <b>Eric Krantz</b>		Received by (print): <b>Steve Ireland</b>		Signature: <b>[Signature]</b>	
Date/Time: <b>4/1/08 01:30</b>		Date/Time: <b>4/1/08 8:30</b>		Date/Time: <b>4/1/08 8:30</b>		Signature: <b>[Signature]</b>	
Sample Disposal: _____		Return to Client: _____		Received by Laboratory: _____		Signature: _____	
Lab Disposal: _____		Date/Time: _____		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 forms and more.



## ANALYTICAL SUMMARY REPORT

July 29, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08040028

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 4 samples from RESPEC Inc on 4/2/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040028-001	DewBurd GW615	04/01/08 14:34	04/02/08	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
R08040028-002	DewBurd GW615	04/01/08 14:42	04/02/08	Aqueous	Same As Above
R08040028-003	DewBurd GW622	04/01/08 14:56	04/02/08	Aqueous	Same As Above



R08040028-004 DewBurd BLK01

04/01/08 16:35 04/02/08

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



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040028-001  
Client Sample ID: DewBurd GW615

Report Date: 07/29/08  
Collection Date: 04/01/08 14:34  
Date Received: 04/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	136	mg/L		5		1	A2320 B	04/07/08 10:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/07/08 10:59/mb
Bicarbonate as HCO3	166	mg/L		5		1	A2320 B	04/07/08 10:59/mb
Calcium	70.9	mg/L		0.5		1	E200.7	04/14/08 12:51/eli-c
Chloride	6	mg/L		1		1	E300.0	04/02/08 20:45/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	04/02/08 20:45/jmh
Magnesium	21.7	mg/L		0.5		1	E200.7	04/14/08 12:51/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:53/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 20:45/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 20:45/jmh
Potassium	8.7	mg/L		0.5		1	E200.7	04/14/08 12:51/eli-c
Silica	7.6	mg/L		0.5		1	E200.7	04/14/08 12:51/eli-c
Sodium	127	mg/L		0.5		1	E200.7	04/14/08 12:51/eli-c
Sulfate	378	mg/L	D	3		50	E300.0	04/02/08 19:59/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1050	umhos/cm		5.0		1	A2510 B	04/05/08 14:41/jmh
Oxidation-Reduction Potential	210	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.36	s.u.		0.01		1	A4500-H B	04/05/08 14:25/jmh
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	670	mg/L		5		1	A2540 C	04/07/08 08:43/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 12:51/eli-c
Arsenic	0.020	mg/L		0.001		1	E200.8	04/28/08 20:37/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 12:51/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 12:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/28/08 20:37/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 12:51/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 12:51/eli-c
Iron	0.70	mg/L		0.03		1	E200.7	04/14/08 12:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/28/08 20:37/eli-c
Manganese	0.08	mg/L		0.01		1	E200.7	04/14/08 12:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/28/08 20:37/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 12:51/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/28/08 20:37/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:36/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 20:37/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: R08040028-001  
Client Sample ID: DewBurd GW615

Report Date: 07/29/08  
Collection Date: 04/01/08 14:34  
Date Received: 04/02/08  
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	04/28/08 20:37/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	04/28/08 20:37/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 12:51/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 12:51/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 13:33/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:06/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.2	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta	11.6	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta MDC	3.6	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Lead 210	-2.5	pCi/L	U	1.0		1	E909.0M	04/15/08 11:15/eli-c
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	04/15/08 11:15/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	1.8	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/11/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/11/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	27.1	pCi/L		1.0		1	E909.0M	04/10/08 11:00/eli-c
Lead 210 precision (±)	2.1	pCi/L				1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.4	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.3	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	04/21/08 14:47/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: R08040028-001  
Client Sample ID: DewBurd GW615

Report Date: 07/29/08  
Collection Date: 04/01/08 14:34  
Date Received: 04/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226 MDC	0.1	pCi/L					1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.9	pCi/L		0.2			1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	04/09/08 16:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	1490	pCi/L		100			1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	67.5	pCi/L					1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	04/16/08 23:33/eli-c
Arsenic	0.024	mg/L		0.001			1	E200.8	04/16/08 23:33/eli-c
Barium	ND	mg/L		0.1			2	E200.7	04/14/08 16:46/eli-c
Beryllium	ND	mg/L		0.001			2	E200.7	04/14/08 16:46/eli-c
Boron	ND	mg/L		0.1			2	E200.7	04/14/08 16:46/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	04/16/08 23:33/eli-c
Chromium	ND	mg/L		0.05			2	E200.7	04/14/08 16:46/eli-c
Copper	ND	mg/L		0.01			1	E200.8	04/16/08 23:33/eli-c
Iron	1.35	mg/L		0.03			2	E200.7	04/14/08 16:46/eli-c
Lead	0.002	mg/L		0.001			1	E200.8	04/16/08 23:33/eli-c
Manganese	0.08	mg/L		0.01			2	E200.7	04/14/08 16:46/eli-c
Mercury	ND	mg/L		0.001			1	E245.1	04/11/08 13:52/eli-b
Molybdenum	ND	mg/L		0.1			1	E200.8	04/16/08 23:33/eli-c
Nickel	ND	mg/L		0.05			2	E200.7	04/14/08 16:46/eli-c
Selenium	ND	mg/L		0.001			1	E200.8	04/16/08 23:33/eli-c
Silver	ND	mg/L		0.005			1	E200.8	04/16/08 23:33/eli-c
Strontium	1.3	mg/L		0.1			1	E200.8	04/16/08 23:33/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	04/16/08 23:33/eli-c
Uranium	0.0026	mg/L		0.0003			1	E200.8	04/16/08 23:33/eli-c
Zinc	0.02	mg/L		0.01			1	E200.8	04/16/08 23:33/eli-c
DATA QUALITY									
A/C Balance (± 5)	1.45						1	A1030 E	06/17/08 00:00/ADM
Anions	10.8	meq/L					1	A1030 E	06/17/08 00:00/ADM
Cations	11.1	meq/L					1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	715	mg/L					1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.940						1	A1030 E	06/17/08 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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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040028-002  
**Client Sample ID:** DewBurd GW615

**Report Date:** 07/29/08  
**Collection Date:** 04/01/08 14:42  
**Date Received:** 04/02/08  
**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	04/07/08 11:15/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/07/08 11:15/mb
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	04/07/08 11:15/mb
Calcium	71.1	mg/L		0.5		1	E200.7	04/14/08 12:54/eli-c
Chloride	6	mg/L		1		1	E300.0	04/02/08 21:47/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	04/02/08 21:47/jmh
Magnesium	21.9	mg/L		0.5		1	E200.7	04/14/08 12:54/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:54/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 21:47/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 21:47/jmh
Potassium	8.6	mg/L		0.5		1	E200.7	04/14/08 12:54/eli-c
Silica	7.6	mg/L		0.5		1	E200.7	04/14/08 12:54/eli-c
Sodium	128	mg/L		0.5		1	E200.7	04/14/08 12:54/eli-c
Sulfate	370	mg/L	D	3		50	E300.0	04/02/08 21:00/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1050	umhos/cm		5.0		1	A2510 B	04/05/08 14:42/jmh
Oxidation-Reduction Potential	210	mV				1	A2580 B	04/04/08 00:00/jmh
pH	7.34	s.u.		0.01		1	A4500-H B	04/05/08 14:26/jmh
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	680	mg/L		5		1	A2540 C	04/07/08 08:43/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 12:54/eli-c
Arsenic	0.019	mg/L		0.001		1	E200.8	04/28/08 20:43/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 12:54/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 12:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/28/08 20:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 12:54/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 12:54/eli-c
Iron	0.66	mg/L		0.03		1	E200.7	04/14/08 12:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/28/08 20:43/eli-c
Manganese	0.08	mg/L		0.01		1	E200.7	04/14/08 12:54/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/28/08 20:43/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 12:54/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/28/08 20:43/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 20:43/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: R08040028-002  
Client Sample ID: DewBurd GW615

Report Date: 07/29/08  
Collection Date: 04/01/08 14:42  
Date Received: 04/02/08  
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	04/28/08 20:43/eli-c
Uranium	0.0026	mg/L		0.0003		1	E200.8	04/28/08 20:43/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 12:54/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 12:54/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 13:37/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:08/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	17.7	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha MDC	3.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta	5.8	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta MDC	3.6	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Lead 210	-13.8	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	2.1	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	0.8	pCi/L	U	1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	0.9	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	2.3	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/11/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/11/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	12.8	pCi/L		1.0		1	E909.0M	04/10/08 11:00/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.9	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.5	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.0	pCi/L	U			1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	04/21/08 14:47/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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040028-002  
Client Sample ID: DewBurd GW615

Report Date: 07/29/08  
Collection Date: 04/01/08 14:42  
Date Received: 04/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1250	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	64.9	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/16/08 23:40/eli-c
Arsenic	0.025	mg/L		0.001		1	E200.8	04/16/08 23:40/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/14/08 16:53/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	04/14/08 16:53/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/14/08 16:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 23:40/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/14/08 16:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 23:40/eli-c
Iron	1.40	mg/L		0.03		2	E200.7	04/14/08 16:53/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	04/16/08 23:40/eli-c
Manganese	0.08	mg/L		0.01		2	E200.7	04/14/08 16:53/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:54/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/16/08 23:40/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	04/14/08 16:53/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/16/08 23:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/16/08 23:40/eli-c
Strontium	1.3	mg/L		0.1		1	E200.8	04/16/08 23:40/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/16/08 23:40/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	04/16/08 23:40/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	04/16/08 23:40/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.22					1	A1030 E	06/17/08 00:00/ADM
Anions	10.7	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	11.2	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	710	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040028-003  
Client Sample ID: DewBurd GW622

Report Date: 07/29/08  
Collection Date: 04/01/08 14:56  
Date Received: 04/02/08  
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	04/07/08 11:19/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/07/08 11:19/mb
Bicarbonate as HCO3	200	mg/L		5		1	A2320 B	04/07/08 11:19/mb
Calcium	11.2	mg/L		0.5		2	E200.7	06/18/08 15:35/eli-c
Chloride	12	mg/L		1		1	E300.0	04/02/08 22:17/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/02/08 22:17/jmh
Magnesium	7.1	mg/L		0.5		2	E200.7	06/18/08 15:35/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:55/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 22:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 22:17/jmh
Potassium	11.3	mg/L		0.5		1	E200.7	04/14/08 12:58/eli-c
Silica	1.2	mg/L		0.5		1	E200.7	04/14/08 12:58/eli-c
Sodium	179	mg/L		0.5		1	E200.7	04/14/08 12:58/eli-c
Sulfate	470	mg/L	D	3		50	E300.0	04/02/08 22:02/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1260	umhos/cm		5.0		1	A2510 B	04/05/08 14:43/jmh
Oxidation-Reduction Potential	200	mV				1	A2580 B	04/04/08 00:00/jmh
pH	8.15	s.u.		0.01		1	A4500-H B	04/05/08 14:27/jmh
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	800	mg/L		5		1	A2540 C	04/07/08 08:44/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 12:58/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/28/08 20:50/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 12:58/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 12:58/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/28/08 20:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 12:58/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 12:58/eli-c
Iron	ND	mg/L		0.03		1	E200.7	04/14/08 12:58/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/28/08 20:50/eli-c
Manganese	0.02	mg/L		0.01		1	E200.7	04/14/08 12:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/28/08 20:50/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 12:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/28/08 20:50/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/28/08 20:50/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: R08040028-003  
Client Sample ID: DewBurd GW622

Report Date: 07/29/08  
Collection Date: 04/01/08 14:56  
Date Received: 04/02/08  
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	04/28/08 20:50/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/28/08 20:50/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 12:58/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	04/14/08 12:58/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 13:54/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:15/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	15.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha MDC	3.5	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta	9.2	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta MDC	4.1	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Lead 210	-3.5	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	1.1	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	0.8	pCi/L	U	1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	0.9	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	2.3	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/11/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/11/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Lead 210 precision (±)	1.1	pCi/L				1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.1	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.7	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 14:47/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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040028-003  
Client Sample ID: DewBurd GW622

Report Date: 07/29/08  
Collection Date: 04/01/08 14:56  
Date Received: 04/02/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/09/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	501	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	56.4	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/16/08 23:46/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/16/08 23:46/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/14/08 16:56/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	04/14/08 16:56/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/14/08 16:56/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 23:46/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/14/08 16:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 23:46/eli-c
Iron	0.96	mg/L		0.03		2	E200.7	04/14/08 16:56/eli-c
Lead	0.004	mg/L		0.001		1	E200.8	04/16/08 23:46/eli-c
Manganese	0.02	mg/L		0.01		2	E200.7	04/14/08 16:56/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:57/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/16/08 23:46/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	04/14/08 16:56/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/16/08 23:46/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/16/08 23:46/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	04/16/08 23:46/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/16/08 23:46/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/16/08 23:46/eli-c
Zinc	0.03	mg/L		0.01		1	E200.8	04/16/08 23:46/eli-c
DATA QUALITY								
A/C Balance (± 5)	-18.5	%				1	A1030 E	07/02/08 00:00/jmh
Anions	13.4	meq/L				1	A1030 E	07/02/08 00:00/jmh
Cations	9.23	meq/L				1	A1030 E	07/02/08 00:00/jmh
Solids, Total Dissolved Calculated	793	mg/L				1	A1030 E	07/02/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	07/02/08 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: R08040028-004  
Client Sample ID: DewBurd BLK01

Report Date: 07/29/08  
Collection Date: 04/01/08 16:35  
Date Received: 04/02/08  
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	04/07/08 11:24/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/07/08 11:24/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	04/07/08 11:24/mb
Calcium	ND	mg/L		0.5		1	E200.7	04/14/08 13:01/eli-c
Chloride	ND	mg/L		1		1	E300.0	04/02/08 22:33/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	04/02/08 22:33/jmh
Magnesium	ND	mg/L		0.5		1	E200.7	04/14/08 13:01/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:56/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/02/08 22:33/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/02/08 22:33/jmh
Potassium	ND	mg/L		0.5		1	E200.7	04/14/08 13:01/eli-c
Silica	ND	mg/L		0.5		1	E200.7	04/14/08 13:01/eli-c
Sodium	ND	mg/L		0.5		1	E200.7	04/14/08 13:01/eli-c
Sulfate	ND	mg/L		1		1	E300.0	04/02/08 22:33/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	04/05/08 14:44/jmh
Oxidation-Reduction Potential	300	mV				1	A2580 B	04/04/08 00:00/jmh
pH	5.73	s.u.		0.01		1	A4500-H B	04/05/08 14:29/jmh
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	06/17/08 00:00/ADM
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C	04/07/08 08:44/mb
- SAR calculations may not be appropriate for near blank results.								
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.7	04/14/08 13:01/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/22/08 15:38/eli-c
Barium	ND	mg/L		0.1		1	E200.7	04/14/08 13:01/eli-c
Boron	ND	mg/L		0.1		1	E200.7	04/14/08 13:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/22/08 15:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	04/14/08 13:01/eli-c
Copper	ND	mg/L		0.01		1	E200.7	04/14/08 13:01/eli-c
Iron	ND	mg/L		0.03		1	E200.7	04/14/08 13:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/22/08 15:38/eli-c
Manganese	ND	mg/L		0.01		1	E200.7	04/14/08 13:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/22/08 15:38/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	04/14/08 13:01/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/22/08 15:38/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 12:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/22/08 15:38/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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040028-004  
Client Sample ID: DewBurd BLK01

Report Date: 07/29/08  
Collection Date: 04/01/08 16:35  
Date Received: 04/02/08  
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	04/22/08 15:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/22/08 15:38/eli-c
Vanadium	ND	mg/L		0.1		1	E200.7	04/14/08 13:01/eli-c
Zinc	0.01	mg/L		0.01		1	E200.7	04/14/08 13:01/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	04/17/08 13:58/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:18/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	-0.4	pCi/L	U			1	E900.0	04/16/08 03:08/eli-c
Gross Alpha precision (±)	0.5	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Alpha MDC	1.0	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta	-2.7	pCi/L	U			1	E900.0	04/16/08 03:08/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Gross Beta MDC	2.7	pCi/L				1	E900.0	04/16/08 03:08/eli-c
Lead 210	-11	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	1.9	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	04/08/08 12:00/eli-c
Polonium 210 precision (±)	0.8	pCi/L				1	RMO-3008	04/08/08 12:00/eli-c
Radium 226	0.2	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/23/08 02:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/11/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/11/08 15:30/eli-c
Gross Gamma	0.0	pCi/L		20		1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.3	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.4	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 14:47/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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040028-004  
**Client Sample ID:** DewBurd BLK01

**Report Date:** 07/29/08  
**Collection Date:** 04/01/08 16:35  
**Date Received:** 04/02/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/21/08 14:47/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/09/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	136	pCi/L		100		1	D5072-92	04/03/08 18:27/eli-c
Radon 222 precision (±)	51.1	pCi/L				1	D5072-92	04/03/08 18:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/16/08 23:53/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	04/16/08 23:53/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/14/08 17:00/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	04/14/08 17:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/14/08 17:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/16/08 23:53/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/14/08 17:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/16/08 23:53/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/14/08 17:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/16/08 23:53/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	04/14/08 17:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/11/08 13:59/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/16/08 23:53/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	04/14/08 17:00/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/16/08 23:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/16/08 23:53/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	04/16/08 23:53/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/16/08 23:53/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/16/08 23:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/16/08 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.  
U - Not detected at minimum detectable concentration

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080407A-ALK-SEL-W							
Sample ID: LCS1_080407A	Laboratory Control Sample				Run: PH_COND1-R_080407B		04/07/08 10:43		
Alkalinity, Total as CaCO <sub>3</sub>	972	mg/L	5.0	97	90	110			
Sample ID: MBLK1_080407A	Method Blank				Run: PH_COND1-R_080407B		04/07/08 10:46		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08040028-001AMS	Sample Matrix Spike				Run: PH_COND1-R_080407B		04/07/08 11:05		
Alkalinity, Total as CaCO <sub>3</sub>	236	mg/L	5.0	94	80	120			
Sample ID: R08040028-001AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080407B		04/07/08 11:11		
Alkalinity, Total as CaCO <sub>3</sub>	240	mg/L	5.0	98	80	120	1.7	10	
Method: A2510 B		Batch: 080405_1_COND-PROBE-W							
Sample ID: LCS1-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:35		
Conductivity @ 25 C	145	umhos/cm	5.0	97	90	110			
Sample ID: LCS2-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	4950	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080405	Method Blank				Run: PH_COND2-R_080405A		04/05/08 14:37		
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080407A-SLDS-TDS-W							
Sample ID: LCS1_080407A	Laboratory Control Sample				Run: BAL-4-R_080407A		04/07/08 08:38		
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	5.0	102	90	110			
Sample ID: MBLK1_080407A	Method Blank				Run: BAL-4-R_080407A		04/07/08 08:39		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08040002-002AMS	Sample Matrix Spike				Run: BAL-4-R_080407A		04/07/08 08:41		
Solids, Total Dissolved TDS @ 180 C	4300	mg/L	5.0	104	80	120			
Sample ID: R08040002-002AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080407A		04/07/08 08:41		
Solids, Total Dissolved TDS @ 180 C	4300	mg/L	5.0	107	80	120	1.3	10	
Sample ID: R08040069-001AMS	Sample Matrix Spike				Run: BAL-4-R_080407A		04/07/08 08:48		
Solids, Total Dissolved TDS @ 180 C	3400	mg/L	5.0	107	80	120			
Sample ID: R08040069-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080407A		04/07/08 08:48		
Solids, Total Dissolved TDS @ 180 C	3400	mg/L	5.0	107	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: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE-3114-080407A		
Sample ID: MBLK	Method Blank					Run: SUB-C99208			04/07/08 12:04
Selenium	ND	mg/L	6E-05						
Sample ID: 288-54-6	Laboratory Control Sample					Run: SUB-C99208			04/07/08 12:06
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: C08040192-002EMS	Sample Matrix Spike					Run: SUB-C99208			04/07/08 12:41
Selenium	0.050	mg/L	0.0010	99	85	115			
Sample ID: C08040192-002EMSD	Sample Matrix Spike Duplicate					Run: SUB-C99208			04/07/08 12:43
Selenium	0.051	mg/L	0.0010	101	85	115	2.0	10	
Method: A3114 B							Batch: C_SEIV-3114-080407		
Sample ID: MBLK	Method Blank					Run: SUB-C99195			04/07/08 09:27
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-54-6	Laboratory Control Sample					Run: SUB-C99195			04/07/08 09:29
Selenium-IV	0.045	mg/L	0.0010	91	90	110			
Sample ID: C08040192-002EMS	Sample Matrix Spike					Run: SUB-C99195			04/07/08 10:10
Selenium-IV	0.043	mg/L	0.0010	86	85	115			
Sample ID: C08040192-002EMSD	Sample Matrix Spike Duplicate					Run: SUB-C99195			04/07/08 10:12
Selenium-IV	0.045	mg/L	0.0010	90	85	115	4.7	10	
Method: A4500-H B							Batch: 080405_1_PH-W		
Sample ID: LCS_pH-1_080405	Laboratory Control Sample					Run: PH_COND2-R_080405A			04/05/08 14:19
pH	6.94	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: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-NH3 G</b>		Batch: A2008-04-04_2_NH3_01							
<b>Sample ID: MBLK-2</b> Nitrogen, Ammonia as N	Method Blank ND	mg/L	0.01			Run: TECHAA2-R_080404A			04/04/08 09:05
<b>Sample ID: LFB-3</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.24	mg/L	0.10	98	90	110			04/04/08 09:06
<b>Sample ID: LFB-4</b> Nitrogen, Ammonia as N	Laboratory Fortified Blank 0.24	mg/L	0.10	98	90	110			04/04/08 09:08
<b>Sample ID: R08040003-001CMS</b> Nitrogen, Ammonia as N	Sample Matrix Spike 0.19	mg/L	0.10	76	80	120			04/04/08 10:49 S
<b>Sample ID: R08040003-001CMSD</b> Nitrogen, Ammonia as N	Sample Matrix Spike Duplicate 0.19	mg/L	0.10	74	80	120	3.2	10	04/04/08 10:50 S
<b>Method: D5072-92</b>		Batch: C_R99230							
<b>Sample ID: C08040148-009GDUP</b> Radon 222	Sample Duplicate 464	pCi/L	100			Run: SUB-C99230	5.5		04/03/08 18:27 30
<b>Sample ID: MB-R99230</b> Radon 222	Method Blank -10	pCi/L				Run: SUB-C99230			04/03/08 18:27 U
<b>Sample ID: LCS-R99230</b> Radon 222	Laboratory Control Sample 298	pCi/L	100	98	70	130			04/03/08 18:27

### 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: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_18214		
<b>Sample ID: MB-18214</b>	Method Blank		Run: SUB-C99617				04/14/08 16:36		
Barium	ND	mg/L	0.004						
Boron	0.008	mg/L	0.006						
Chromium	ND	mg/L	0.003						
Iron	ND	mg/L	0.005						
Manganese	ND	mg/L	0.0008						
Nickel	ND	mg/L	0.02						
<b>Sample ID: LCS-18214</b>	Laboratory Control Sample		Run: SUB-C99617				04/14/08 16:39		
Barium	0.497	mg/L	0.10	99	85	115			
Boron	0.503	mg/L	0.10	101	85	115			
Chromium	0.508	mg/L	0.050	102	85	115			
Iron	0.504	mg/L	0.030	101	85	115			
Manganese	0.484	mg/L	0.010	97	85	115			
Nickel	0.474	mg/L	0.050	95	85	115			
<b>Sample ID: C08040196-003D MS</b>	Sample Matrix Spike		Run: SUB-C99617				04/14/08 17:23		
Barium	0.521	mg/L	0.10	100	70	130			
Boron	0.573	mg/L	0.10	100	70	130			
Chromium	0.502	mg/L	0.050	100	70	130			
Iron	0.621	mg/L	0.030	103	70	130			
Manganese	0.566	mg/L	0.010	98	70	130			
Nickel	0.459	mg/L	0.050	92	70	130			
<b>Sample ID: C08040196-003D MSD</b>	Sample Matrix Spike Duplicate		Run: SUB-C99617				04/14/08 17:26		
Barium	0.517	mg/L	0.10	99	70	130	0.7	20	
Boron	0.566	mg/L	0.10	99	70	130	1.3	20	
Chromium	0.501	mg/L	0.050	100	70	130	0.3	20	
Iron	0.621	mg/L	0.030	103	70	130	0.0	20	
Manganese	0.559	mg/L	0.010	96	70	130	1.2	20	
Nickel	0.481	mg/L	0.050	96	70	130	4.7	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.7</b>							Batch: C_R99617		
<b>Sample ID: MB-080414A</b>	Method Blank				Run: SUB-C99617		04/14/08 12:04		
Silica	ND	mg/L	0.06						
Aluminum	ND	mg/L	0.008						
Barium	ND	mg/L	0.006						
Boron	0.006	mg/L	0.004						
Calcium	ND	mg/L	0.04						
Chromium	ND	mg/L	0.003						
Copper	ND	mg/L	0.005						
Iron	ND	mg/L	0.002						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0004						
Molybdenum	ND	mg/L	0.01						
Potassium	ND	mg/L	0.08						
Sodium	ND	mg/L	0.06						
Vanadium	ND	mg/L	0.006						
Zinc	ND	mg/L	0.004						
<b>Sample ID: LFB-080414A</b>	Laboratory Fortified Blank				Run: SUB-C99617		04/14/08 12:08		
Silica	0.96	mg/L	0.10	96	85	125			
Aluminum	0.92	mg/L	0.10	92	85	125			
Barium	0.93	mg/L	0.10	93	85	125			
Boron	0.95	mg/L	0.10	94	85	125			
Calcium	51	mg/L	0.50	102	85	125			
Chromium	0.95	mg/L	0.050	95	85	125			
Copper	0.89	mg/L	0.010	89	85	125			
Iron	0.93	mg/L	0.030	93	85	125			
Magnesium	50	mg/L	0.50	100	85	125			
Manganese	0.91	mg/L	0.010	91	85	125			
Molybdenum	0.99	mg/L	0.10	99	85	125			
Potassium	47	mg/L	0.50	94	85	125			
Sodium	48	mg/L	0.50	96	85	125			
Vanadium	0.97	mg/L	0.10	97	85	125			
Zinc	0.96	mg/L	0.010	96	85	125			
<b>Sample ID: C08040196-001CMS2</b>	Sample Matrix Spike				Run: SUB-C99617		04/14/08 13:08		
Aluminum	0.872	mg/L	0.10	86	70	130			
Barium	0.916	mg/L	0.10	89	70	130			
Boron	0.930	mg/L	0.10	86	70	130			
Chromium	0.901	mg/L	0.050	88	70	130			
Copper	0.852	mg/L	0.010	84	70	130			
Iron	0.907	mg/L	0.030	87	70	130			
Manganese	0.926	mg/L	0.010	86	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: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99617		
Sample ID: C08040196-001CMS2	Sample Matrix Spike		Run: SUB-C99617				04/14/08 13:08		
Molybdenum	0.922	mg/L	0.10	90	70	130			
Vanadium	0.938	mg/L	0.10	92	70	130			
Zinc	0.978	mg/L	0.010	96	70	130			
Calcium	74.4	mg/L	1.0	91	70	130			
Magnesium	56.4	mg/L	1.0	91	70	130			
Potassium	55.4	mg/L	1.0	90	70	130			
Silica	8.74	mg/L	0.10		70	130			A
Sodium	303	mg/L	1.0		70	130			A
Sample ID: C08040196-001CMS2	Sample Matrix Spike Duplicate		Run: SUB-C99617				04/14/08 13:11		
Aluminum	0.863	mg/L	0.10	85	70	130	1.1	20	
Barium	0.911	mg/L	0.10	88	70	130	0.6	20	
Boron	0.933	mg/L	0.10	86	70	130	0.3	20	
Chromium	0.893	mg/L	0.050	88	70	130	0.9	20	
Copper	0.849	mg/L	0.010	83	70	130	0.4	20	
Iron	0.913	mg/L	0.030	88	70	130	0.7	20	
Manganese	0.922	mg/L	0.010	86	70	130	0.4	20	
Molybdenum	0.915	mg/L	0.10	90	70	130	0.8	20	
Vanadium	0.932	mg/L	0.10	91	70	130	0.7	20	
Zinc	0.969	mg/L	0.010	95	70	130	0.9	20	
Calcium	74.5	mg/L	1.0	91	70	130	0.1	20	
Magnesium	56.5	mg/L	1.0	91	70	130	0.2	20	
Potassium	55.9	mg/L	1.0	91	70	130	0.9	20	
Silica	8.79	mg/L	0.10		70	130	0.6	20	A
Sodium	303	mg/L	1.0		70	130	0.1	20	A
Sample ID: C08040167-001CMS2	Sample Matrix Spike		Run: SUB-C99617				04/14/08 14:01		
Aluminum	0.873	mg/L	0.10	85	70	130			
Barium	0.944	mg/L	0.10	89	70	130			
Boron	0.963	mg/L	0.10	92	70	130			
Chromium	0.919	mg/L	0.050	90	70	130			
Copper	0.843	mg/L	0.010	83	70	130			
Iron	0.973	mg/L	0.030	88	70	130			
Manganese	0.899	mg/L	0.010	86	70	130			
Molybdenum	0.941	mg/L	0.10	92	70	130			
Vanadium	0.939	mg/L	0.10	92	70	130			
Zinc	0.967	mg/L	0.010	95	70	130			
Calcium	104	mg/L	1.0	87	70	130			
Magnesium	54.3	mg/L	1.0	93	70	130			
Potassium	47.1	mg/L	1.0	88	70	130			
Silica	15.4	mg/L	0.10		70	130			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: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99617		
Sample ID: C08040167-001CMS2	Sample Matrix Spike			Run: SUB-C99617			04/14/08 14:01		
Sodium	60.9	mg/L	1.0	89	70	130			
Sample ID: C08040167-001CMSD2	Sample Matrix Spike Duplicate			Run: SUB-C99617			04/14/08 14:04		
Aluminum	0.875	mg/L	0.10	86	70	130	0.2	20	
Barium	0.940	mg/L	0.10	89	70	130	0.3	20	
Boron	0.970	mg/L	0.10	93	70	130	0.7	20	
Chromium	0.917	mg/L	0.050	90	70	130	0.2	20	
Copper	0.848	mg/L	0.010	83	70	130	0.6	20	
Iron	0.977	mg/L	0.030	88	70	130	0.4	20	
Manganese	0.898	mg/L	0.010	86	70	130	0.1	20	
Molybdenum	0.939	mg/L	0.10	92	70	130	0.2	20	
Vanadium	0.934	mg/L	0.10	92	70	130	0.5	20	
Zinc	0.957	mg/L	0.010	94	70	130	1.1	20	
Calcium	104	mg/L	1.0	87	70	130	0.3	20	
Magnesium	54.2	mg/L	1.0	92	70	130	0.2	20	
Potassium	47.1	mg/L	1.0	88	70	130	0.0	20	
Silica	15.4	mg/L	0.10		0	0			
Sodium	61.0	mg/L	1.0	89	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: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18214		
<b>Sample ID: MB-18214</b>	Method Blank		Run: SUB-C99752				04/16/08 21:17		
Antimony	ND	mg/L	0.0002						
Arsenic	7E-05	mg/L	5E-05						
Cadmium	ND	mg/L	3E-05						
Copper	ND	mg/L	0.0002						
Lead	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Silver	9E-05	mg/L	4E-05						
Strontium	0.00010	mg/L	8E-05						
Thallium	7E-05	mg/L	3E-05						
Uranium	0.0001	mg/L	3E-05						
Zinc	0.003	mg/L	0.0003						
<b>Sample ID: LCS-18214</b>	Laboratory Control Sample		Run: SUB-C99752				04/16/08 21:24		
Antimony	0.510	mg/L	0.050	102	85	115			
Arsenic	0.525	mg/L	0.0010	105	85	115			
Cadmium	0.522	mg/L	0.010	104	85	115			
Copper	0.513	mg/L	0.010	103	85	115			
Lead	0.514	mg/L	0.050	103	85	115			
Molybdenum	0.508	mg/L	0.10	102	85	115			
Selenium	0.528	mg/L	0.0020	106	85	115			
Silver	0.159	mg/L	0.010	79	85	115			S
Strontium	0.519	mg/L	0.10	104	85	115			
Thallium	0.511	mg/L	0.10	102	85	115			
Uranium	0.551	mg/L	0.00032	110	85	115			
Zinc	0.547	mg/L	0.010	109	85	115			
- The LCS Silver recovery was outside of the recommended acceptance range. The MS and MSD recoveries were within acceptance range, and so the batch is accepted.									
<b>Sample ID: C08040196-003D MS4</b>	Post Digestion Spike		Run: SUB-C99752				04/17/08 00:20		
Antimony	0.0213	mg/L	0.050	106	70	130			
Arsenic	0.0230	mg/L	0.0010	106	70	130			
Cadmium	0.0196	mg/L	0.010	98	70	130			
Copper	0.0203	mg/L	0.010	97	70	130			
Lead	0.0204	mg/L	0.050	102	70	130			
Molybdenum	0.0255	mg/L	0.10	106	70	130			
Selenium	0.0971	mg/L	0.0010	97	70	130			
Silver	0.0200	mg/L	0.010	100	70	130			
Strontium	0.931	mg/L	0.10		70	130			A
Thallium	0.0196	mg/L	0.10	98	70	130			
Uranium	0.0246	mg/L	0.00030	107	70	130			
Zinc	0.0258	mg/L	0.010	96	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: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18214
Sample ID: C08040196-003D MSD4	Post Digestion Spike Duplicate				Run: SUB-C99752				04/17/08 00:27
Antimony	0.0215	mg/L	0.050	107	70	130	0.0	20	
Arsenic	0.0222	mg/L	0.0010	102	70	130	3.7	20	
Cadmium	0.0198	mg/L	0.010	99	70	130	1.0	20	
Copper	0.0200	mg/L	0.010	96	70	130	1.2	20	
Lead	0.0207	mg/L	0.050	103	70	130	0.0	20	
Molybdenum	0.0260	mg/L	0.10	108	70	130	0.0	20	
Selenium	0.0971	mg/L	0.0010	97	70	130	0.0	20	
Silver	0.0205	mg/L	0.010	102	70	130	2.5	20	
Strontium	0.941	mg/L	0.10		70	130	1.0	20	A
Thallium	0.0202	mg/L	0.10	101	70	130	0.0	20	
Uranium	0.0249	mg/L	0.00030	109	70	130	1.2	20	
Zinc	0.0254	mg/L	0.010	94	70	130	1.4	20	
Method: E200.8									Batch: C_18234
Sample ID: MB-18234	Method Blank				Run: SUB-C99827				04/17/08 13:25
Uranium	0.0008	mg/L	2E-05						
Sample ID: LCS1-18234	Laboratory Control Sample				Run: SUB-C99827				04/17/08 13:29
Uranium	0.0512	mg/L	0.00030	97	80	120			
Sample ID: R08040058-001I	Post Digestion Spike				Run: SUB-C99827				04/17/08 14:18
Uranium	0.0126	mg/L	0.00030	95	70	130			
Sample ID: R08040058-001I	Post Digestion Spike Duplicate				Run: SUB-C99827				04/17/08 14:22
Uranium	0.0126	mg/L	0.00030	95	70	130	0.1	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: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100014		
Sample ID: LRB	Method Blank		Run: SUB-C100014				04/22/08 14:44		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	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-C100014				04/22/08 14:51		
Arsenic	0.0530	mg/L	0.0010	106	85	115			
Cadmium	0.0534	mg/L	0.0010	107	85	115			
Lead	0.0538	mg/L	0.0010	108	85	115			
Mercury	0.00542	mg/L	0.0010	108	85	115			
Nickel	0.0535	mg/L	0.0010	107	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Thorium 232	0.0533	mg/L	0.0010	106	85	115			
Uranium	0.0523	mg/L	0.00030	105	85	115			
Sample ID: R08040028-004C	Post Digestion Spike		Run: SUB-C100014				04/22/08 15:45		
Arsenic	0.0514	mg/L	0.0010	103	70	130			
Cadmium	0.0511	mg/L	0.010	102	70	130			
Lead	0.0519	mg/L	0.050	104	70	130			
Mercury	0.00518	mg/L	0.0010	104	70	130			
Nickel	0.0507	mg/L	0.050	101	70	130			
Silver	0.0165	mg/L	0.010	82	70	130			
Thorium 232	0.0511	mg/L	0.0010	102	70	130			
Uranium	0.0513	mg/L	0.00030	102	70	130			
Sample ID: R08040028-004C	Post Digestion Spike Duplicate		Run: SUB-C100014				04/22/08 16:12		
Arsenic	0.0514	mg/L	0.0010	103	70	130	0.1	20	
Cadmium	0.0515	mg/L	0.010	103	70	130	0.8	20	
Lead	0.0519	mg/L	0.050	104	70	130	0.0	20	
Mercury	0.00524	mg/L	0.0010	105	70	130	1.1	20	
Nickel	0.0511	mg/L	0.050	102	70	130	0.8	20	
Silver	0.0175	mg/L	0.010	87	70	130	6.0	20	
Thorium 232	0.0513	mg/L	0.0010	103	70	130	0.4	20	
Uranium	0.0506	mg/L	0.00030	101	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: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100330		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C100330				04/28/08 11:48		
Arsenic	ND	mg/L	6E-05						
Cadmium	2E-05	mg/L	1E-05						
Lead	ND	mg/L	3E-05						
Mercury	ND	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Silver	ND	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C100330				04/28/08 11:55		
Arsenic	0.0529	mg/L	0.0010	106	85	115			
Cadmium	0.0525	mg/L	0.0010	105	85	115			
Lead	0.0528	mg/L	0.0010	106	85	115			
Mercury	0.00553	mg/L	0.0010	111	85	115			
Nickel	0.0533	mg/L	0.0010	107	85	115			
Silver	0.0206	mg/L	0.0010	103	85	115			
Thorium 232	0.0525	mg/L	0.0010	105	85	115			
Uranium	0.0525	mg/L	0.00030	105	85	115			
<b>Sample ID: R08040028-003C</b>	Post Digestion Spike		Run: SUB-C100330				04/28/08 20:57		
Arsenic	0.0519	mg/L	0.0010	102	70	130			
Cadmium	0.0491	mg/L	0.010	98	70	130			
Lead	0.0515	mg/L	0.050	103	70	130			
Mercury	0.00545	mg/L	0.0010	109	70	130			
Nickel	0.0490	mg/L	0.050	98	70	130			
Silver	0.0134	mg/L	0.010	67	70	130			S
Thorium 232	0.0529	mg/L	0.0010	106	70	130			
Uranium	0.0533	mg/L	0.00030	106	70	130			
<b>Sample ID: R08040028-003C</b>	Post Digestion Spike Duplicate		Run: SUB-C100330				04/28/08 21:24		
Arsenic	0.0522	mg/L	0.0010	103	70	130	0.6	20	
Cadmium	0.0491	mg/L	0.010	98	70	130	0.0	20	
Lead	0.0511	mg/L	0.050	102	70	130	0.7	20	
Mercury	0.00549	mg/L	0.0010	110	70	130	0.7	20	
Nickel	0.0486	mg/L	0.050	97	70	130	0.0	20	
Silver	0.0120	mg/L	0.010	60	70	130	11	20	S
Thorium 232	0.0534	mg/L	0.0010	107	70	130	0.9	20	
Uranium	0.0536	mg/L	0.00030	107	70	130	0.5	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: 07/29/08

Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>							Batch: C_B_31868		
<b>Sample ID: MB-31868</b>	Method Blank				Run: SUB-C99522		04/11/08 12:57		
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-31868</b>	Laboratory Fortified Blank				Run: SUB-C99522		04/11/08 14:33		
Mercury	0.0021	mg/L	0.0010	106	85	115			
<b>Sample ID: B08041116-007DMS</b>	Sample Matrix Spike				Run: SUB-C99522		04/11/08 13:42		
Mercury	0.0036	mg/L	0.0010	90	70	130			
<b>Sample ID: B08041116-007DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C99522		04/11/08 13:45		
Mercury	0.0036	mg/L	0.0010	89	70	130	1.1	30	
<b>Method: E300.0</b>							Batch: R34041		
<b>Sample ID: LFB0804024817-3</b>	Laboratory Fortified Blank				Run: DIONEX_080402A		04/02/08 17:09		
Chloride	4.58	mg/L	0.50	92	90	110			
Fluoride	1.95	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N	2.46	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N	2.35	mg/L	0.10	94	90	110			
Sulfate	13.7	mg/L	1.0	91	90	110			
<b>Sample ID: LFB0804024817-4</b>	Laboratory Fortified Blank				Run: DIONEX_080402A		04/02/08 17:24		
Chloride	4.72	mg/L	0.50	94	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.28	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.43	mg/L	0.10	97	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
<b>Sample ID: R08040028-002AMS</b>	Sample Matrix Spike				Run: DIONEX_080402A		04/02/08 21:16		
Chloride	247	mg/L	5.4	90	80	120			
Fluoride	105	mg/L	0.56	105	80	120			
Nitrogen, Nitrate as N	115	mg/L	1.3	92	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	991	mg/L	3.4	83	80	120			
<b>Sample ID: R08040028-002AMSD</b>	Sample Matrix Spike Duplicate				Run: DIONEX_080402A		04/02/08 21:31		
Chloride	237	mg/L	5.4	86	80	120	3.9	10	
Fluoride	101	mg/L	0.56	101	80	120	3.6	10	
Nitrogen, Nitrate as N	111	mg/L	1.3	89	80	120	3.7	10	
Nitrogen, Nitrite as N	119	mg/L	2.9	95	80	120	3.9	10	
Sulfate	975	mg/L	3.4	81	80	120	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: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0425		
Sample ID: MB-GrAB-0425	Method Blank				Run: SUB-C99839		04/16/08 03:08		
Gross Alpha	-0.4	pCi/L							U
Gross Beta	-3	pCi/L							U
Sample ID: UNAT-GrAB-0425	Laboratory Control Sample				Run: SUB-C99839		04/16/08 03:08		
Gross Alpha	250	pCi/L		103	70	130			
Sample ID: Cs137-GrAB-0425	Laboratory Control Sample				Run: SUB-C99839		04/16/08 03:08		
Gross Beta	100	pCi/L		109	70	130			
Sample ID: C08040142-001CMS	Sample Matrix Spike				Run: SUB-C99839		04/16/08 03:08		
Gross Alpha	280	pCi/L		113	70	130			
Sample ID: C08040142-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-C99839		04/16/08 03:08		
Gross Alpha	210	pCi/L		87	70	130	26	14.9	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: C08040142-001CMS	Sample Matrix Spike				Run: SUB-C99839		04/16/08 03:08		
Gross Beta	100	pCi/L		109	70	130			
Sample ID: C08040142-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-C99839		04/16/08 03:08		
Gross Beta	100	pCi/L		110	70	130	1.2	15.9	
Method: E901.1							Batch: C_R99476		
Sample ID: LCS-R99476	Laboratory Control Sample				Run: SUB-C99476		04/04/08 16:45		
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1200	pCi/L	20	83	70	130			
Sample ID: MB-R99476	Method Blank				Run: SUB-C99476		04/04/08 16:45		
Gross Gamma	ND	pCi/L							U
Sample ID: C08040148-004HDUP	Sample Duplicate				Run: SUB-C99476		04/04/08 16:45		
Gross Gamma	580	pCi/L	20				3.1	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: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>							Batch: C_18234		
<b>Sample ID: C08040215-001AMS</b> Radium 226	Sample Matrix Spike 120	pCi/Filter		94	70	130			04/21/08 14:47
<b>Sample ID: C08040215-001AMSD</b> Radium 226	Sample Matrix Spike Duplicate 113	pCi/Filter		88	70	130	5.9	21.7	04/21/08 14:47
<b>Sample ID: LCS-18234</b> Radium 226	Laboratory Control Sample 11	pCi/L		76	70	130			04/21/08 16:36
<b>Sample ID: MB-18234</b> Radium 226	Method Blank 2	pCi/L							04/21/08 16:36
<b>Method: E903.0</b>							Batch: C_RA226-2728		
<b>Sample ID: C08040239-004BMS</b> Radium 226	Sample Matrix Spike 6.1	pCi/L		89	70	130			04/23/08 04:05
<b>Sample ID: C08040239-004BMSD</b> Radium 226	Sample Matrix Spike Duplicate 5.9	pCi/L		86	70	130	3.0	22.3	04/23/08 04:05
<b>Sample ID: MB-RA226-2728</b> Radium 226	Method Blank 0.3	pCi/L							04/23/08 04:06
<b>Sample ID: LCS-RA226-2728</b> Radium 226	Laboratory Control Sample 6.0	pCi/L		90	70	130			04/23/08 14:56
<b>Method: E907.0</b>							Batch: C_18234		
<b>Sample ID: R08040058-001I</b> Thorium 230	Sample Matrix Spike 10.3	pCi/L	0.20	83	70	130			04/09/08 16:00
<b>Sample ID: R08040058-001I</b> Thorium 230	Sample Matrix Spike Duplicate 11.3	pCi/L	0.20	90	70	130	8.9	30	04/09/08 16:00
<b>Sample ID: LCS-R99603</b> Thorium 230	Laboratory Control Sample 50.8	pCi/L	0.20	103	70	130			04/09/08 16:00
<b>Sample ID: MB-R99603</b> Thorium 230	Method Blank 1	pCi/L							04/09/08 16:00

### 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: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R99824		
Sample ID: LCS-R99824	Laboratory Control Sample				Run: SUB-C99824		04/11/08 15:30		
Thorium 230	6.50	pCi/L	0.20	93	70	130			
Sample ID: C08040254-001BMS	Sample Matrix Spike				Run: SUB-C99824		04/11/08 15:30		
Thorium 230	14.1	pCi/L	0.20	88	70	130			
Sample ID: C08040254-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C99824		04/11/08 15:30		
Thorium 230	18.8	pCi/L	0.20	115	70	130	29	30	
Sample ID: MB-R99824	Method Blank				Run: SUB-C99824		04/11/08 15:30		
Thorium 230	0.02	pCi/L							U
Method: E909.0M							Batch: C_18234		
Sample ID: R08040028-002I	Sample Matrix Spike				Run: SUB-C100050		04/10/08 11:00		
Lead 210	1200	pCi/L	1.0	104	70	130			
Sample ID: R08040028-002I	Sample Matrix Spike Duplicate				Run: SUB-C100050		04/10/08 11:00		
Lead 210	980	pCi/L	1.0	82	70	130	23	30	
Sample ID: MB-R100050	Method Blank				Run: SUB-C100050		04/10/08 11:00		
Lead 210		pCi/L							U
Sample ID: LCS-R100050	Laboratory Control Sample				Run: SUB-C100050		04/10/08 11:00		
Lead 210	110	pCi/L	1.0	90	70	130			
Method: E909.0M							Batch: C_R100194		
Sample ID: R08040058-001H	Sample Matrix Spike				Run: SUB-C100194		04/11/08 09:45		
Lead 210	600	pCi/L	1.0	101	70	130			
Sample ID: R08040058-001H	Sample Matrix Spike Duplicate				Run: SUB-C100194		04/11/08 09:45		
Lead 210	590	pCi/L	1.0	100	70	130	1.2	30	
Sample ID: MB-R100194	Method Blank				Run: SUB-C100194		04/11/08 09:45		
Lead 210		pCi/L							U
Sample ID: LCS-R100194	Laboratory Control Sample				Run: SUB-C100194		04/11/08 09:45		
Lead 210	120	pCi/L	1.0	104	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: 07/29/08  
Work Order: R08040028

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E909.0M</b>							Batch: C_R100292		
Sample ID: C08040264-009AMS	Sample Matrix Spike				Run: SUB-C100292				04/15/08 11:15
Lead 210	490	pCi/L	1.0	83	70	130			
Sample ID: C08040264-009AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100292				04/15/08 11:15
Lead 210	500	pCi/L	1.0	85	70	130	2.5	30	
Sample ID: MB-R100292	Method Blank				Run: SUB-C100292				04/15/08 11:15
Lead 210		pCi/L							U
Sample ID: LCS-R100292	Laboratory Control Sample				Run: SUB-C100292				04/15/08 11:15
Lead 210	110	pCi/L	1.0	91	70	130			
<b>Method: RMO-3008</b>							Batch: C_18234		
Sample ID: C08040246-003FMS	Sample Matrix Spike				Run: SUB-C100641				04/29/08 15:30
Polonium 210	88	pCi/L	1.0	99	70	130			
Sample ID: C08040246-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C100641				04/29/08 15:30
Polonium 210	87	pCi/L	1.0	98	70	130	1.6	30	
Sample ID: LCS-18234	Laboratory Control Sample				Run: SUB-C100641				04/29/08 15:30
Polonium 210	180	pCi/L	1.0	101	70	130			
Sample ID: MB-18234	Method Blank				Run: SUB-C100641				04/29/08 15:30
Polonium 210	2	pCi/L							
<b>Method: RMO-3008</b>							Batch: C_R99727		
Sample ID: C08040196-002HMS	Sample Matrix Spike				Run: SUB-C99727				04/08/08 12:00
Polonium 210	210	pCi/L	1.0	118	70	130			
Sample ID: C08040196-002HMSD	Sample Matrix Spike Duplicate				Run: SUB-C99727				04/08/08 12:00
Polonium 210	170	pCi/L	1.0	99	70	130	17	30	
Sample ID: LCS-R99727	Laboratory Control Sample				Run: SUB-C99727				04/08/08 12:00
Polonium 210	77	pCi/L	1.0	86	70	130			
Sample ID: MB-R99727	Method Blank				Run: SUB-C99727				04/08/08 12:00
Polonium 210	1	pCi/L							

### 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 \_\_\_\_ of \_\_\_\_

PLEASE PRINT - Provide as much information as possible.

Company Name: <b>LESIEC</b>		Project Name, PWS, Permit, Etc. <b>Burdock Dewey budock</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>LESIEC</b>		Contact Name: <b>any. foreman reple can</b>		Email: <b>any. foreman reple can</b>	Sampler: (Please Print) <b>Lesiec</b>
Invoice Address: <b>LESIEC</b>		Invoice Contact & Phone: <b>any. foreman reple can</b>		Purchase Order:	Quoter/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					
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>Burdock 6/15</b>					
2. <b>Burdock 6/15</b>		04/01/08	14:34	W	
3. <b>Burdock 6/15</b>		04/01/08	14:42	W	
4. <b>Burdock 6/15</b>		04/01/08	14:56	W	
5. <b>Burdock 6/15</b>		04/01/08		W	
6. <b>Burdock 6/15</b>		04/01/08	16:35	W	
7. <b>Burdock 6/15</b>					
8. <b>Burdock 6/15</b>					
9. <b>Burdock 6/15</b>					
10. <b>Burdock 6/15</b>					
Custody Record Relinquished by (print): <b>Lesiec</b> Date/Time: <b>04/01/08 08:15</b> Relinquished by (print): <b>Lesiec</b> Date/Time: <b>04/01/08 08:15</b>		Signature: <b>Lesiec</b>		Received by (print): <b>Lesiec</b> Date/Time: <b>04/01/08 08:15</b>	Signature: <b>Lesiec</b>
Signed		Sample Disposal:		Lab Disposal:	Received by Laboratory: <b>Lesiec</b> Date/Time: <b>04/01/08 08:15</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 free schedule, forms, and links.



## ANALYTICAL SUMMARY REPORT

June 24, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08040058

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 1 sample from RESPEC Inc on 4/3/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040058-001	DewBurd GW688	04/02/08 18:07	04/03/08	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: R08040058-001  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/02/08 18:07  
Date Received: 04/03/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	98	mg/L		5		1	A2320 B	04/07/08 11:29/mb
Carbonate as CO3	53	mg/L		5		1	A2320 B	04/07/08 11:29/mb
Bicarbonate as HCO3	12	mg/L		5		1	A2320 B	04/07/08 11:29/mb
Calcium	25.8	mg/L		0.5		2	E200.7	04/16/08 14:55/eli-c
Chloride	13	mg/L		1		1	E300.0	04/04/08 19:39/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	04/04/08 19:39/jmh
Magnesium	13.6	mg/L		0.5		2	E200.7	04/16/08 14:55/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH3 G	04/04/08 10:57/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/04/08 19:39/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/04/08 19:39/jmh
Potassium	16.8	mg/L		0.5		2	E200.7	04/16/08 14:55/eli-c
Silica	7.9	mg/L		0.5		2	E200.7	04/16/08 14:55/eli-c
Sodium	193	mg/L		0.5		2	E200.7	04/16/08 14:55/eli-c
Sulfate	428	mg/L	D	3		50	E300.0	04/04/08 18:53/jmh
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1180	umhos/cm		5.0		1	A2510 B	04/05/08 14:45/jmh
Oxidation-Reduction Potential	110	mV				1	A2580 B	04/04/08 00:00/jmh
pH	10.3	s.u.		0.01		1	A4500-H B	04/05/08 14:30/jmh
Sodium Adsorption Ratio (SAR)	7.6	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	690	mg/L		5		1	A2540 C	04/07/08 08:46/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	04/16/08 14:55/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/25/08 20:21/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/16/08 14:55/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/16/08 14:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/25/08 20:21/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/16/08 14:55/eli-c
Copper	ND	mg/L		0.01		2	E200.7	04/16/08 14:55/eli-c
Iron	ND	mg/L		0.03		2	E200.7	04/16/08 14:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/25/08 20:21/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	04/16/08 14:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/25/08 20:21/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/16/08 14:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/25/08 20:21/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/07/08 13:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:53/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: R08040058-001  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/02/08 18:07  
Date Received: 04/03/08  
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	04/25/08 20:21/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/25/08 20:21/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/16/08 14:55/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/16/08 14:55/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L	D	0.0008		1	E200.8	04/17/08 14:14/eli-c
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/07/08 10:31/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/07/08 15:12/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	2.9	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Gross Alpha precision (±)	1.9	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Gross Alpha MDC	2.8	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Gross Beta	8.8	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Gross Beta precision (±)	2.0	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Gross Beta MDC	3.1	pCi/L				1	E900.0	04/25/08 22:38/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	04/11/08 09:45/eli-c
Lead 210 precision (±)	0.6	pCi/L				1	E909.0M	04/11/08 09:45/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	04/08/08 13:00/eli-c
Polonium 210 precision (±)	0.8	pCi/L				1	RMO-3008	04/08/08 13:00/eli-c
Radium 226	0.3	pCi/L				1	E903.0	04/29/08 15:46/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	04/29/08 15:46/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	04/29/08 15:46/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/14/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/14/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	04/10/08 15:29/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/10/08 15:29/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.4	pCi/L	U	1.0		1	E909.0M	04/10/08 11:00/eli-c
Lead 210 precision (±)	0.5	pCi/L				1	E909.0M	04/10/08 11:00/eli-c
Polonium 210	1.0	pCi/L		1.0		1	RMO-3008	04/29/08 15:30/eli-c
Polonium 210 precision (±)	0.64	pCi/L				1	RMO-3008	04/29/08 15:30/eli-c
Radium 226	0.9	pCi/L				1	E903.0	04/21/08 16:36/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	04/21/08 16:36/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: R08040058-001  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/02/08 18:07  
Date Received: 04/03/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226 MDC	0.1	pCi/L				1	E903.0	04/21/08 16:36/eli-c
Thorium 230	0.7	pCi/L		0.2		1	E907.0	04/09/08 16:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	04/09/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	608	pCi/L	H	100		1	D5072-92	04/07/08 14:17/eli-c
Radon 222 precision (±)	89.1	pCi/L	H			1	D5072-92	04/07/08 14:17/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	04/11/08 00:59/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/11/08 00:59/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 00:59/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	04/11/08 19:02/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/15/08 13:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/11/08 00:59/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 00:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/11/08 19:02/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	04/15/08 13:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/11/08 00:59/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	04/11/08 19:02/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/11/08 00:59/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/16/08 15:46/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/11/08 00:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 19:02/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/11/08 00:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/11/08 00:59/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	04/11/08 00:59/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/11/08 00:59/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/11/08 00:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/11/08 19:02/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.0600					1	A1030 E	06/17/08 00:00/ADM
Anions	11.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	11.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	771	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.890					1	A1030 E	06/17/08 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.  
H - Analysis performed past recommended holding time.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080407A-ALK-SEL-W							
Sample ID: LCS1_080407A	Laboratory Control Sample				Run: PH_COND1-R_080407B		04/07/08 10:43		
Alkalinity, Total as CaCO <sub>3</sub>	972	mg/L	5.0	97	90	110			
Sample ID: MBLK1_080407A	Method Blank				Run: PH_COND1-R_080407B		04/07/08 10:46		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08040028-001AMS	Sample Matrix Spike				Run: PH_COND1-R_080407B		04/07/08 11:05		
Alkalinity, Total as CaCO <sub>3</sub>	236	mg/L	5.0	94	80	120			
Sample ID: R08040028-001AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080407B		04/07/08 11:11		
Alkalinity, Total as CaCO <sub>3</sub>	240	mg/L	5.0	98	80	120	1.7	10	
Method: A2510 B		Batch: 080405_1_COND-PROBE-W							
Sample ID: LCS1-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:35		
Conductivity @ 25 C	145	umhos/cm	5.0	97	90	110			
Sample ID: LCS2-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	4950	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080405	Laboratory Control Sample				Run: PH_COND2-R_080405A		04/05/08 14:36		
Conductivity @ 25 C	1400	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_080405	Method Blank				Run: PH_COND2-R_080405A		04/05/08 14:37		
Conductivity @ 25 C	ND	umhos/cm	5						
Method: A2540 C		Batch: 080407A-SLDS-TDS-W							
Sample ID: LCS1_080407A	Laboratory Control Sample				Run: BAL-4-R_080407A		04/07/08 08:38		
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	5.0	102	90	110			
Sample ID: MBLK1_080407A	Method Blank				Run: BAL-4-R_080407A		04/07/08 08:39		
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08040069-001AMS	Sample Matrix Spike				Run: BAL-4-R_080407A		04/07/08 08:48		
Solids, Total Dissolved TDS @ 180 C	3400	mg/L	5.0	107	80	120			
Sample ID: R08040069-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080407A		04/07/08 08:48		
Solids, Total Dissolved TDS @ 180 C	3400	mg/L	5.0	107	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: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE-3114-080407A		
Sample ID: MBLK	Method Blank					Run: SUB-C99208			04/07/08 12:04
Selenium	ND	mg/L	6E-05						
Sample ID: 288-54-6	Laboratory Control Sample					Run: SUB-C99208			04/07/08 12:06
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: C08040192-002EMS	Sample Matrix Spike					Run: SUB-C99208			04/07/08 12:41
Selenium	0.050	mg/L	0.0010	99	85	115			
Sample ID: C08040192-002EMSD	Sample Matrix Spike Duplicate					Run: SUB-C99208			04/07/08 12:43
Selenium	0.051	mg/L	0.0010	101	85	115	2.0	10	
Method: A3114 B							Batch: C_SEIV-3114-080407		
Sample ID: MBLK	Method Blank					Run: SUB-C99195			04/07/08 09:27
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-54-6	Laboratory Control Sample					Run: SUB-C99195			04/07/08 09:29
Selenium-IV	0.045	mg/L	0.0010	91	90	110			
Sample ID: C08040192-002EMS	Sample Matrix Spike					Run: SUB-C99195			04/07/08 10:10
Selenium-IV	0.043	mg/L	0.0010	86	85	115			
Sample ID: C08040192-002EMSD	Sample Matrix Spike Duplicate					Run: SUB-C99195			04/07/08 10:12
Selenium-IV	0.045	mg/L	0.0010	90	85	115	4.7	10	
Method: A4500-H B							Batch: 080405_1_PH-W		
Sample ID: LCS_pH-1_080405	Laboratory Control Sample					Run: PH_COND2-R_080405A			04/05/08 14:19
pH	6.94	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G			Batch: A2008-04-04_2_NH3_01						
Sample ID: MBLK-2	Method Blank						Run: TECHAA2-R_080404A	04/04/08 09:05	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank						Run: TECHAA2-R_080404A	04/04/08 09:06	
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank						Run: TECHAA2-R_080404A	04/04/08 09:08	
Nitrogen, Ammonia as N	0.24	mg/L	0.10	98	90	110			
Sample ID: R08040003-001CMS	Sample Matrix Spike						Run: TECHAA2-R_080404A	04/04/08 10:49	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	76	80	120			S
Sample ID: R08040003-001CMSD	Sample Matrix Spike Duplicate						Run: TECHAA2-R_080404A	04/04/08 10:50	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	74	80	120	3.2	10	S
Method: D5072-92			Batch: C_R99299						
Sample ID: R08040058-001G	Sample Duplicate						Run: SUB-C99299	04/07/08 14:17	
Radon 222	636	pCi/L	100				4.6	30	
Sample ID: MB-R99299	Method Blank						Run: SUB-C99299	04/07/08 14:17	
Radon 222	-9	pCi/L							U
Sample ID: LCS-R99299	Laboratory Control Sample						Run: SUB-C99299	04/07/08 14:17	
Radon 222	303	pCi/L	100	103	70	130			
Method: E200.7			Batch: C_18255						
Sample ID: MB-18255	Method Blank						Run: SUB-C99715	04/15/08 13:42	
Boron	ND	mg/L	0.006						
Iron	ND	mg/L	0.005						
Sample ID: LCS-18255	Laboratory Control Sample						Run: SUB-C99715	04/15/08 13:45	
Boron	0.482	mg/L	0.10	96	85	115			
Iron	0.473	mg/L	0.030	95	85	115			
Sample ID: C08040370-001A MS	Sample Matrix Spike						Run: SUB-C99715	04/15/08 14:09	
Boron	0.486	mg/L	0.10	93	70	130			
Iron	0.519	mg/L	0.030	91	70	130			
Sample ID: C08040370-001A MSD	Sample Matrix Spike Duplicate						Run: SUB-C99715	04/15/08 14:12	
Boron	0.495	mg/L	0.10	95	70	130	1.9	20	
Iron	0.529	mg/L	0.030	93	70	130	1.9	20	

### 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: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99737		
Sample ID: MB-080416A	Method Blank		Run: SUB-C99737				04/16/08 11:30		
Silica	ND	mg/L	0.06						
Aluminum	ND	mg/L	0.008						
Barium	ND	mg/L	0.006						
Boron	ND	mg/L	0.004						
Calcium	ND	mg/L	0.04						
Chromium	ND	mg/L	0.003						
Copper	ND	mg/L	0.005						
Iron	0.006	mg/L	0.002						
Magnesium	ND	mg/L	0.04						
Manganese	ND	mg/L	0.0004						
Molybdenum	ND	mg/L	0.01						
Potassium	ND	mg/L	0.08						
Sodium	ND	mg/L	0.06						
Vanadium	ND	mg/L	0.006						
Zinc	ND	mg/L	0.004						
Sample ID: LFB-080416A							04/16/08 11:33		
Laboratory Fortified Blank		Run: SUB-C99737							
Silica	0.95	mg/L	0.10	95	85	125			
Aluminum	0.89	mg/L	0.10	89	85	125			
Barium	0.88	mg/L	0.10	88	85	125			
Boron	0.92	mg/L	0.10	92	85	125			
Calcium	46	mg/L	0.50	92	85	125			
Chromium	0.90	mg/L	0.050	90	85	125			
Copper	0.87	mg/L	0.010	87	85	125			
Iron	0.89	mg/L	0.030	88	85	125			
Magnesium	47	mg/L	0.50	93	85	125			
Manganese	0.88	mg/L	0.010	88	85	125			
Molybdenum	0.94	mg/L	0.10	94	85	125			
Potassium	43	mg/L	0.50	86	85	125			
Sodium	45	mg/L	0.50	90	85	125			
Vanadium	0.94	mg/L	0.10	94	85	125			
Zinc	0.91	mg/L	0.010	91	85	125			
Sample ID: R08040058-001C							04/16/08 14:59		
Sample Matrix Spike		Run: SUB-C99737							
Aluminum	1.74	mg/L	0.10	85	70	130			
Barium	1.78	mg/L	0.10	85	70	130			
Boron	1.86	mg/L	0.10	89	70	130			
Chromium	1.77	mg/L	0.050	87	70	130			
Copper	1.72	mg/L	0.011	85	70	130			
Iron	1.80	mg/L	0.030	88	70	130			
Manganese	1.76	mg/L	0.010	86	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R99737		
Sample ID: R08040058-001C	Sample Matrix Spike			Run: SUB-C99737			04/16/08 14:59		
Molybdenum	1.90	mg/L	0.10	91	70	130			
Vanadium	1.88	mg/L	0.10	92	70	130			
Zinc	1.89	mg/L	0.010	93	70	130			
Calcium	118	mg/L	1.0	90	70	130			
Magnesium	107	mg/L	1.0	91	70	130			
Potassium	103	mg/L	1.0	84	70	130			
Silica	9.71	mg/L	0.12	90	70	130			
Sodium	272	mg/L	1.0	78	70	130			
Sample ID: R08040058-001C	Sample Matrix Spike Duplicate			Run: SUB-C99737			04/16/08 15:02		
Aluminum	1.73	mg/L	0.10	85	70	130	0.6	20	
Barium	1.79	mg/L	0.10	86	70	130	0.2	20	
Boron	1.84	mg/L	0.10	88	70	130	0.9	20	
Chromium	1.76	mg/L	0.050	86	70	130	0.6	20	
Copper	1.71	mg/L	0.011	84	70	130	0.8	20	
Iron	1.79	mg/L	0.030	87	70	130	0.3	20	
Manganese	1.75	mg/L	0.010	86	70	130	0.7	20	
Molybdenum	1.84	mg/L	0.10	88	70	130	3.2	20	
Vanadium	1.86	mg/L	0.10	91	70	130	1.3	20	
Zinc	1.87	mg/L	0.010	92	70	130	1.0	20	
Calcium	118	mg/L	1.0	90	70	130	0.5	20	
Magnesium	106	mg/L	1.0	91	70	130	0.4	20	
Potassium	103	mg/L	1.0	84	70	130	0.2	20	
Silica	9.45	mg/L	0.12	77	70	130	2.7	20	
Sodium	269	mg/L	1.0	75	70	130	1.0	20	
Method: E200.8							Batch: C_18234		
Sample ID: MB-18234	Method Blank			Run: SUB-C99827			04/17/08 13:25		
Uranium	0.0008	mg/L	2E-05						
Sample ID: LCS1-18234	Laboratory Control Sample			Run: SUB-C99827			04/17/08 13:29		
Uranium	0.0512	mg/L	0.00030	97	80	120			
Sample ID: R08040058-001I	Post Digestion Spike			Run: SUB-C99827			04/17/08 14:18		
Uranium	0.0126	mg/L	0.00030	95	70	130			
Sample ID: R08040058-001I	Post Digestion Spike Duplicate			Run: SUB-C99827			04/17/08 14:22		
Uranium	0.0126	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  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18255		
<b>Sample ID: MB-18255</b>	Method Blank		Run: SUB-C99461				04/11/08 00:45		
Antimony	ND	mg/L	0.0002						
Arsenic	ND	mg/L	5E-05						
Barium	ND	mg/L	0.0003						
Cadmium	ND	mg/L	3E-05						
Chromium	0.001	mg/L	5E-05						
Lead	1E-05	mg/L							
Molybdenum	ND	mg/L	5E-05						
Selenium	0.0005	mg/L	0.0002						
Silver	ND	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	5E-05	mg/L	3E-05						
Uranium	7E-05	mg/L	3E-05						
<b>Sample ID: LCS1-18255</b>	Laboratory Control Sample		Run: SUB-C99461				04/11/08 00:52		
Antimony	0.0199	mg/L	0.050	99	80	120			
Arsenic	0.0221	mg/L	0.0010	111	80	120			
Barium	0.0194	mg/L	0.10	97	80	120			
Cadmium	0.0221	mg/L	0.010	110	80	120			
Chromium	0.0210	mg/L	0.050	99	80	120			
Lead	0.0197	mg/L	0.050	98	80	120			
Molybdenum	0.0218	mg/L	0.10	109	80	120			
Selenium	0.108	mg/L	0.0010	108	80	120			
Silver	0.0226	mg/L	0.010	113	80	120			
Strontium	0.0106	mg/L	0.10	106	80	120			
Thallium	0.0194	mg/L	0.10	97	80	120			
Uranium	0.0191	mg/L	0.00030	95	80	120			
<b>Sample ID: C08040370-001AMS4</b>	Post Digestion Spike		Run: SUB-C99461				04/11/08 02:00		
Antimony	0.0211	mg/L	0.050	104	70	130			
Arsenic	0.0232	mg/L	0.0010	116	70	130			
Barium	0.0351	mg/L	0.10	104	70	130			
Cadmium	0.0214	mg/L	0.010	105	70	130			
Chromium	0.0204	mg/L	0.050	95	70	130			
Lead	0.0212	mg/L	0.050	106	70	130			
Molybdenum	0.0257	mg/L	0.10	115	70	130			
Selenium	0.111	mg/L	0.0010	109	70	130			
Silver	0.0215	mg/L	0.010	107	70	130			
Strontium	1.70	mg/L	0.10		70	130			A
Thallium	0.0213	mg/L	0.10	106	70	130			
Uranium	0.0227	mg/L	0.00030	107	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: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18255		
Sample ID: C08040370-001AMSD4	Post Digestion Spike Duplicate			Run: SUB-C99461			04/11/08 02:07		
Antimony	0.0202	mg/L	0.050	100	70	130	0.0	20	
Arsenic	0.0230	mg/L	0.0010	115	70	130	0.9	20	
Barium	0.0344	mg/L	0.10	100	70	130	0.0	20	
Cadmium	0.0209	mg/L	0.010	103	70	130	2.5	20	
Chromium	0.0191	mg/L	0.050	89	70	130	0.0	20	
Lead	0.0203	mg/L	0.050	101	70	130	0.0	20	
Molybdenum	0.0250	mg/L	0.10	112	70	130	0.0	20	
Selenium	0.108	mg/L	0.0010	106	70	130	2.3	20	
Silver	0.0213	mg/L	0.010	107	70	130	0.8	20	
Strontium	1.65	mg/L	0.10		70	130	3.3	20	A
Thallium	0.0208	mg/L	0.10	103	70	130	0.0	20	
Uranium	0.0216	mg/L	0.00030	102	70	130	4.8	20	
Sample ID: MB-18255	Method Blank			Run: SUB-C99538			04/11/08 18:48		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0004	mg/L	5E-05						
Barium	ND	mg/L	0.0003						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	0.0007	mg/L	5E-05						
Copper	0.0004	mg/L	0.0001						
Lead	ND	mg/L	5E-05						
Manganese	7E-05	mg/L	3E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	6E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	4E-05						
Uranium	7E-05	mg/L	3E-05						
Zinc	0.002	mg/L	0.0003						
Sample ID: LCS1-18255	Laboratory Control Sample			Run: SUB-C99538			04/11/08 18:55		
Antimony	0.0202	mg/L	0.050	101	80	120			
Arsenic	0.0205	mg/L	0.0010	103	80	120			
Barium	0.0206	mg/L	0.10	103	80	120			
Beryllium	0.0217	mg/L	0.010	108	80	120			
Cadmium	0.0206	mg/L	0.010	103	80	120			
Chromium	0.0213	mg/L	0.050	107	80	120			
Copper	0.0208	mg/L	0.010	104	80	120			
Lead	0.0199	mg/L	0.050	99	80	120			
Manganese	0.0205	mg/L	0.010	102	80	120			
Molybdenum	0.0205	mg/L	0.10	102	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18255		
Sample ID: LCS1-18255	Laboratory Control Sample			Run: SUB-C99538			04/11/08 18:55		
Nickel	0.0201	mg/L	0.050	101	80	120			
Strontium	0.0110	mg/L	0.10	110	80	120			
Thallium	0.0177	mg/L	0.10	88	80	120			
Uranium	0.0210	mg/L	0.00030	105	80	120			
Zinc	0.0239	mg/L	0.010	119	80	120			
Sample ID: C08040370-001AMS4	Post Digestion Spike			Run: SUB-C99538			04/11/08 19:35		
Antimony	0.0222	mg/L	0.050	109	70	130			
Arsenic	0.0234	mg/L	0.0010	112	70	130			
Barium	0.0354	mg/L	0.10	101	70	130			
Beryllium	0.0178	mg/L	0.010	89	70	130			
Cadmium	0.0201	mg/L	0.010	99	70	130			
Chromium	0.0207	mg/L	0.050	99	70	130			
Copper	0.0255	mg/L	0.010	104	70	130			
Lead	0.0208	mg/L	0.050	104	70	130			
Manganese	0.729	mg/L	0.010		70	130			A
Molybdenum	0.0240	mg/L	0.10	107	70	130			
Nickel	0.0244	mg/L	0.050	118	70	130			
Strontium	1.64	mg/L	0.10		70	130			A
Thallium	0.0192	mg/L	0.10	95	70	130			
Uranium	0.0217	mg/L	0.00030	102	70	130			
Zinc	0.0553	mg/L	0.010	98	70	130			
Sample ID: C08040370-001AMSD4	Post Digestion Spike Duplicate			Run: SUB-C99538			04/11/08 19:42		
Antimony	0.0216	mg/L	0.050	106	70	130	0.0	20	
Arsenic	0.0222	mg/L	0.0010	106	70	130	5.3	20	
Barium	0.0364	mg/L	0.10	106	70	130	0.0	20	
Beryllium	0.0183	mg/L	0.010	91	70	130	2.9	20	
Cadmium	0.0200	mg/L	0.010	98	70	130	0.5	20	
Chromium	0.0205	mg/L	0.050	98	70	130	0.0	20	
Copper	0.0254	mg/L	0.010	103	70	130	0.4	20	
Lead	0.0200	mg/L	0.050	100	70	130	0.0	20	
Manganese	0.748	mg/L	0.010		70	130	2.6	20	A
Molybdenum	0.0240	mg/L	0.10	107	70	130	0.0	20	
Nickel	0.0253	mg/L	0.050	123	70	130	0.0	20	
Strontium	1.70	mg/L	0.10		70	130	3.6	20	A
Thallium	0.0196	mg/L	0.10	97	70	130	0.0	20	
Uranium	0.0221	mg/L	0.00030	104	70	130	2.1	20	
Zinc	0.0548	mg/L	0.010	95	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: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100187		
Sample ID: LRB	Method Blank		Run: SUB-C100187				04/25/08 11:29		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	1E-05						
Lead	ND	mg/L	3E-05						
Mercury	8E-05	mg/L	8E-05						
Nickel	ND	mg/L	0.0007						
Thorium 232	0.0002	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Sample ID: LFB	Laboratory Fortified Blank		Run: SUB-C100187				04/25/08 11:36		
Arsenic	0.0540	mg/L	0.0010	108	85	115			
Cadmium	0.0551	mg/L	0.0010	110	85	115			
Lead	0.0546	mg/L	0.0010	109	85	115			
Mercury	0.00551	mg/L	0.0010	109	85	115			
Nickel	0.0537	mg/L	0.0010	107	85	115			
Thorium 232	0.0544	mg/L	0.0010	108	85	115			
Uranium	0.0550	mg/L	0.00030	110	85	115			
Sample ID: R08040058-001C	Post Digestion Spike		Run: SUB-C100187				04/25/08 20:28		
Arsenic	0.0515	mg/L	0.0010	101	70	130			
Cadmium	0.0487	mg/L	0.010	97	70	130			
Lead	0.0518	mg/L	0.050	104	70	130			
Mercury	0.00527	mg/L	0.0010	105	70	130			
Nickel	0.0479	mg/L	0.050	96	70	130			
Thorium 232	0.0530	mg/L	0.0010	106	70	130			
Uranium	0.0527	mg/L	0.00030	105	70	130			
Sample ID: R08040058-001C	Post Digestion Spike Duplicate		Run: SUB-C100187				04/25/08 20:34		
Arsenic	0.0517	mg/L	0.0010	101	70	130	0.3	20	
Cadmium	0.0496	mg/L	0.010	99	70	130	1.8	20	
Lead	0.0512	mg/L	0.050	102	70	130	1.1	20	
Mercury	0.00523	mg/L	0.0010	105	70	130	0.7	20	
Nickel	0.0479	mg/L	0.050	96	70	130	0.0	20	
Thorium 232	0.0524	mg/L	0.0010	105	70	130	1.1	20	
Uranium	0.0522	mg/L	0.00030	104	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100732		
<b>Sample ID: LRB</b>	Method Blank					Run: SUB-C100732			05/06/08 11:52
Silver	5E-05	mg/L	3E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank					Run: SUB-C100732			05/06/08 11:59
Silver	0.0211	mg/L	0.0010	105	85	115			
<b>Sample ID: C08040928-001CMS4</b>	Post Digestion Spike					Run: SUB-C100732			05/06/08 15:02
Silver	0.0129	mg/L	0.010	65	70	130			S
<b>Sample ID: C08040928-001CMSD4</b>	Post Digestion Spike Duplicate					Run: SUB-C100732			05/06/08 15:08
Silver	0.0134	mg/L	0.010	67	70	130	3.4	20	S
<b>Method: E245.1</b>							Batch: C_B_31952		
<b>Sample ID: MB-31952</b>	Method Blank					Run: SUB-C99797			04/16/08 15:32
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-31952</b>	Laboratory Fortified Blank					Run: SUB-C99797			04/16/08 15:34
Mercury	0.0020	mg/L	0.0010	101	85	115			
<b>Sample ID: B08031990-003AMS</b>	Sample Matrix Spike					Run: SUB-C99797			04/16/08 15:39
Mercury	0.0019	mg/L	0.0010	96	70	130			
<b>Sample ID: B08031990-003AMSD</b>	Sample Matrix Spike Duplicate					Run: SUB-C99797			04/16/08 15:41
Mercury	0.0019	mg/L	0.0010	93	70	130	3.2	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: R34057		
<b>Sample ID: LFB0804043239-3</b>	Laboratory Fortified Blank			Run: DIONEX_080404A			04/04/08 18:07		
Chloride	4.88	mg/L	0.50	98	90	110			
Fluoride	2.04	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N	2.30	mg/L	0.10	92	90	110			
Nitrogen, Nitrite as N	2.49	mg/L	0.10	100	90	110			
Sulfate	13.8	mg/L	1.0	92	90	110			
<b>Sample ID: LFB0804043239-4</b>	Laboratory Fortified Blank			Run: DIONEX_080404A			04/04/08 18:22		
Chloride	4.74	mg/L	0.50	95	90	110			
Fluoride	2.03	mg/L	0.10	101	90	110			
Nitrogen, Nitrate as N	2.48	mg/L	0.10	99	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			
<b>Sample ID: R08040058-001AMS</b>	Sample Matrix Spike			Run: DIONEX_080404A			04/04/08 19:09		
Chloride	257	mg/L	5.4	91	80	120			
Fluoride	108	mg/L	0.56	108	80	120			
Nitrogen, Nitrate as N	116	mg/L	1.3	92	80	120			
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120			
Sulfate	1030	mg/L	3.4	80	80	120			
<b>Sample ID: R08040058-001AMSD</b>	Sample Matrix Spike Duplicate			Run: DIONEX_080404A			04/04/08 19:24		
Chloride	247	mg/L	5.4	86	80	120	4.2	10	
Fluoride	103	mg/L	0.56	103	80	120	4.7	10	
Nitrogen, Nitrate as N	110	mg/L	1.3	88	80	120	4.9	10	
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120	4.5	10	
Sulfate	990	mg/L	3.4	75	80	120	3.8	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0428		
Sample ID: MB-GrAB-0428	Method Blank				Run: SUB-C100225			04/25/08 22:38	
Gross Alpha	-0.06	pCi/L							U
Gross Beta	-0.9	pCi/L							U
Sample ID: UNAT-GrAB-0428	Laboratory Control Sample				Run: SUB-C100225			04/26/08 10:51	
Gross Alpha	240	pCi/L	100		70	130			
Sample ID: Cs137-GrAB-0428	Laboratory Control Sample				Run: SUB-C100225			04/25/08 22:38	
Gross Beta	87	pCi/L	94		70	130			
Sample ID: C08040375-001AMS	Sample Matrix Spike				Run: SUB-C100225			04/25/08 22:38	
Gross Alpha	264	pCi/L	108		70	130			
Sample ID: C08040375-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100225			04/25/08 22:38	
Gross Alpha	259	pCi/L	106		70	130	1.9	14.1	
Sample ID: C08040375-001AMS	Sample Matrix Spike				Run: SUB-C100225			04/25/08 22:38	
Gross Beta	94.5	pCi/L	103		70	130			
Sample ID: C08040375-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100225			04/25/08 22:38	
Gross Beta	95.3	pCi/L	104		70	130	0.8	15.5	
Sample ID: C08040265-002EDUP	Sample Duplicate				Run: SUB-C100225			04/26/08 10:51	
Gross Alpha	40	pCi/L					2.3	37.6	
Gross Beta	17	pCi/L					37	54.9	
Method: E901.1							Batch: C_R99476		
Sample ID: LCS-R99476	Laboratory Control Sample				Run: SUB-C99476			04/04/08 16:45	
Americium 241	740	pCi/L	20	91	70	130			
Cesium 137	1200	pCi/L	20	83	70	130			
Sample ID: MB-R99476	Method Blank				Run: SUB-C99476			04/04/08 16:45	
Gross Gamma	ND	pCi/L							U
Sample ID: R08040058-001H	Sample Duplicate				Run: SUB-C99476			04/10/08 18:11	
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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E903.0</b>									Batch: C_18234
Sample ID: C08040215-001AMS	Sample Matrix Spike				Run: SUB-C100044				04/21/08 14:47
Radium 226	120	pCi/Filter		94	70	130			
Sample ID: C08040215-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100044				04/21/08 14:47
Radium 226	113	pCi/Filter		88	70	130	5.9	21.7	
Sample ID: LCS-18234	Laboratory Control Sample				Run: SUB-C100044				04/21/08 16:36
Radium 226	11	pCi/L		76	70	130			
Sample ID: MB-18234	Method Blank				Run: SUB-C100044				04/21/08 16:36
Radium 226	2	pCi/L							
<b>Method: E903.0</b>									Batch: C_RA226-2735
Sample ID: C08040334-002AMS	Sample Matrix Spike				Run: SUB-C100382				04/29/08 15:46
Radium 226	11	pCi/L		89	70	130			
Sample ID: C08040334-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100382				04/29/08 15:46
Radium 226	11	pCi/L		90	70	130	0.9	24.7	
Sample ID: MB-RA226-2735	Method Blank				Run: SUB-C100382				04/29/08 15:46
Radium 226	0.3	pCi/L							
Sample ID: LCS-RA226-2735	Laboratory Control Sample				Run: SUB-C100382				04/29/08 15:46
Radium 226	4.8	pCi/L		72	70	130			
<b>Method: E907.0</b>									Batch: C_18234
Sample ID: R08040058-001I	Sample Matrix Spike				Run: SUB-C99603				04/09/08 16:00
Thorium 230	10.3	pCi/L	0.20	83	70	130			
Sample ID: R08040058-001I	Sample Matrix Spike Duplicate				Run: SUB-C99603				04/09/08 16:00
Thorium 230	11.3	pCi/L	0.20	90	70	130	8.9	30	
Sample ID: LCS-R99603	Laboratory Control Sample				Run: SUB-C99603				04/09/08 16:00
Thorium 230	50.8	pCi/L	0.20	103	70	130			
Sample ID: MB-R99603	Method Blank				Run: SUB-C99603				04/09/08 16:00
Thorium 230	1	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R100081		
Sample ID: LCS-R100081	Laboratory Control Sample				Run: SUB-C100081		04/14/08 15:00		
Thorium 230	6.90	pCi/L	0.20	99	70	130			
Sample ID: R08040058-001H	Sample Matrix Spike				Run: SUB-C100081		04/14/08 15:00		
Thorium 230	16.0	pCi/L	0.20	99	70	130			
Sample ID: R08040058-001H	Sample Matrix Spike Duplicate				Run: SUB-C100081		04/14/08 15:00		
Thorium 230	14.7	pCi/L	0.20	90	70	130	8.5	30	
Sample ID: MB-R100081	Method Blank				Run: SUB-C100081		04/14/08 15:00		
Thorium 230	1E-06	pCi/L					U		
Method: E909.0M							Batch: C_18234		
Sample ID: C08040192-002IMS	Sample Matrix Spike				Run: SUB-C100050		04/10/08 11:00		
Lead 210	1200	pCi/L	1.0	104	70	130			
Sample ID: C08040192-002IMSD	Sample Matrix Spike Duplicate				Run: SUB-C100050		04/10/08 11:00		
Lead 210	980	pCi/L	1.0	82	70	130	23	30	
Sample ID: MB-R100050	Method Blank				Run: SUB-C100050		04/10/08 11:00		
Lead 210		pCi/L					U		
Sample ID: LCS-R100050	Laboratory Control Sample				Run: SUB-C100050		04/10/08 11:00		
Lead 210	110	pCi/L	1.0	90	70	130			
Method: E909.0M							Batch: C_R100194		
Sample ID: C08040254-004BDUP	Sample Duplicate				Run: SUB-C100194		04/11/08 09:45		
Lead 210	ND	pCi/L	1.0				0.0	30	
Sample ID: R08040058-001H	Sample Matrix Spike				Run: SUB-C100194		04/11/08 09:45		
Lead 210	600	pCi/L	1.0	101	70	130			
Sample ID: R08040058-001H	Sample Matrix Spike Duplicate				Run: SUB-C100194		04/11/08 09:45		
Lead 210	590	pCi/L	1.0	100	70	130	1.2	30	
Sample ID: MB-R100194	Method Blank				Run: SUB-C100194		04/11/08 09:45		
Lead 210		pCi/L					U		
Sample ID: LCS-R100194	Laboratory Control Sample				Run: SUB-C100194		04/11/08 09:45		
Lead 210	120	pCi/L	1.0	104	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: 06/24/08  
Work Order: R08040058

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_18234		
Sample ID: C08040246-003FMS	Sample Matrix Spike				Run: SUB-C100641			04/29/08 15:30	
Polonium 210	88	pCi/L	1.0	99	70	130			
Sample ID: C08040246-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C100641			04/29/08 15:30	
Polonium 210	87	pCi/L	1.0	98	70	130	1.6	30	
Sample ID: LCS-18234	Laboratory Control Sample				Run: SUB-C100641			04/29/08 15:30	
Polonium 210	180	pCi/L	1.0	101	70	130			
Sample ID: MB-18234	Method Blank				Run: SUB-C100641			04/29/08 15:30	
Polonium 210	2	pCi/L							
Method: RMO-3008							Batch: C_R99716		
Sample ID: R08040058-001H	Sample Matrix Spike				Run: SUB-C99716			04/08/08 13:00	
Polonium 210	190	pCi/L	1.0	108	70	130			
Sample ID: R08040058-001H	Sample Matrix Spike Duplicate				Run: SUB-C99716			04/08/08 13:00	
Polonium 210	180	pCi/L	1.0	101	70	130	6.2	30	
Sample ID: LCS-R99716	Laboratory Control Sample				Run: SUB-C99716			04/08/08 13:00	
Polonium 210	91	pCi/L	1.0	104	70	130			
Sample ID: MB-R99716	Method Blank				Run: SUB-C99716			04/08/08 13:00	
Polonium 210	0.8	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>RESTER</b>		Project Name, PWS, Permit, Etc. <b>Power Tech Dams, Burdack</b>		Sample Origin State: <b>SD</b>	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>RESTER</b>		Contact Name: <b>Cory Foreman</b>		Phone/Fax: <b>605-698-0310</b>	Sampler: (Please Print) <b>Eric Kraft</b>
Invoice Address: <b>RESTER</b>		Invoice Contact & Phone: <b>11</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"/> 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.)		Collection Date	Collection Time	MATRIX	SEE ATTACHED Normal Turnaround (TAT)
1 <b>Dew Burd SW 688</b>		<b>4/2/08</b>	<b>18:07</b>	<b>W</b>	<b>RUSH</b> Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: <b>etc</b>
2					
3					
4					
5					
6					
7					
8					
9					
10					
Custody Record Must be Signed		Relinquished by (print): <b>Eric Kraft</b>	Date/Time: <b>4/3/08 09:10</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

June 24, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08040250

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 4/22/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040250-001	DewBurd GW694	04/21/08 12:24	04/22/08	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 Nitrogen, Nitrite Nitrogen, Nitrate + Nitrite Nitrogen, Nitrate Only 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
R08040250-002	DewBurd GW694	04/21/08 12:30	04/22/08	Aqueous	Same As Above
R08040250-003	DewBurd GW622	04/21/08 15:28	04/22/08	Aqueous	Same As Above
R08040250-004	DewBurd GW615	04/21/08 16:16	04/22/08	Aqueous	Same As Above
R08040250-005	DewBurd GW689	04/21/08 19:50	04/22/08	Aqueous	Same As Above
R08040250-006	DewBurd GW681	04/21/08 20:06	04/22/08	Aqueous	Same As Above
R08040250-007	DewBurd GW680	04/21/08 21:21	04/22/08	Aqueous	Same As Above



**ENERGY LABORATORIES, INC.** • 2821 Plant Street • Rapid City, SD 57702 • [www.energylab.com](http://www.energylab.com)  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • [rapid\\_city@energylab.com](mailto:rapid_city@energylab.com)

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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: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Linda Larson", written over a horizontal line.

Linda Larson

Rapid City - Project Manager



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-001  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:24  
Date Received: 04/22/08  
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	04/23/08 08:47/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 08:47/mb
Bicarbonate as HCO3	246	mg/L		5		1	A2320 B	04/23/08 08:47/mb
Calcium	97.0	mg/L		0.5		2	E200.7	05/05/08 13:59/eli-c
Chloride	9	mg/L		1		5	E300.0	05/10/08 19:49/eli-g
Fluoride	0.2	mg/L		0.1		5	E300.0	05/10/08 19:49/eli-g
Magnesium	37.6	mg/L		0.5		2	E200.7	05/05/08 13:59/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/28/08 15:55/jmh
Potassium	13.0	mg/L		0.5		2	E200.7	05/05/08 13:59/eli-c
Silica	8.4	mg/L		0.5		2	E200.7	05/05/08 13:59/eli-c
Sodium	176	mg/L		0.5		2	E200.7	05/05/08 13:59/eli-c
Sulfate	512	mg/L		1		5	E300.0	05/10/08 19:49/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1370	umhos/cm		5.0		1	A2510 B	04/28/08 12:37/tb
Oxidation-Reduction Potential	360	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.94	s.u.		0.01		1	A4500-H B	04/28/08 10:29/tb
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	04/22/08 13:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 13:59/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 22:29/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 22:29/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 13:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 22:29/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 13:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 22:29/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	05/05/08 13:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 22:29/eli-c
Manganese	0.15	mg/L		0.01		2	E200.7	05/05/08 13:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 22:29/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 13:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 22:29/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:27/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:06/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 22:29/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	05/05/08 22:29/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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-001  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:24  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 13:59/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 13:59/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 05:25/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:30/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:01/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:27/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	19.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	3.4	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	15.7	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.3	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	1.4	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	4.2	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	RMO-3008	05/01/08 14:15/eli-c

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

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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: R08040250-001  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:24  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.4	pCi/L	U			1	E903.0	05/06/08 13:38/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/01/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	251	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	60.4	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 02:59/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 02:59/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 02:59/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 02:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 02:59/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	05/05/08 16:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	05/01/08 02:59/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:31/eli-b
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 02:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 02:59/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 02:59/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	05/01/08 02:59/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 02:59/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	05/01/08 02:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/01/08 02:59/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.20					1	A1030 E	06/17/08 00:00/ADM
Anions	15.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	15.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	988	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08040250-001

Client Sample ID: DewBurd GW694

Report Date: 06/24/08

Collection Date: 04/21/08 12:24

Date Received: 04/22/08

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	06/17/08 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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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-002  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:30  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	204	mg/L		5		1	A2320 B	04/23/08 08:50/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 08:50/mb
Bicarbonate as HCO3	249	mg/L		5		1	A2320 B	04/23/08 08:50/mb
Calcium	98.8	mg/L		0.5		2	E200.7	05/05/08 14:02/eli-c
Chloride	9	mg/L		1		5	E300.0	05/10/08 20:01/eli-g
Fluoride	0.2	mg/L		0.1		5	E300.0	05/10/08 20:01/eli-g
Magnesium	38.4	mg/L		0.5		2	E200.7	05/05/08 14:02/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/28/08 15:56/jmh
Potassium	13.5	mg/L		0.5		2	E200.7	05/05/08 14:02/eli-c
Silica	8.3	mg/L		0.5		2	E200.7	05/05/08 14:02/eli-c
Sodium	180	mg/L		0.5		2	E200.7	05/05/08 14:02/eli-c
Sulfate	511	mg/L		1		5	E300.0	05/10/08 20:01/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1380	umhos/cm		5.0		1	A2510 B	04/28/08 12:39/tb
Oxidation-Reduction Potential	350	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.84	s.u.		0.01		1	A4500-H B	04/28/08 10:30/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	990	mg/L		5		1	A2540 C	04/22/08 13:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:02/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 22:36/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 22:36/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 14:02/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 22:36/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 22:36/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/05/08 14:02/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 22:36/eli-c
Manganese	0.15	mg/L		0.01		2	E200.7	05/05/08 14:02/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 22:36/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:02/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 22:36/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 22:36/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	05/05/08 22:36/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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-002  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:30  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:02/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:02/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 05:30/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:32/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:12/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:38/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.1	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	3.5	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	3.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	16.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	-2.4	pCi/L	U	1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.1	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	3.7	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.2	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.55	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040250-002  
Client Sample ID: DewBurd GW694

Report Date: 06/24/08  
Collection Date: 04/21/08 12:30  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.09	pCi/L	U			1	E903.0	05/06/08 13:38/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/01/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	250	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	60.4	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 03:06/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 03:06/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 03:06/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 03:06/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 03:06/eli-c
Iron	0.12	mg/L		0.03		2	E200.7	05/05/08 16:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	05/01/08 03:06/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:33/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 03:06/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 03:06/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 03:06/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	05/01/08 03:06/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 03:06/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	05/01/08 03:06/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/01/08 03:06/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.23					1	A1030 E	06/17/08 00:00/ADM
Anions	15.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	16.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	996	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040250-002

**Client Sample ID:** DewBurd GW694

**Report Date:** 06/24/08

**Collection Date:** 04/21/08 12:30

**Date Received:** 04/22/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-003  
Client Sample ID: DewBurd GW622

Report Date: 06/24/08  
Collection Date: 04/21/08 15:28  
Date Received: 04/22/08  
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	04/23/08 08:54/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 08:54/mb
Bicarbonate as HCO3	219	mg/L		5		1	A2320 B	04/23/08 08:54/mb
Calcium	87.6	mg/L		0.5		2	E200.7	05/05/08 14:05/eli-c
Chloride	10	mg/L		1		5	E300.0	05/10/08 20:13/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/10/08 20:13/eli-g
Magnesium	32.0	mg/L		0.5		2	E200.7	05/05/08 14:05/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/28/08 15:59/jmh
Potassium	10.3	mg/L		0.5		2	E200.7	05/05/08 14:05/eli-c
Silica	7.5	mg/L		0.5		2	E200.7	05/05/08 14:05/eli-c
Sodium	175	mg/L		0.5		2	E200.7	05/05/08 14:05/eli-c
Sulfate	487	mg/L		1		5	E300.0	05/10/08 20:13/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5.0		1	A2510 B	04/28/08 12:29/tb
Oxidation-Reduction Potential	340	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.85	s.u.		0.01		1	A4500-H B	04/28/08 10:32/tb
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	04/22/08 13:59/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:05/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/05/08 22:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 22:42/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 14:05/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 22:42/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 22:42/eli-c
Iron	0.03	mg/L		0.03		2	E200.7	05/05/08 14:05/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	05/05/08 22:42/eli-c
Manganese	0.18	mg/L		0.01		2	E200.7	05/05/08 14:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 22:42/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 22:42/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 22:42/eli-c
Uranium	0.0054	mg/L		0.0003		1	E200.8	05/05/08 22:42/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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-003  
Client Sample ID: DewBurd GW622

Report Date: 06/24/08  
Collection Date: 04/21/08 15:28  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:05/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:05/eli-c
METALS - SUSPENDED								
Uranium	0.0008	mg/L		0.0003		1	E200.8	05/05/08 05:34/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.08	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:34/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:14/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:40/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	22.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	3.5	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	3.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	16.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	-4.1	pCi/L	U	1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.1	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	2.7	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.6	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	2.8	pCi/L		1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040250-003  
Client Sample ID: DewBurd GW622

Report Date: 06/24/08  
Collection Date: 04/21/08 15:28  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226	0.9	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 13:38/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1090	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	69.4	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 03:12/eli-c
Arsenic	0.006	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 03:12/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:36/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 03:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 03:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 03:12/eli-c
Iron	7.34	mg/L		0.03		2	E200.7	05/05/08 16:36/eli-c
Lead	0.026	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Manganese	0.23	mg/L		0.01		1	E200.8	05/01/08 03:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:36/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 03:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 03:12/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 03:12/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	05/01/08 03:12/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 03:12/eli-c
Uranium	0.0065	mg/L		0.0003		1	E200.8	05/01/08 03:12/eli-c
Zinc	0.22	mg/L		0.01		1	E200.8	05/01/08 03:12/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.01					1	A1030 E	06/17/08 00:00/ADM
Anions	14.0	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	14.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	931	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040250-003

**Client Sample ID:** DewBurd GW622

**Report Date:** 06/24/08

**Collection Date:** 04/21/08 15:28

**Date Received:** 04/22/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL	DF			
DATA QUALITY									
TDS Balance (0.80 - 1.20)	1.01						1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-004  
Client Sample ID: DewBurd GW615

Report Date: 06/24/08  
Collection Date: 04/21/08 16:16  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	136	mg/L		5		1	A2320 B	04/23/08 08:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 08:59/mb
Bicarbonate as HCO3	166	mg/L		5		1	A2320 B	04/23/08 08:59/mb
Calcium	73.0	mg/L		0.5		2	E200.7	05/05/08 14:09/eli-c
Chloride	4	mg/L		1		5	E300.0	05/10/08 20:24/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/10/08 20:24/eli-g
Magnesium	22.9	mg/L		0.5		2	E200.7	05/05/08 14:09/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:03/jmh
Potassium	8.7	mg/L		0.5		2	E200.7	05/05/08 14:09/eli-c
Silica	7.8	mg/L		0.5		2	E200.7	05/05/08 14:09/eli-c
Sodium	132	mg/L		0.5		2	E200.7	05/05/08 14:09/eli-c
Sulfate	371	mg/L		1		5	E300.0	05/10/08 20:24/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1040	umhos/cm		5.0		1	A2510 B	04/28/08 12:41/tb
Oxidation-Reduction Potential	300	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.43	s.u.		0.01		1	A4500-H B	04/28/08 10:33/tb
Sodium Adsorption Ratio (SAR)	3.5	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	750	mg/L		5		1	A2540 C	04/22/08 14:00/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:09/eli-c
Arsenic	0.020	mg/L		0.001		1	E200.8	05/05/08 22:49/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 22:49/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 14:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 22:49/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 22:49/eli-c
Iron	0.79	mg/L		0.03		2	E200.7	05/05/08 14:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 22:49/eli-c
Manganese	0.07	mg/L		0.01		2	E200.7	05/05/08 14:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 22:49/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 22:49/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:26/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 22:49/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	05/05/08 22:49/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.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040250-004  
**Client Sample ID:** DewBurd GW615

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 16:16  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:09/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:09/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 05:38/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.06	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:36/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:16/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:43/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.1	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	2.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	2.5	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	12.1	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	3.4	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.2	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.90	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	2.0	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3.2	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.52	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040250-004  
Client Sample ID: DewBurd GW615

Report Date: 06/24/08  
Collection Date: 04/21/08 16:16  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.2	pCi/L	U			1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/01/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	1180	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	70.1	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 03:19/eli-c
Arsenic	0.024	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 03:19/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:39/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 03:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 03:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 03:19/eli-c
Iron	1.35	mg/L		0.03		2	E200.7	05/05/08 16:39/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	05/01/08 03:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:38/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 03:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 03:19/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 03:19/eli-c
Strontium	1.4	mg/L		0.1		1	E200.8	05/01/08 03:19/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 03:19/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	05/01/08 03:19/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/01/08 03:19/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.26					1	A1030 E	06/17/08 00:00/ADM
Anions	10.6	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	11.5	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	715	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040250-004  
**Client Sample ID:** DewBurd GW615

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 16:16  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.05					1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-005  
Client Sample ID: DewBurd GW689

Report Date: 06/24/08  
Collection Date: 04/21/08 19:50  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	148	mg/L		5		1	A2320 B	04/23/08 09:02/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 09:02/mb
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	04/23/08 09:02/mb
Calcium	48.5	mg/L		0.5		2	E200.7	05/05/08 14:12/eli-c
Chloride	5	mg/L		1		5	E300.0	05/10/08 20:59/eli-g
Fluoride	0.5	mg/L		0.1		5	E300.0	05/10/08 20:59/eli-g
Magnesium	16.8	mg/L		0.5		2	E200.7	05/05/08 14:12/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:04/jmh
Potassium	7.9	mg/L		0.5		2	E200.7	05/05/08 14:12/eli-c
Silica	8.0	mg/L		0.5		2	E200.7	05/05/08 14:12/eli-c
Sodium	180	mg/L		0.5		2	E200.7	05/05/08 14:12/eli-c
Sulfate	374	mg/L		1		5	E300.0	05/10/08 20:59/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1110	umhos/cm		5.0		1	A2510 B	04/28/08 12:43/tb
Oxidation-Reduction Potential	300	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.02	s.u.		0.01		1	A4500-H B	04/28/08 10:34/tb
Sodium Adsorption Ratio (SAR)	5.7	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	760	mg/L		5		1	A2540 C	04/22/08 14:01/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:12/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/05/08 22:56/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 22:56/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 14:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 22:56/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 22:56/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/05/08 14:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 22:56/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	05/05/08 14:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 22:56/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 22:56/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:45/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 22:56/eli-c
Uranium	0.0037	mg/L		0.0003		1	E200.8	05/05/08 22:56/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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-005  
Client Sample ID: DewBurd GW689

Report Date: 06/24/08  
Collection Date: 04/21/08 19:50  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:12/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:12/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 05:54/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:39/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:18/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:45/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	25.5	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	2.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	13.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	3.4	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	-2.4	pCi/L	U	1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.1	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	4.2	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.3	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.5	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.71	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040250-005  
Client Sample ID: DewBurd GW689

Report Date: 06/24/08  
Collection Date: 04/21/08 19:50  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226	0.02	pCi/L	U			1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1540	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	72.3	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 03:26/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 03:26/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 03:26/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 03:26/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 03:26/eli-c
Iron	0.52	mg/L		0.03		2	E200.7	05/05/08 16:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	05/01/08 03:26/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:43/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 03:26/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 03:26/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 03:26/eli-c
Strontium	1.0	mg/L		0.1		1	E200.8	05/01/08 03:26/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 03:26/eli-c
Uranium	0.0040	mg/L		0.0003		1	E200.8	05/01/08 03:26/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/01/08 03:26/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.98					1	A1030 E	06/17/08 00:00/ADM
Anions	10.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	11.8	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	744	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040250-005  
**Client Sample ID:** DewBurd GW689

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 19:50  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-006  
Client Sample ID: DewBurd GW681

Report Date: 06/24/08  
Collection Date: 04/21/08 20:06  
Date Received: 04/22/08  
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	04/23/08 09:05/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 09:05/mb
Bicarbonate as HCO3	210	mg/L		5		1	A2320 B	04/23/08 09:05/mb
Calcium	62.0	mg/L		0.5		2	E200.7	05/05/08 14:32/eli-c
Chloride	13	mg/L		1		5	E300.0	05/10/08 21:34/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/10/08 21:34/eli-g
Magnesium	25.0	mg/L		0.5		2	E200.7	05/05/08 14:32/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:05/jmh
Potassium	10	mg/L		0.5		2	E200.7	05/05/08 14:32/eli-c
Silica	7.2	mg/L		0.5		2	E200.7	05/05/08 14:32/eli-c
Sodium	204	mg/L		0.5		2	E200.7	05/05/08 14:32/eli-c
Sulfate	466	mg/L		1		5	E300.0	05/10/08 21:34/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5.0		1	A2510 B	04/28/08 12:44/tb
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.02	s.u.		0.01		1	A4500-H B	04/28/08 10:35/tb
Sodium Adsorption Ratio (SAR)	5.5	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L		5		1	A2540 C	04/22/08 14:01/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:32/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 23:03/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 23:03/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 14:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 23:03/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 23:03/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/05/08 14:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 23:03/eli-c
Manganese	0.09	mg/L		0.01		2	E200.7	05/05/08 14:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 23:03/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 23:03/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:47/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 23:03/eli-c
Uranium	0.0098	mg/L		0.0003		1	E200.8	05/05/08 23:03/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: R08040250-006  
Client Sample ID: DewBurd GW681

Report Date: 06/24/08  
Collection Date: 04/21/08 20:06  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:32/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:32/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 05:59/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:45/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:20/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:47/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	1400	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	23.2	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	430	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	6.6	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	3.9	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	49.9	pCi/L		1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	9.0	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	3.5	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	377	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	3.4	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	3400	pCi/L		20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	110	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	16.7	pCi/L		1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	2.2	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040250-006  
Client Sample ID: DewBurd GW681

Report Date: 06/24/08  
Collection Date: 04/21/08 20:06  
Date Received: 04/22/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	0.2	pCi/L	U			1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/01/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	253000	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	623	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 03:53/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/01/08 03:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 03:53/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 03:53/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/05/08 16:46/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 03:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 03:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 03:53/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/05/08 16:46/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 03:53/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	05/01/08 03:53/eli-c
Mercury	ND	mg/L		0.01		1	E200.8	05/01/08 03:53/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:50/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 03:53/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 03:53/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 03:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 03:53/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	05/01/08 03:53/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 03:53/eli-c
Uranium	0.0102	mg/L		0.0003		1	E200.8	05/01/08 03:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/01/08 03:53/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.67					1	A1030 E	06/17/08 00:00/ADM
Anions	13.5	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	14.3	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	903	mg/L				1	A1030 E	06/17/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040250-006  
**Client Sample ID:** DewBurd GW681

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 20:06  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040250-007  
Client Sample ID: DewBurd GW680

Report Date: 06/24/08  
Collection Date: 04/21/08 21:21  
Date Received: 04/22/08  
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	04/23/08 09:09/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/23/08 09:09/mb
Bicarbonate as HCO3	319	mg/L		5		1	A2320 B	04/23/08 09:09/mb
Calcium	368	mg/L		0.5		2	E200.7	05/05/08 14:39/eli-c
Chloride	11	mg/L		1		5	E300.0	05/10/08 21:46/eli-g
Fluoride	0.3	mg/L		0.1		5	E300.0	05/10/08 21:46/eli-g
Magnesium	123	mg/L		0.5		2	E200.7	05/05/08 14:39/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:06/jmh
Potassium	19.2	mg/L		0.5		2	E200.7	05/05/08 14:39/eli-c
Silica	8.3	mg/L		0.5		2	E200.7	05/05/08 14:39/eli-c
Sodium	125	mg/L		0.5		2	E200.7	05/05/08 14:39/eli-c
Sulfate	1360	mg/L		1		10	E300.0	05/12/08 15:31/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2510	umhos/cm		5.0		1	A2510 B	04/28/08 12:48/tb
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.56	s.u.		0.01		1	A4500-H B	04/28/08 10:37/tb
Sodium Adsorption Ratio (SAR)	1.4	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	04/22/08 14:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 14:39/eli-c
Arsenic	0.007	mg/L		0.001		1	E200.8	05/05/08 23:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 23:09/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	05/05/08 14:39/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 23:09/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/05/08 14:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 23:09/eli-c
Iron	0.25	mg/L		0.03		2	E200.7	05/05/08 14:39/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 23:09/eli-c
Manganese	0.42	mg/L		0.01		2	E200.7	05/05/08 14:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 23:09/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 14:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 23:09/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/06/08 12:46/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/05/08 23:09/eli-c
Uranium	0.0303	mg/L		0.0003		1	E200.8	05/05/08 23:09/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.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040250-007  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 21:21  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 14:39/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 14:39/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 06:03/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/23/08 19:52/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:23/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:49/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4270	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha precision (±)	62.3	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Alpha MDC	7.4	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta	1390	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta precision (±)	17.7	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Gross Beta MDC	9.1	pCi/L				1	E900.0	05/09/08 14:29/eli-c
Lead 210	32.0	pCi/L		1.0		1	E909.0M	05/21/08 07:45/eli-c
Lead 210 precision (±)	8.7	pCi/L				1	E909.0M	05/21/08 07:45/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	1230	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 precision (±)	5.8	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 08:49/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	1000	pCi/L		20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	62	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1.0	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.7	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	05/01/08 14:15/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:** R08040250-007  
**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08  
**Collection Date:** 04/21/08 21:21  
**Date Received:** 04/22/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
RADIONUCLIDES - SUSPENDED								
Radium 226	1.6	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	81000	pCi/L		100		1	D5072-92	04/24/08 13:29/eli-c
Radon 222 precision (±)	371	pCi/L				1	D5072-92	04/24/08 13:29/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/01/08 04:00/eli-c
Arsenic	0.006	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/01/08 04:00/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	05/05/08 16:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/01/08 04:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/01/08 04:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/01/08 04:00/eli-c
Iron	0.29	mg/L		0.03		2	E200.7	05/05/08 16:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Manganese	0.44	mg/L		0.01		1	E200.8	05/01/08 04:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 16:53/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/01/08 04:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/01/08 04:00/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/01/08 04:00/eli-c
Strontium	7.3	mg/L		0.1		1	E200.8	05/01/08 04:00/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/01/08 04:00/eli-c
Uranium	0.0291	mg/L		0.0003		1	E200.8	05/01/08 04:00/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	05/01/08 04:00/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.770					1	A1030 E	06/17/08 00:00/ADM
Anions	33.9	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	34.5	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	2190	mg/L				1	A1030 E	06/17/08 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.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040250-007

**Client Sample ID:** DewBurd GW680

**Report Date:** 06/24/08

**Collection Date:** 04/21/08 21:21

**Date Received:** 04/22/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	06/17/08 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.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B							Batch: 080423A-ALK-SEL-W		
Sample ID: LCS1_080423A	Laboratory Control Sample					Run: PH_COND1-R_080423A		04/23/08 08:40	
Alkalinity, Total as CaCO3	980	mg/L	5.0	98	90	110			
Sample ID: MBLK1_080423A	Method Blank					Run: PH_COND1-R_080423A		04/23/08 08:43	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R08040273-003AMS	Sample Matrix Spike					Run: PH_COND1-R_080423A		04/23/08 09:25	
Alkalinity, Total as CaCO3	270	mg/L	5.0	100	80	120			
Sample ID: R08040273-003AMSD	Sample Matrix Spike Duplicate					Run: PH_COND1-R_080423A		04/23/08 09:29	
Alkalinity, Total as CaCO3	268	mg/L	5.0	98	80	120	0.7	10	
Method: A2510 B							Batch: 080428_1_COND-PROBE-W		
Sample ID: LCS1-1_080428	Laboratory Control Sample					Run: PH_COND2-R_080428B		04/28/08 11:49	
Conductivity @ 25 C	143	umhos/cm	5.0	95	90	110			
Sample ID: LCS2-1_080428	Laboratory Control Sample					Run: PH_COND2-R_080428B		04/28/08 11:50	
Conductivity @ 25 C	4960	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080428	Laboratory Control Sample					Run: PH_COND2-R_080428B		04/28/08 11:51	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080428	Method Blank					Run: PH_COND2-R_080428B		04/28/08 11:52	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08040250-002ADUP	Sample Duplicate					Run: PH_COND2-R_080428B		04/28/08 12:41	
Conductivity @ 25 C	1380	umhos/cm	5.0				0.0	10	
Method: A2540 C							Batch: 080422A-SLDS-TDS-W		
Sample ID: LCS1_080422A	Laboratory Control Sample					Run: BAL-4-R_080422E		04/22/08 13:53	
Solids, Total Dissolved TDS @ 180 C	230	mg/L	5.0	110	90	110			
Sample ID: MBLK1_080422A	Method Blank					Run: BAL-4-R_080422E		04/22/08 14:05	
Solids, Total Dissolved TDS @ 180 C	10	mg/L	3						
Sample ID: R08040250-007AMS	Sample Matrix Spike					Run: BAL-4-R_080422E		04/22/08 14:03	
Solids, Total Dissolved TDS @ 180 C	2500	mg/L	5.0	119	80	120			
Sample ID: R08040250-007AMSD	Sample Matrix Spike Duplicate					Run: BAL-4-R_080422E		04/22/08 14:04	
Solids, Total Dissolved TDS @ 180 C	2500	mg/L	5.0	116	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: 06/24/08

Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Analytical Run: SUB-C100349		
Sample ID: 288-66-6	Initial Calibration Verification Standard								04/29/08 12:37
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Method: A3114 B							Batch: C_SE3114-080429B		
Sample ID: MBLK	Method Blank								04/29/08 12:43
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-66-6	Laboratory Control Sample								04/29/08 12:45
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: R08040250-001E	Sample Matrix Spike								04/29/08 13:07
Selenium-IV	0.047	mg/L	0.0010	94	85	115			
Sample ID: R08040250-001E	Sample Matrix Spike Duplicate								04/29/08 13:10
Selenium-IV	0.048	mg/L	0.0010	96	85	115	2.7	10	
Sample ID: R08040287-001E	Sample Matrix Spike								04/29/08 13:31
Selenium-IV	0.049	mg/L	0.0010	98	85	115			
Sample ID: R08040287-001E	Sample Matrix Spike Duplicate								04/29/08 13:34
Selenium-IV	0.050	mg/L	0.0010	100	85	115	1.8	10	
Method: A3114 B							Batch: C_SE3114-080429D		
Sample ID: MBLK	Method Blank								04/29/08 16:10
Selenium	ND	mg/L	6E-05						
Sample ID: 288-66-6	Laboratory Control Sample								04/29/08 16:12
Selenium	0.053	mg/L	0.0010	107	90	110			
Sample ID: R08040250-001E	Sample Matrix Spike								04/29/08 16:34
Selenium	0.054	mg/L	0.0010	109	85	115			
Sample ID: R08040250-001E	Sample Matrix Spike Duplicate								04/29/08 16:36
Selenium	0.054	mg/L	0.0010	109	85	115	0.1	10	
Sample ID: R08040287-001E	Sample Matrix Spike								04/29/08 16:58
Selenium	0.054	mg/L	0.0010	107	85	115			
Sample ID: R08040287-001E	Sample Matrix Spike Duplicate								04/29/08 17:00
Selenium	0.052	mg/L	0.0010	105	85	115	2.3	10	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080428_1_PH-W		
Sample ID: LCS_pH-1_080428	Laboratory Control Sample				Run: PH_COND2-R_080428A		04/28/08 10:25		
pH	6.93	s.u.	0.010	101	98.55	101.45			
Method: A4500-NH3 G							Batch: A2008-04-28_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080428A		04/28/08 15:00		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080428A		04/28/08 15:01		
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080428A		04/28/08 15:02		
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	90	110			
Sample ID: R08040250-003BMS	Sample Matrix Spike				Run: TECHAA2-R_080428A		04/28/08 16:01		
Nitrogen, Ammonia as N	0.32	mg/L	0.10	115	80	120			
Sample ID: R08040250-003BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080428A		04/28/08 16:02		
Nitrogen, Ammonia as N	0.29	mg/L	0.10	104	80	120	8.9	10	
Method: D5072-92							Batch: C_R100290		
Sample ID: C08041066-001ADUP	Sample Duplicate				Run: SUB-C100290		04/24/08 13:29		
Radon 222	2010	pCi/L	100				3.5	30	
Sample ID: MB-R100290	Method Blank				Run: SUB-C100290		04/24/08 13:29		
Radon 222	20	pCi/L							
Sample ID: LCS-R100290	Laboratory Control Sample				Run: SUB-C100290		04/24/08 13:29		
Radon 222	304	pCi/L	100	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18421		
Sample ID: MB-18421	Method Blank		Run: SUB-C100675				05/05/08 16:12		
Boron	ND	mg/L	0.006						
Iron	ND	mg/L	0.005						
Sample ID: LCS3-18421	Laboratory Control Sample		Run: SUB-C100675				05/05/08 16:15		
Boron	0.498	mg/L	0.10	100	85	115			
Iron	2.52	mg/L	0.030	101	85	115			
Sample ID: R08040250-007D	Sample Matrix Spike		Run: SUB-C100675				05/05/08 16:53		
Boron	0.597	mg/L	0.10	97	70	130			
Iron	2.81	mg/L	0.030	101	70	130			
Sample ID: R08040250-007D	Sample Matrix Spike Duplicate		Run: SUB-C100675				05/05/08 16:56		
Boron	0.590	mg/L	0.10	96	70	130	1.2	20	
Iron	2.75	mg/L	0.030	99	70	130	2.1	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E200.7							Batch: C_R100675			
Sample ID: MB-080505A	Method Blank		Run: SUB-C100675				05/05/08 10:34			
Silica	ND	mg/L	0.06							
Aluminum	ND	mg/L	0.008							
Boron	ND	mg/L	0.004							
Calcium	ND	mg/L	0.04							
Chromium	0.003	mg/L	0.003							
Iron	0.006	mg/L	0.002							
Magnesium	ND	mg/L	0.04							
Manganese	ND	mg/L	0.0004							
Molybdenum	ND	mg/L	0.01							
Potassium	ND	mg/L	0.08							
Sodium	ND	mg/L	0.06							
Vanadium	ND	mg/L	0.006							
Zinc	ND	mg/L	0.004							
Sample ID: LFB-080505A							Laboratory Fortified Blank		Run: SUB-C100675	05/05/08 10:37
Silica	0.97	mg/L	0.10	97	85	125				
Aluminum	0.96	mg/L	0.10	96	85	125				
Boron	0.99	mg/L	0.10	99	85	125				
Calcium	55	mg/L	0.50	110	85	125				
Chromium	0.99	mg/L	0.050	99	85	125				
Iron	0.97	mg/L	0.030	97	85	125				
Magnesium	53	mg/L	0.50	107	85	125				
Manganese	0.95	mg/L	0.010	95	85	125				
Molybdenum	1.0	mg/L	0.10	100	85	125				
Potassium	50	mg/L	0.50	100	85	125				
Sodium	51	mg/L	0.50	102	85	125				
Vanadium	1.0	mg/L	0.10	103	85	125				
Zinc	1.0	mg/L	0.010	102	85	125				
Sample ID: C08040699-001KMS2							Sample Matrix Spike		Run: SUB-C100675	05/05/08 11:04
Aluminum	4.44	mg/L	0.10	87	70	130				
Boron	4.80	mg/L	0.10	91	70	130				
Chromium	4.65	mg/L	0.050	91	70	130				
Iron	4.65	mg/L	0.030	90	70	130				
Manganese	4.70	mg/L	0.010	88	70	130				
Molybdenum	4.79	mg/L	0.10	94	70	130				
Vanadium	4.85	mg/L	0.10	95	70	130				
Zinc	4.90	mg/L	0.021	94	70	130				
Calcium	622	mg/L	1.0	91	70	130				
Magnesium	387	mg/L	1.0	91	70	130				
Potassium	251	mg/L	1.0	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R100675		
Sample ID: C08040699-001KMS2	Sample Matrix Spike			Run: SUB-C100675			05/05/08 11:04		
Silica	20.5	mg/L	0.29	74	70	130			
Sodium	364	mg/L	1.0	91	70	130			
Sample ID: C08040699-001KMSD2	Sample Matrix Spike Duplicate			Run: SUB-C100675			05/05/08 11:17		
Aluminum	4.85	mg/L	0.10	95	70	130	8.8	20	
Boron	5.27	mg/L	0.10	100	70	130	9.2	20	
Chromium	5.04	mg/L	0.050	99	70	130	8.1	20	
Iron	5.01	mg/L	0.030	97	70	130	7.5	20	
Manganese	5.07	mg/L	0.010	96	70	130	7.6	20	
Molybdenum	5.07	mg/L	0.10	100	70	130	5.8	20	
Vanadium	5.26	mg/L	0.10	103	70	130	8.3	20	
Zinc	5.24	mg/L	0.021	101	70	130	6.6	20	
Calcium	670	mg/L	1.0	110	70	130	7.5	20	
Magnesium	420	mg/L	1.0	104	70	130	8.2	20	
Potassium	268	mg/L	1.0	101	70	130	6.7	20	
Silica	22.2	mg/L	0.29	107	70	130	8.1	20	
Sodium	390	mg/L	1.0	102	70	130	6.9	20	
Sample ID: R08040250-005C	Sample Matrix Spike			Run: SUB-C100675			05/05/08 14:25		
Aluminum	1.92	mg/L	0.10	94	70	130			
Boron	2.08	mg/L	0.10	99	70	130			
Chromium	2.00	mg/L	0.050	98	70	130			
Iron	1.98	mg/L	0.030	97	70	130			
Manganese	1.97	mg/L	0.010	95	70	130			
Molybdenum	1.91	mg/L	0.10	94	70	130			
Vanadium	2.11	mg/L	0.10	104	70	130			
Zinc	2.10	mg/L	0.010	103	70	130			
Calcium	156	mg/L	1.0	105	70	130			
Magnesium	126	mg/L	1.0	108	70	130			
Potassium	110	mg/L	1.0	100	70	130			
Silica	9.99	mg/L	0.12	97	70	130			
Sodium	276	mg/L	1.0	94	70	130			
Sample ID: R08040250-005C	Sample Matrix Spike Duplicate			Run: SUB-C100675			05/05/08 14:28		
Aluminum	1.89	mg/L	0.10	93	70	130	1.7	20	
Boron	2.06	mg/L	0.10	98	70	130	0.8	20	
Chromium	1.97	mg/L	0.050	97	70	130	1.4	20	
Iron	1.95	mg/L	0.030	96	70	130	1.6	20	
Manganese	1.95	mg/L	0.010	94	70	130	1.2	20	
Molybdenum	1.90	mg/L	0.10	93	70	130	0.5	20	
Vanadium	2.08	mg/L	0.10	102	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R100675		
Sample ID: R08040250-005C	Sample Matrix Spike Duplicate			Run: SUB-C100675			05/05/08 14:28		
Zinc	2.06	mg/L	0.010	101	70	130	1.7	20	
Calcium	153	mg/L	1.0	102	70	130	1.8	20	
Magnesium	124	mg/L	1.0	105	70	130	2.0	20	
Potassium	108	mg/L	1.0	98	70	130	1.7	20	
Silica	10.0	mg/L	0.12	97	70	130	0.2	20	
Sodium	271	mg/L	1.0	89	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18421		
Sample ID: MB-18421	Method Blank		Run: SUB-C100440				05/01/08 01:04		
Antimony	0.0002	mg/L	0.0002						
Arsenic	ND	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	3E-05						
Chromium	0.001	mg/L	5E-05						
Copper	0.0007	mg/L	0.0001						
Lead	2E-05	mg/L							
Manganese	ND	mg/L	3E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Silver	4E-05	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.0009	mg/L	0.0003						
Sample ID: LCS3-18421	Laboratory Control Sample		Run: SUB-C100440				05/01/08 01:11		
Antimony	0.518	mg/L	0.050	104	85	115			
Arsenic	0.512	mg/L	0.0010	102	85	115			
Barium	0.522	mg/L	0.10	104	85	115			
Beryllium	0.242	mg/L	0.010	97	85	115			
Cadmium	0.257	mg/L	0.010	103	85	115			
Chromium	0.495	mg/L	0.050	99	85	115			
Copper	0.489	mg/L	0.010	98	85	115			
Lead	0.500	mg/L	0.050	100	85	115			
Manganese	2.58	mg/L	0.010	103	85	115			
Molybdenum	0.504	mg/L	0.10	101	85	115			
Nickel	0.500	mg/L	0.050	100	85	115			
Selenium	0.497	mg/L	0.0020	99	85	115			
Silver	0.0460	mg/L	0.010	92	85	115			
Strontium	0.505	mg/L	0.10	101	85	115			
Thallium	0.497	mg/L	0.10	99	85	115			
Uranium	0.486	mg/L	0.00032	97	85	115			
Zinc	0.498	mg/L	0.010	99	85	115			
Sample ID: R08040250-007D	Sample Matrix Spike		Run: SUB-C100440				05/01/08 04:06		
Antimony	0.502	mg/L	0.050	100	70	130			
Arsenic	0.488	mg/L	0.0010	96	70	130			
Barium	0.503	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: 06/24/08

Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18421		
Sample ID: R08040250-007D	Sample Matrix Spike			Run: SUB-C100440			05/01/08 04:06		
Beryllium	0.240	mg/L	0.010	96	70	130			
Cadmium	0.237	mg/L	0.010	95	70	130			
Chromium	0.469	mg/L	0.050	93	70	130			
Copper	0.462	mg/L	0.010	92	70	130			
Lead	0.471	mg/L	0.050	94	70	130			
Manganese	2.92	mg/L	0.010	99	70	130			
Molybdenum	0.483	mg/L	0.10	96	70	130			
Nickel	0.474	mg/L	0.050	94	70	130			
Selenium	0.461	mg/L	0.0020	92	70	130			
Silver	0.0432	mg/L	0.010	86	70	130			
Strontium	7.59	mg/L	0.10		70	130			A
Thallium	0.468	mg/L	0.10	94	70	130			
Uranium	0.504	mg/L	0.00032	95	70	130			
Zinc	0.486	mg/L	0.010	93	70	130			
Sample ID: R08040250-007D	Sample Matrix Spike Duplicate			Run: SUB-C100440			05/01/08 04:13		
Antimony	0.498	mg/L	0.050	100	70	130	0.7	20	
Arsenic	0.495	mg/L	0.0010	98	70	130	1.4	20	
Barium	0.513	mg/L	0.10	100	70	130	2.0	20	
Beryllium	0.229	mg/L	0.010	92	70	130	4.6	20	
Cadmium	0.237	mg/L	0.010	95	70	130	0.0	20	
Chromium	0.471	mg/L	0.050	94	70	130	0.6	20	
Copper	0.459	mg/L	0.010	91	70	130	0.6	20	
Lead	0.472	mg/L	0.050	94	70	130	0.2	20	
Manganese	2.95	mg/L	0.010	100	70	130	1.2	20	
Molybdenum	0.477	mg/L	0.10	95	70	130	1.3	20	
Nickel	0.464	mg/L	0.050	92	70	130	2.0	20	
Selenium	0.459	mg/L	0.0020	92	70	130	0.4	20	
Silver	0.0431	mg/L	0.010	86	70	130	0.2	20	
Strontium	7.67	mg/L	0.10		70	130	1.0	20	A
Thallium	0.471	mg/L	0.10	94	70	130	0.5	20	
Uranium	0.500	mg/L	0.00032	94	70	130	0.9	20	
Zinc	0.481	mg/L	0.010	92	70	130	1.0	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_18450
Sample ID: MB-18450	Method Blank								05/05/08 05:17
Uranium	4E-05	mg/L	2E-05						
Sample ID: LCS1-18450	Laboratory Control Sample								05/05/08 05:21
Uranium	0.0505	mg/L	0.00030	96	80	120			
Sample ID: R08040287-003I	Post Digestion Spike								05/05/08 06:19
Uranium	0.0132	mg/L	0.00030	98	70	130			
Sample ID: R08040287-003I	Post Digestion Spike Duplicate								05/05/08 06:23
Uranium	0.0135	mg/L	0.00030	100	70	130	2.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100685		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C100685				05/05/08 13:42		
Arsenic	ND	mg/L	6E-05						
Barium	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						
Nickel	ND	mg/L	0.0007						
Thorium 232	8E-05	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C100685				05/05/08 13:48		
Arsenic	0.0524	mg/L	0.0010	105	85	115			
Barium	0.0525	mg/L	0.0010	105	85	115			
Cadmium	0.0525	mg/L	0.0010	105	85	115			
Copper	0.0527	mg/L	0.0010	105	85	115			
Lead	0.0516	mg/L	0.0010	103	85	115			
Mercury	0.00519	mg/L	0.0010	104	85	115			
Nickel	0.0527	mg/L	0.0010	105	85	115			
Thorium 232	0.0509	mg/L	0.0010	102	85	115			
Uranium	0.0514	mg/L	0.00030	103	85	115			
<b>Sample ID: R08040250-007C</b>	Post Digestion Spike		Run: SUB-C100685				05/05/08 23:16		
Arsenic	0.0602	mg/L	0.0010	106	70	130			
Barium	0.0776	mg/L	0.10	107	70	130			
Cadmium	0.0480	mg/L	0.010	96	70	130			
Copper	0.0495	mg/L	0.010	94	70	130			
Lead	0.0529	mg/L	0.050	106	70	130			
Mercury	0.00511	mg/L	0.0010	102	70	130			
Nickel	0.0568	mg/L	0.050	107	70	130			
Thorium 232	0.0561	mg/L	0.0010	112	70	130			
Uranium	0.0861	mg/L	0.00030	112	70	130			
<b>Sample ID: R08040250-007C</b>	Post Digestion Spike Duplicate		Run: SUB-C100685				05/05/08 23:23		
Arsenic	0.0629	mg/L	0.0010	111	70	130	4.3	20	
Barium	0.0776	mg/L	0.10	107	70	130	0.0	20	
Cadmium	0.0491	mg/L	0.010	98	70	130	2.3	20	
Copper	0.0518	mg/L	0.010	99	70	130	4.6	20	
Lead	0.0528	mg/L	0.050	105	70	130	0.2	20	
Mercury	0.00518	mg/L	0.0010	104	70	130	1.3	20	
Nickel	0.0635	mg/L	0.050	121	70	130	11	20	
Thorium 232	0.0560	mg/L	0.0010	112	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100685		
Sample ID: R08040250-007C	Post Digestion Spike Duplicate				Run: SUB-C100685			05/05/08 23:23	
Uranium	0.0857	mg/L	0.00030	111	70	130	0.5	20	
Sample ID: C08040936-001AMS	Sample Matrix Spike				Run: SUB-C100685			05/06/08 03:00	
Arsenic	0.56	mg/L	0.0010	104	70	130			
Barium	0.54	mg/L	0.0010	103	70	130			
Cadmium	0.50	mg/L	0.0010	101	70	130			
Copper	0.49	mg/L	0.0015	98	70	130			
Lead	0.52	mg/L	0.0010	104	70	130			
Mercury	0.053	mg/L	0.0010	105	70	130			
Nickel	0.50	mg/L	0.0010	98	70	130			
Thorium 232	0.53	mg/L	0.0010	107	70	130			
Uranium	0.53	mg/L	0.00032	106	70	130			
Sample ID: C08040936-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100685			05/06/08 03:07	
Arsenic	0.56	mg/L	0.0010	104	70	130	0.5	20	
Barium	0.54	mg/L	0.0010	104	70	130	0.8	20	
Cadmium	0.50	mg/L	0.0010	101	70	130	0.2	20	
Copper	0.50	mg/L	0.0015	99	70	130	1.8	20	
Lead	0.52	mg/L	0.0010	104	70	130	0.3	20	
Mercury	0.043	mg/L	0.0010	87	70	130	19	20	
Nickel	0.51	mg/L	0.0010	100	70	130	2.3	20	
Thorium 232	0.53	mg/L	0.0010	106	70	130	0.2	20	
Uranium	0.53	mg/L	0.00032	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100732		
Sample ID: LRB	Method Blank					Run: SUB-C100732			05/06/08 11:52
Silver	5E-05	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank					Run: SUB-C100732			05/06/08 11:59
Silver	0.0211	mg/L	0.0010	105	85	115			
Sample ID: C08040928-001CMS4	Post Digestion Spike					Run: SUB-C100732			05/06/08 15:02
Silver	0.0129	mg/L	0.010	65	70	130			S
Sample ID: C08040928-001CMSD4	Post Digestion Spike Duplicate					Run: SUB-C100732			05/06/08 15:08
Silver	0.0134	mg/L	0.010	67	70	130	3.4	20	S
Sample ID: R08040287-001C	Post Digestion Spike					Run: SUB-C100732			05/07/08 01:51
Silver	0.0144	mg/L	0.010	72	70	130			
Sample ID: R08040287-001C	Post Digestion Spike Duplicate					Run: SUB-C100732			05/07/08 01:58
Silver	0.0151	mg/L	0.010	76	70	130	5.0	20	
Method: E245.1							Batch: C_B_32271		
Sample ID: MB-32271	Method Blank					Run: SUB-C100762			05/06/08 16:10
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-32271	Laboratory Fortified Blank					Run: SUB-C100762			05/06/08 16:12
Mercury	0.0019	mg/L	0.0010	93	85	115			
Sample ID: B08050167-003CMS	Sample Matrix Spike					Run: SUB-C100762			05/06/08 16:22
Mercury	0.0019	mg/L	0.0010	97	70	130			
Sample ID: B08050167-003CMSD	Sample Matrix Spike Duplicate					Run: SUB-C100762			05/06/08 16:24
Mercury	0.0021	mg/L	0.0010	105	70	130	8.4	30	
Sample ID: B08050247-007DMS	Sample Matrix Spike					Run: SUB-C100762			05/06/08 16:55
Mercury	0.0020	mg/L	0.0010	102	70	130			
Sample ID: B08050247-007DMSD	Sample Matrix Spike Duplicate					Run: SUB-C100762			05/06/08 16:57
Mercury	0.0019	mg/L	0.0010	96	70	130	5.6	30	
Method: E245.1							Analytical Run: SUB-C100762		
Sample ID: QCS	Initial Calibration Verification Standard								05/06/08 14:51
Mercury	0.0020	mg/L	0.0010	101	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: 06/24/08

Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0							Batch: G_R159465		
Sample ID: G08050354-007BMS	Sample Matrix Spike				Run: SUB-G159465		05/11/08 08:04		
Chloride	1060	mg/L	2.1	100	80	120			
Fluoride	99.9	mg/L	0.18	101	80	120			
Sample ID: G08050354-007BMSD	Sample Matrix Spike Duplicate				Run: SUB-G159465		05/11/08 08:16		
Chloride	1080	mg/L	2.1	102	80	120	1.8	20	
Fluoride	102	mg/L	0.18	103	80	120	1.7	20	
Method: E300.0							Batch: G_R159560		
Sample ID: G08050374-001BMS	Sample Matrix Spike				Run: SUB-G159560		05/13/08 04:54		
Sulfate	385	mg/L	1.0	100	80	120			
Sample ID: G08050374-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-G159560		05/13/08 05:06		
Sulfate	382	mg/L	1.0	99	80	120	0.9	20	
Method: E353.2							Batch: A2008-04-23_3_NO2_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA1-R_080423A		04/23/08 18:53		
Nitrogen, Nitrite as N	ND	mg/L	0.02						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA1-R_080423A		04/23/08 19:06		
Nitrogen, Nitrite as N	0.249	mg/L	0.050	100	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA1-R_080423A		04/23/08 19:08		
Nitrogen, Nitrite as N	0.282	mg/L	0.050	113	90	110			S
Sample ID: R08040244-001BMS	Sample Matrix Spike				Run: TECHAA1-R_080423A		04/23/08 19:21		
Nitrogen, Nitrite as N	0.167	mg/L	0.050	67	90	110			S
Sample ID: R08040244-001BMSD	Sample Matrix Spike Duplicate				Run: TECHAA1-R_080423A		04/23/08 19:23		
Nitrogen, Nitrite as N	0.171	mg/L	0.050	68	90	110	2.4	10	S
Sample ID: R08040250-006AMS	Sample Matrix Spike				Run: TECHAA1-R_080423A		04/23/08 19:47		
Nitrogen, Nitrite as N	0.226	mg/L	0.050	90	90	110			
Sample ID: R08040250-006AMSD	Sample Matrix Spike Duplicate				Run: TECHAA1-R_080423A		04/23/08 19:49		
Nitrogen, Nitrite as N	0.196	mg/L	0.050	78	90	110	14	10	SR

### 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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0439		
Sample ID: MB-GrAB-0439	Method Blank				Run: SUB-C100919			05/09/08 01:51	
Gross Alpha	-0.1	pCi/L							U
Gross Beta	-1	pCi/L							U
Sample ID: UNAT-GrAB-0439	Laboratory Control Sample				Run: SUB-C100919			05/09/08 01:51	
Gross Alpha	250	pCi/L	100		70	130			
Sample ID: Cs137-GrAB-0439	Laboratory Control Sample				Run: SUB-C100919			05/09/08 01:51	
Gross Beta	93	pCi/L	100		70	130			
Sample ID: C08041163-001BMS	Sample Matrix Spike				Run: SUB-C100919			05/09/08 01:51	
Gross Alpha	260	pCi/L	102		70	130			
Sample ID: C08041163-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C100919			05/09/08 01:51	
Gross Alpha	240	pCi/L	96		70	130	6.6	15.8	
Sample ID: C08041163-001BMS	Sample Matrix Spike				Run: SUB-C100919			05/09/08 01:51	
Gross Beta	94	pCi/L	101		70	130			
Sample ID: C08041163-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C100919			05/09/08 01:51	
Gross Beta	93	pCi/L	100		70	130	1.1	16.1	
Method: E901.1							Batch: C_R100708		
Sample ID: LCS-R100708	Laboratory Control Sample				Run: SUB-C100708			05/01/08 17:22	
Americium 241	720	pCi/L	20	88	70	130			
Cesium 137	1200	pCi/L	20	109	70	130			
Sample ID: MB-R100708	Method Blank				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	ND	pCi/L							
Sample ID: C08041046-006ADUP	Sample Duplicate				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	480	pCi/L	20				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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18450		
Sample ID: C08041110-001AMS	Sample Matrix Spike				Run: SUB-C100770		05/06/08 15:27		
Radium 226	125	pCi/Filter	101		70	130			
Sample ID: C08041110-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100770		05/06/08 15:27		
Radium 226	127	pCi/Filter	102		70	130	1.2	25.7	
Sample ID: LCS-18450	Laboratory Control Sample				Run: SUB-C100770		05/06/08 15:27		
Radium 226	13	pCi/L	109		70	130			
Sample ID: MB-18450	Method Blank				Run: SUB-C100770		05/06/08 15:27		
Radium 226	-2	pCi/L							U
Method: E903.0							Batch: C_RA226-2771		
Sample ID: C08041060-002HMS	Sample Matrix Spike				Run: SUB-C101060		05/13/08 08:49		
Radium 226	12	pCi/L	90		70	130			
Sample ID: C08041060-002HMSD	Sample Matrix Spike Duplicate				Run: SUB-C101060		05/13/08 08:49		
Radium 226	12	pCi/L	93		70	130	2.4	21.9	
Sample ID: MB-RA226-2771	Method Blank				Run: SUB-C101060		05/13/08 13:15		
Radium 226	-0.03	pCi/L							U
Sample ID: LCS-RA226-2771	Laboratory Control Sample				Run: SUB-C101060		05/13/08 13:15		
Radium 226	5.3	pCi/L	83		70	130			
Method: E907.0							Batch: C_18450		
Sample ID: C08041060-004IMS	Sample Matrix Spike				Run: SUB-C100959		05/01/08 15:30		
Thorium 230	21.6	pCi/L	0.20	98	70	130			
Sample ID: C08041060-004IMSD	Sample Matrix Spike Duplicate				Run: SUB-C100959		05/01/08 15:30		
Thorium 230	18.9	pCi/L	0.20	82	70	130	13	30	
Sample ID: LCS-18450	Laboratory Control Sample				Run: SUB-C100959		05/01/08 15:30		
Thorium 230	47.0	pCi/L	0.20	98	70	130			
Sample ID: MB-18450	Method Blank				Run: SUB-C100959		05/01/08 15:30		
Thorium 230	ND	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: 06/24/08

Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_R100724		
Sample ID: LCS-R100724	Laboratory Control Sample				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	7.20	pCi/L	0.20	103	70	130			
Sample ID: R08040287-001H	Sample Matrix Spike				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	9.50	pCi/L	0.20	97	70	130			
Sample ID: R08040287-001H	Sample Matrix Spike Duplicate				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	9.40	pCi/L	0.20	96	70	130	1.1	30	
Sample ID: MB-R100724	Method Blank				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	ND	pCi/L							
Method: E909.0M							Batch: C_18450		
Sample ID: C08041052-003BMS	Sample Matrix Spike				Run: SUB-C101784			05/16/08 07:00	
Lead 210	1000	pCi/L	1.0	85	70	130			
Sample ID: C08041052-003BMSD	Sample Matrix Spike Duplicate				Run: SUB-C101784			05/16/08 07:00	
Lead 210	1200	pCi/L	1.0	101	70	130	18	30	
Sample ID: MB-R101784	Method Blank				Run: SUB-C101784			05/16/08 07:00	
Lead 210	ND	pCi/L							
Sample ID: LCS-R101784	Laboratory Control Sample				Run: SUB-C101784			05/16/08 07:00	
Lead 210	130	pCi/L	1.0	106	70	130			
Method: E909.0M							Batch: C_R102446		
Sample ID: C08041052-001AMS	Sample Matrix Spike				Run: SUB-C102446			05/21/08 07:45	
Lead 210	460	pCi/L	1.0	78	70	130			
Sample ID: C08041052-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C102446			05/21/08 07:45	
Lead 210	500	pCi/L	1.0	85	70	130	9.1	30	
Sample ID: C08041052-006ADUP	Sample Duplicate				Run: SUB-C102446			05/21/08 07:45	
Lead 210	ND	pCi/L	1.0				0.0	30	
Sample ID: MB-R102446	Method Blank				Run: SUB-C102446			05/21/08 07:45	
Lead 210	ND	pCi/L							
Sample ID: LCS-R102446	Laboratory Control Sample				Run: SUB-C102446			05/21/08 07:45	
Lead 210	130	pCi/L	1.0	109	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: 06/24/08  
Work Order: R08040250

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_R100704		
Sample ID: R08040287-003I	Sample Matrix Spike				Run: SUB-C100704			05/01/08 14:15	
Polonium 210	88	pCi/L	1.0	107	70	130			
Sample ID: R08040287-003I	Sample Matrix Spike Duplicate				Run: SUB-C100704			05/01/08 14:15	
Polonium 210	89	pCi/L	1.0	107	70	130	0.8	30	
Sample ID: LCS-18424	Laboratory Control Sample				Run: SUB-C100704			05/01/08 14:15	
Polonium 210	180	pCi/L	1.0	102	70	130			
Sample ID: MB-18424	Method Blank				Run: SUB-C100704			05/01/08 14:15	
Polonium 210	0.5	pCi/L							U
Method: RMO-3008							Batch: C_R100887		
Sample ID: R08040250-007H	Sample Matrix Spike				Run: SUB-C100887			05/06/08 17:00	
Polonium 210	160	pCi/L	1.0	93	70	130			
Sample ID: R08040250-007H	Sample Matrix Spike Duplicate				Run: SUB-C100887			05/06/08 17:00	
Polonium 210	220	pCi/L	1.0	125	70	130	30	30	
Sample ID: LCS-R100887	Laboratory Control Sample				Run: SUB-C100887			05/06/08 17:00	
Polonium 210	93	pCi/L	1.0	106	70	130			
Sample ID: MB-R100887	Method Blank				Run: SUB-C100887			05/06/08 17:00	
Polonium 210	0.8	pCi/L							

### 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. Refer to corresponding notes on reverse side.

Company Name: <b>RESPEC</b>		Project Name, PWS #, Permit #, Etc.: <b>Pine Tail Derry Pump</b>	
Report Mail Address: <b>RESPEC</b>		Contact Name, Phone, Fax, E-mail: <b>Cor. Foreman &amp; Rep. - Eric Krantz</b>	
Invoice Address: <b>RESPEC</b>		Invoice Contact & Phone #: <b>Cor. Foreman &amp; Rep. - Eric Krantz</b>	
Report Required For: <input type="checkbox"/> POT/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other: _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other: _____ EDD/EDT <input type="checkbox"/> Format: _____		Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		ANALYSIS REQUESTED	
Collection Date		Collection Time	
MATRIX		SEE ATTACHED	
Normal Turnaround (TAT)		RUSH Turnaround (TAT)	
Notify ELI prior to RUSH sample submittal for additional charges and scheduling		Comments:	
Custody Intact Signature Match		Receipt	
Lab ID		Date/Time	

1	2	3	4	5	6	7	8	9	10
Dew Burd GN 694	4/21/08	12:24	W						
Dew Burd GN 694	4/21/08	12:30	W						
Dew Burd GN 622	4/21/08	15:24	W						
Dew Burd GN 615	4/21/08	16:16	W						
Dew Burd GN 689	4/21/08	19:50	W						
Dew Burd GN 681	4/21/08	20:36	W						
Dew Burd GN 680	4/21/08	21:21	W						

Custody Record MUST be Signed	Relinquished by: <b>Eric Krantz</b>	Date/Time: <b>4/22/08 8:00</b>	Shipped by:	Received by: <b>Eric Krantz</b>	Date/Time: <b>4/22/08 8:45</b>
Sample Disposal:	Return to client:	Lab Disposal:	Sample Type:	# of fractions:	

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, & links.



## ANALYTICAL SUMMARY REPORT

June 24, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08040287

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 4/23/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040287-001	DewBurd GW695	04/22/08 12:46	04/23/08	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 Nitrogen, Nitrite Nitrogen, Nitrate + Nitrite Nitrogen, Nitrate Only 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
R08040287-002	DewBurd GW688	04/22/08 13:26	04/23/08	Aqueous	Same As Above
R08040287-003	DewBurd GW3026	04/22/08 14:30	04/23/08	Aqueous	Same As Above
R08040287-004	DewBurd GW698	04/22/08 11:30	04/23/08	Aqueous	Same As Above
R08040287-005	DewBurd GW697	04/22/08 16:02	04/23/08	Aqueous	Same As Above



R08040287-006 DewBurd BLK01

04/22/08 15:57 04/23/08

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  
Nitrogen, Nitrite  
Nitrogen, Nitrate + Nitrite  
Nitrogen, Nitrate Only  
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



R08040287-007 DewBurd GW696

04/22/08 16:58 04/23/08

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  
Nitrogen, Nitrite  
Nitrogen, Nitrate + Nitrite  
Nitrogen, Nitrate Only  
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: R08040287-001  
Client Sample ID: DewBurd GW695

Report Date: 06/24/08  
Collection Date: 04/22/08 12:46  
Date Received: 04/23/08  
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	04/25/08 15:21/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/25/08 15:21/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	04/25/08 15:21/mb
Calcium	50.1	mg/L		0.5		2	E200.7	05/08/08 21:29/eli-c
Chloride	11	mg/L		1		5	E300.0	05/10/08 21:58/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/10/08 21:58/eli-g
Magnesium	17.6	mg/L		0.5		2	E200.7	05/08/08 21:29/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:23/jmh
Potassium	8.4	mg/L		0.5		2	E200.7	05/08/08 21:29/eli-c
Silica	3.9	mg/L		0.5		2	E200.7	05/08/08 21:29/eli-c
Sodium	251	mg/L	D	2		2	E200.7	05/08/08 21:29/eli-c
Sulfate	504	mg/L		1		5	E300.0	05/10/08 21:58/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1370	umhos/cm		5.0		1	A2510 B	04/28/08 12:49/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.08	s.u.		0.01		1	A4500-H B	04/28/08 10:42/tb
Sodium Adsorption Ratio (SAR)	7.8	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	04/24/08 16:44/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 21:29/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/07/08 01:44/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 01:44/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 21:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 01:44/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 01:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 01:44/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/08/08 21:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 01:44/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	05/07/08 01:44/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 01:44/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 01:44/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 01:44/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 16:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 01:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 01:44/eli-c
Uranium	0.0029	mg/L		0.0003		1	E200.8	05/07/08 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: R08040287-001  
Client Sample ID: DewBurd GW695

Report Date: 06/24/08  
Collection Date: 04/22/08 12:46  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 01:44/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 01:44/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 06:07/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.06	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:15/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:29/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 16:56/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	29.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	4.2	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	3.7	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	6.0	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	-1.8	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.9	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	1.6	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	5.0	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.1	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040287-001  
Client Sample ID: DewBurd GW695

Report Date: 06/24/08  
Collection Date: 04/22/08 12:46  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.4	pCi/L	U			1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1400	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	64.0	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 16:04/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/05/08 16:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 16:04/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/06/08 19:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 23:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 16:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 16:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 16:04/eli-c
Iron	0.14	mg/L		0.03		2	E200.7	05/08/08 23:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 16:04/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	05/05/08 16:04/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:00/eli-b
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 16:04/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 16:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 16:04/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 16:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 16:04/eli-c
Strontium	1.0	mg/L		0.1		1	E200.8	05/05/08 16:04/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 16:04/eli-c
Uranium	0.0032	mg/L		0.0003		1	E200.8	05/05/08 16:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 16:04/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.68					1	A1030 E	06/18/08 00:00/ADM
Anions	14.3	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	15.1	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	957	mg/L				1	A1030 E	06/18/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-001  
**Client Sample ID:** DewBurd GW695

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 12:46  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-002  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/22/08 13:26  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	90	mg/L		5		1	A2320 B	04/25/08 15:25/mb
Carbonate as CO3	17	mg/L		5		1	A2320 B	04/25/08 15:25/mb
Bicarbonate as HCO3	76	mg/L		5		1	A2320 B	04/25/08 15:25/mb
Calcium	50.1	mg/L		0.5		2	E200.7	05/08/08 21:33/eli-c
Chloride	10	mg/L		1		5	E300.0	05/10/08 22:09/eli-g
Fluoride	0.5	mg/L		0.1		5	E300.0	05/10/08 22:09/eli-g
Magnesium	20.5	mg/L		0.5		2	E200.7	05/08/08 21:33/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:24/jmh
Potassium	12.2	mg/L		0.5		2	E200.7	05/08/08 21:33/eli-c
Silica	3.7	mg/L		0.5		2	E200.7	05/08/08 21:33/eli-c
Sodium	197	mg/L	D	2		2	E200.7	05/08/08 21:33/eli-c
Sulfate	390	mg/L		1		5	E300.0	05/10/08 22:09/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1070	umhos/cm		5.0		1	A2510 B	04/28/08 12:50/tb
Oxidation-Reduction Potential	280	mV				1	A2580 B	04/24/08 00:00/tb
pH	9.15	s.u.		0.01		1	A4500-H B	04/28/08 10:43/tb
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	690	mg/L		5		1	A2540 C	04/24/08 16:45/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 21:33/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/07/08 02:05/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:05/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 21:33/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:05/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:05/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/08/08 21:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:05/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	05/07/08 02:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:05/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 02:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:05/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:05/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:05/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/07/08 02:05/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: R08040287-002  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/22/08 13:26  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:05/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 02:05/eli-c
- The result for Manganese was confirmed by re-analysis.								
<b>METALS - SUSPENDED</b>								
Uranium	0.0147	mg/L		0.0003		1	E200.8	05/05/08 06:11/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:21/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:36/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:02/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	10.1	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	3.3	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	16.9	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	3.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	-2.7	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.8	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	1.9	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	1.2	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.1	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	0.5	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040287-002  
Client Sample ID: DewBurd GW688

Report Date: 06/24/08  
Collection Date: 04/22/08 13:26  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	0.02	pCi/L	U			1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	05/06/08 15:27/eli-c
Thorium 230	15.9	pCi/L		0.2		1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	1.4	pCi/L				1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	307	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	51.1	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 16:10/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 16:10/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 16:10/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/06/08 20:06/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 00:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 16:10/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 16:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 16:10/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	05/09/08 00:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 16:10/eli-c
Manganese	0.01	mg/L		0.01		1	E200.8	05/05/08 16:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 16:10/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:02/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 16:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 16:10/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 16:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 16:10/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	05/05/08 16:10/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 16:10/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 16:10/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 16:10/eli-c

- The result for Manganese was confirmed by re-analysis.

### DATA QUALITY

A/C Balance (± 5)	12.1					1	A1030 E	06/18/08 00:00/ADM
Anions	10.2	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	13.1	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	744	mg/L				1	A1030 E	06/18/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040287-002

**Client Sample ID:** DewBurd GW688

**Report Date:** 06/24/08

**Collection Date:** 04/22/08 13:26

**Date Received:** 04/23/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.920					1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-003  
Client Sample ID: DewBurd GW3026

Report Date: 06/24/08  
Collection Date: 04/22/08 14:30  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	126	mg/L		5		1	A2320 B	04/25/08 15:28/mb
Carbonate as CO3	10	mg/L		5		1	A2320 B	04/25/08 15:28/mb
Bicarbonate as HCO3	134	mg/L		5		1	A2320 B	04/25/08 15:28/mb
Calcium	331	mg/L		0.5		2	E200.7	05/08/08 21:37/eli-c
Chloride	16	mg/L		1		5	E300.0	05/10/08 22:21/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/10/08 22:21/eli-g
Magnesium	86.8	mg/L		0.5		2	E200.7	05/08/08 21:37/eli-c
Nitrogen, Ammonia as N	0.8	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:30/jmh
Potassium	23.7	mg/L		0.5		2	E200.7	05/08/08 21:37/eli-c
Silica	2.1	mg/L		0.5		2	E200.7	05/08/08 21:37/eli-c
Sodium	284	mg/L	D	2		2	E200.7	05/08/08 21:37/eli-c
Sulfate	1520	mg/L		1		10	E300.0	05/12/08 15:43/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2730	umhos/cm		5.0		1	A2510 B	04/28/08 12:51/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.49	s.u.		0.01		1	A4500-H B	04/28/08 10:46/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	04/24/08 16:46/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 21:37/eli-c
Arsenic	0.012	mg/L		0.001		1	E200.8	05/07/08 02:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:12/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 21:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:12/eli-c
Iron	2.67	mg/L		0.03		2	E200.7	05/08/08 21:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:12/eli-c
Manganese	0.36	mg/L		0.01		1	E200.8	05/07/08 02:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:12/eli-c
Molybdenum	0.1	mg/L		0.1		1	E200.8	05/07/08 02:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:12/eli-c
Uranium	0.0150	mg/L		0.0003		1	E200.8	05/07/08 02:12/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: R08040287-003  
Client Sample ID: DewBurd GW3026

Report Date: 06/24/08  
Collection Date: 04/22/08 14:30  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:12/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	05/07/08 02:12/eli-c
METALS - SUSPENDED								
Uranium	0.0010	mg/L		0.0003		1	E200.8	05/05/08 06:15/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.09	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:23/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:39/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:04/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	43.8	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	8.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	8.6	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	24.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	6.0	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.9	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	2.8	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-8.2	pCi/L	U	1.0		1	E909.0M	05/16/08 07:00/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	05/16/08 07:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	05/01/08 14:15/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	05/01/08 14:15/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: R08040287-003  
Client Sample ID: DewBurd GW3026

Report Date: 06/24/08  
Collection Date: 04/22/08 14:30  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Radium 226	0.1	pCi/L	U				1	E903.0	05/06/08 15:27/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	05/06/08 15:27/eli-c
Radium 226 MDC	0.4	pCi/L					1	E903.0	05/06/08 15:27/eli-c
Thorium 230	0.3	pCi/L		0.2			1	E907.0	05/01/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	05/01/08 15:30/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	304	pCi/L		100			1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	50.7	pCi/L					1	D5072-92	04/25/08 16:30/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	05/05/08 16:37/eli-c
Arsenic	0.022	mg/L		0.001			1	E200.8	05/05/08 16:37/eli-c
Barium	ND	mg/L		0.1			1	E200.8	05/05/08 16:37/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	05/06/08 20:13/eli-c
Boron	ND	mg/L		0.1			2	E200.7	05/09/08 00:11/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	05/05/08 16:37/eli-c
Chromium	ND	mg/L		0.05			1	E200.8	05/05/08 16:37/eli-c
Copper	ND	mg/L		0.01			1	E200.8	05/05/08 16:37/eli-c
Iron	5.38	mg/L		0.03			2	E200.7	05/09/08 00:11/eli-c
Lead	ND	mg/L		0.001			1	E200.8	05/05/08 16:37/eli-c
Manganese	0.46	mg/L		0.01			1	E200.8	05/05/08 16:37/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	05/05/08 16:37/eli-c
Mercury	ND	mg/L		0.001			1	E245.1	05/06/08 17:05/eli-b
Molybdenum	0.1	mg/L		0.1			1	E200.8	05/05/08 16:37/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	05/05/08 16:37/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	05/05/08 16:37/eli-c
Silver	ND	mg/L		0.005			1	E200.8	05/05/08 16:37/eli-c
Strontium	6.3	mg/L		0.1			1	E200.8	05/05/08 16:37/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	05/05/08 16:37/eli-c
Uranium	0.0196	mg/L		0.0003			1	E200.8	05/05/08 16:37/eli-c
Zinc	0.01	mg/L		0.01			1	E200.8	05/05/08 16:37/eli-c
DATA QUALITY									
A/C Balance (± 5)	3.12						1	A1030 E	06/18/08 00:00/ADM
Anions	34.6	meq/L					1	A1030 E	06/18/08 00:00/ADM
Cations	36.8	meq/L					1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	2340	mg/L					1	A1030 E	06/18/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-003  
**Client Sample ID:** DewBurd GW3026

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 14:30  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
TDS Balance (0.80 - 1.20)	0.990						1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-004  
**Client Sample ID:** DewBurd GW698

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 11:30  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	120	mg/L		5		1	A2320 B	04/25/08 15:41/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/25/08 15:41/mb
Bicarbonate as HCO3	146	mg/L		5		1	A2320 B	04/25/08 15:41/mb
Calcium	366	mg/L		0.5		2	E200.7	05/08/08 21:41/eli-c
Chloride	9	mg/L		1		5	E300.0	05/10/08 22:33/eli-g
Fluoride	0.3	mg/L		0.1		5	E300.0	05/10/08 22:33/eli-g
Magnesium	129	mg/L		0.5		2	E200.7	05/08/08 21:41/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:33/jmh
Potassium	15.6	mg/L		0.5		2	E200.7	05/08/08 21:41/eli-c
Silica	4.8	mg/L		0.5		2	E200.7	05/08/08 21:41/eli-c
Sodium	89	mg/L	D	2		2	E200.7	05/08/08 21:41/eli-c
Sulfate	1450	mg/L		1		10	E300.0	05/12/08 15:54/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2420	umhos/cm		5.0		1	A2510 B	04/28/08 12:53/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	04/24/08 00:00/tb
pH	7.15	s.u.		0.01		1	A4500-H B	04/28/08 10:48/tb
Sodium Adsorption Ratio (SAR)	1.0	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	04/24/08 16:46/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 21:41/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/07/08 02:18/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:18/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 21:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:18/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:18/eli-c
Iron	2.49	mg/L		0.03		2	E200.7	05/08/08 21:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:18/eli-c
Manganese	2.39	mg/L		0.01		1	E200.8	05/07/08 02:18/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:18/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 02:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:18/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:18/eli-c
Uranium	0.110	mg/L		0.0003		1	E200.8	05/07/08 02:18/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: R08040287-004  
Client Sample ID: DewBurd GW698

Report Date: 06/24/08  
Collection Date: 04/22/08 11:30  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:18/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 02:18/eli-c
METALS - SUSPENDED								
Uranium	0.0006	mg/L		0.0003		1	E200.8	05/05/08 06:48/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.09	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:26/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:07/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2110	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	46.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	8.3	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	604	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	12.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	-3.5	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.8	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	1.4	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	370	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 precision (±)	3.2	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	680	pCi/L		20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	54	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/14/08 06:30/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	05/14/08 06:30/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	05/06/08 12:00/eli-c
Polonium 210 precision (±)	0.48	pCi/L				1	RMO-3008	05/06/08 12:00/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: R08040287-004  
Client Sample ID: DewBurd GW698

Report Date: 06/24/08  
Collection Date: 04/22/08 11:30  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	6.4	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	05/02/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/02/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	25800	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	193	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 16:44/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/05/08 16:44/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 16:44/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/07/08 21:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 00:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 16:44/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 16:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 16:44/eli-c
Iron	4.53	mg/L		0.03		2	E200.7	05/09/08 00:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 16:44/eli-c
Manganese	2.50	mg/L		0.01		1	E200.8	05/05/08 16:44/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 16:44/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:07/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 16:44/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 16:44/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 16:44/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 16:44/eli-c
Strontium	5.2	mg/L		0.1		1	E200.8	05/05/08 16:44/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 16:44/eli-c
Uranium	0.119	mg/L		0.0003		1	E200.8	05/05/08 16:44/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 16:44/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.920					1	A1030 E	06/18/08 00:00/ADM
Anions	32.8	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	33.4	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	2140	mg/L				1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-004  
**Client Sample ID:** DewBurd GW698

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 11:30  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.05					1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-005  
Client Sample ID: DewBurd GW697

Report Date: 06/24/08  
Collection Date: 04/22/08 16:02  
Date Received: 04/23/08  
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	04/25/08 15:44/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/25/08 15:44/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	04/25/08 15:44/mb
Calcium	50.6	mg/L		0.5		2	E200.7	05/08/08 22:42/eli-c
Chloride	8	mg/L		1		5	E300.0	05/10/08 22:44/eli-g
Fluoride	0.5	mg/L		0.1		5	E300.0	05/10/08 22:44/eli-g
Magnesium	17.3	mg/L		0.5		2	E200.7	05/08/08 22:42/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:34/jmh
Potassium	8.5	mg/L		0.5		2	E200.7	05/08/08 22:42/eli-c
Silica	4.0	mg/L		0.5		2	E200.7	05/08/08 22:42/eli-c
Sodium	215	mg/L	D	2		2	E200.7	05/08/08 22:42/eli-c
Sulfate	430	mg/L		1		5	E300.0	05/10/08 22:44/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	04/28/08 12:54/tb
Oxidation-Reduction Potential	320	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.07	s.u.		0.01		1	A4500-H B	04/28/08 10:49/tb
Sodium Adsorption Ratio (SAR)	6.6	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	810	mg/L		5		1	A2540 C	04/25/08 13:10/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	05/08/08 13:28/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/07/08 02:25/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:25/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 22:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:25/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:25/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	05/08/08 22:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:25/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	05/07/08 02:25/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:25/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 02:25/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:25/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:25/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:25/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/07/08 02:25/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: R08040287-005  
Client Sample ID: DewBurd GW697

Report Date: 06/24/08  
Collection Date: 04/22/08 16:02  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:25/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 02:25/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 06:52/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:28/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:09/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	2.7	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	3.3	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	8.4	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	4.0	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	-0.7	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.9	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	1.7	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 11:18/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/14/08 06:30/eli-c
Lead 210 precision (±)	1.2	pCi/L				1	E909.0M	05/14/08 06:30/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	05/06/08 12:00/eli-c
Polonium 210 precision (±)	0.24	pCi/L				1	RMO-3008	05/06/08 12:00/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: R08040287-005  
Client Sample ID: DewBurd GW697

Report Date: 06/24/08  
Collection Date: 04/22/08 16:02  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.1	pCi/L	U			1	E903.0	05/13/08 11:21/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/02/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/02/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	284	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	49.9	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 16:51/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 16:51/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 16:51/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/07/08 21:34/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 01:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 16:51/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 16:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 16:51/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	05/09/08 01:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 16:51/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	05/05/08 16:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 16:51/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:09/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 16:51/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 16:51/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 16:51/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 16:51/eli-c
Strontium	1.3	mg/L		0.1		1	E200.8	05/05/08 16:51/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 16:51/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 16:51/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 16:51/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.91					1	A1030 E	06/18/08 00:00/ADM
Anions	12.5	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	13.5	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	840	mg/L				1	A1030 E	06/18/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-005  
**Client Sample ID:** DewBurd GW697

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 16:02  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	06/18/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/24/08  
Collection Date: 04/22/08 15:57  
Date Received: 04/23/08  
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>	ND	mg/L		5		1	A2320 B	04/25/08 15:46/mb
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/25/08 15:46/mb
Bicarbonate as HCO <sub>3</sub>	ND	mg/L		5		1	A2320 B	04/25/08 15:46/mb
Calcium	ND	mg/L		0.5		2	E200.7	05/08/08 22:50/eli-c
Chloride	ND	mg/L		1		1	E300.0	05/10/08 22:56/eli-g
Fluoride	ND	mg/L		0.1		1	E300.0	05/10/08 22:56/eli-g
Magnesium	ND	mg/L		0.5		2	E200.7	05/08/08 22:50/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH <sub>3</sub> G	04/28/08 16:36/jmh
Potassium	ND	mg/L		0.5		2	E200.7	05/08/08 22:50/eli-c
Silica	ND	mg/L		0.5		2	E200.7	05/08/08 22:50/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	05/08/08 22:50/eli-c
Sulfate	ND	mg/L		1		1	E300.0	05/10/08 22:56/eli-g
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	04/28/08 12:56/tb
Oxidation-Reduction Potential	350	mV				1	A2580 B	04/24/08 00:00/tb
pH	5.67	s.u.		0.01		1	A4500-H B	04/28/08 10:51/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	0	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	6	mg/L		5		1	A2540 C	04/24/08 16:48/mb
- SAR calculations may not be appropriate for near blank results.								
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 22:50/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/07/08 02:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:32/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 22:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:32/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/08/08 22:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:32/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	05/07/08 02:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:32/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 02:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:32/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:11/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:32/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:32/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/07/08 02:32/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: R08040287-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/24/08  
Collection Date: 04/22/08 15:57  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:32/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 02:32/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 06:56/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:30/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:11/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	-0.04	pCi/L	U			1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	0.6	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	1	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	-3	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	2.6	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.9	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.3	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-1.7	pCi/L	U	1.0		1	E909.0M	05/14/08 06:30/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	05/14/08 06:30/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	05/06/08 12:00/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	RMO-3008	05/06/08 12:00/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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/24/08  
Collection Date: 04/22/08 15:57  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	05/13/08 11:21/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	05/02/08 15:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	05/02/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	121	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	47.8	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 16:58/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/05/08 16:58/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 16:58/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/07/08 21:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 01:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 16:58/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 16:58/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 16:58/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/09/08 01:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 16:58/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	05/05/08 16:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 16:58/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:12/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 16:58/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 16:58/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 16:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 16:58/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	05/05/08 16:58/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 16:58/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 16:58/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 16:58/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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040287-007  
Client Sample ID: DewBurd GW696

Report Date: 06/24/08  
Collection Date: 04/22/08 16:58  
Date Received: 04/23/08  
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	04/25/08 15:49/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/25/08 15:49/mb
Bicarbonate as HCO3	222	mg/L		5		1	A2320 B	04/25/08 15:49/mb
Calcium	29.9	mg/L		0.5		2	E200.7	05/08/08 22:54/eli-c
Chloride	12	mg/L		1		5	E300.0	05/10/08 23:08/eli-g
Fluoride	0.3	mg/L		0.1		5	E300.0	05/10/08 23:08/eli-g
Magnesium	10.4	mg/L		0.5		2	E200.7	05/08/08 22:54/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	04/28/08 16:37/jmh
Potassium	9.3	mg/L		0.5		2	E200.7	05/08/08 22:54/eli-c
Silica	4.4	mg/L		0.5		2	E200.7	05/08/08 22:54/eli-c
Sodium	293	mg/L	D	2		2	E200.7	05/08/08 22:54/eli-c
Sulfate	475	mg/L		1		5	E300.0	05/10/08 23:08/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1410	umhos/cm		5.0		1	A2510 B	04/28/08 12:58/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	04/24/08 00:00/tb
pH	8.47	s.u.		0.01		1	A4500-H B	04/28/08 10:52/tb
Sodium Adsorption Ratio (SAR)	12	unitless		0.10		1	Calculation	06/18/08 08:38/ADM
Solids, Total Dissolved TDS @ 180 C	930	mg/L		5		1	A2540 C	04/24/08 16:48/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/08/08 22:54/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/07/08 02:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/07/08 02:39/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/08/08 22:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 02:39/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/07/08 02:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/07/08 02:39/eli-c
Iron	0.07	mg/L		0.03		2	E200.7	05/08/08 22:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 02:39/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	05/07/08 02:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 02:39/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/07/08 02:39/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/07/08 02:39/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/29/08 17:13/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 02:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 02:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/07/08 02:39/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: R08040287-007  
Client Sample ID: DewBurd GW696

Report Date: 06/24/08  
Collection Date: 04/22/08 16:58  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	05/07/08 02:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/07/08 02:39/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 07:00/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/05/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	04/24/08 12:32/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/29/08 13:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/29/08 17:13/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	5.2	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha precision (±)	2.7	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Alpha MDC	3.8	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta	10.7	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Gross Beta MDC	4.1	pCi/L				1	E900.0	05/12/08 04:34/eli-c
Lead 210	-4.9	pCi/L	U	1.0		1	E909.0M	05/23/08 08:45/eli-c
Lead 210 precision (±)	11.8	pCi/L				1	E909.0M	05/23/08 08:45/eli-c
Polonium 210	0.9	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.5	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/13/08 13:15/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	04/29/08 15:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/29/08 15:30/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/14/08 06:30/eli-c
Lead 210 precision (±)	1.5	pCi/L				1	E909.0M	05/14/08 06:30/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	05/06/08 12:00/eli-c
Polonium 210 precision (±)	0.55	pCi/L				1	RMO-3008	05/06/08 12:00/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: R08040287-007  
Client Sample ID: DewBurd GW696

Report Date: 06/24/08  
Collection Date: 04/22/08 16:58  
Date Received: 04/23/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	05/13/08 11:21/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	05/13/08 11:21/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	05/02/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/02/08 15:30/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	185	pCi/L		100		1	D5072-92	04/25/08 16:30/eli-c
Radon 222 precision (±)	48.3	pCi/L				1	D5072-92	04/25/08 16:30/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/05/08 17:04/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	05/05/08 17:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/05/08 17:04/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/07/08 22:11/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 01:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/05/08 17:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/05/08 17:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/05/08 17:04/eli-c
Iron	0.08	mg/L		0.03		2	E200.7	05/09/08 01:16/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/05/08 17:04/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	05/05/08 17:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/05/08 17:04/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/06/08 17:19/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/05/08 17:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/05/08 17:04/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/05/08 17:04/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/05/08 17:04/eli-c
Strontium	0.8	mg/L		0.1		1	E200.8	05/05/08 17:04/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/05/08 17:04/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/05/08 17:04/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/05/08 17:04/eli-c
DATA QUALITY								
A/C Balance (± 5)	5.13					1	A1030 E	06/18/08 00:00/ADM
Anions	13.9	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	15.4	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	951	mg/L				1	A1030 E	06/18/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040287-007  
**Client Sample ID:** DewBurd GW696

**Report Date:** 06/24/08  
**Collection Date:** 04/22/08 16:58  
**Date Received:** 04/23/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
DATA QUALITY									
TDS Balance (0.80 - 1.20)	0.980						1	A1030 E	06/18/08 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.

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B		Batch: 080425A-ALK-SEL-W							
Sample ID: LCS1_080425A	Laboratory Control Sample				Run: PH_COND1-R_080425B		04/25/08 15:16		
Alkalinity, Total as CaCO <sub>3</sub>	952	mg/L	5.0	95	90	110			
Sample ID: MBLK1_080425A	Method Blank				Run: PH_COND1-R_080425B		04/25/08 15:18		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	3						
Sample ID: R08040290-005BMS	Sample Matrix Spike				Run: PH_COND1-R_080425B		04/25/08 16:14		
Alkalinity, Total as CaCO <sub>3</sub>	1220	mg/L	5.0	115	80	120			
Sample ID: R08040290-005BMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080425B		04/25/08 16:18		
Alkalinity, Total as CaCO <sub>3</sub>	1240	mg/L	5.0	121	80	120	1.0	10	S
Method: A2510 B		Batch: 080428_1_COND-PROBE-W							
Sample ID: LCS1-1_080428	Laboratory Control Sample				Run: PH_COND2-R_080428B		04/28/08 11:49		
Conductivity @ 25 C	143	umhos/cm	5.0	95	90	110			
Sample ID: LCS2-1_080428	Laboratory Control Sample				Run: PH_COND2-R_080428B		04/28/08 11:50		
Conductivity @ 25 C	4960	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080428	Laboratory Control Sample				Run: PH_COND2-R_080428B		04/28/08 11:51		
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_080428	Method Blank				Run: PH_COND2-R_080428B		04/28/08 11:52		
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R08040287-005ADUP	Sample Duplicate				Run: PH_COND2-R_080428B		04/28/08 12:56		
Conductivity @ 25 C	1240	umhos/cm	5.0				0.8	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: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C		Batch: 080424A-SLDS-TDS-W							
Sample ID: LCS1_080424A	Laboratory Control Sample				Run: BAL-4-R_080424B			04/24/08 16:32	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	5.0	104	90	110			
Sample ID: MBLK1_080424A	Method Blank				Run: BAL-4-R_080424B			04/24/08 16:33	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08040273-002AMS	Sample Matrix Spike				Run: BAL-4-R_080424B			04/24/08 16:40	
Solids, Total Dissolved TDS @ 180 C	350	mg/L	5.0	102	80	120			
Sample ID: R08040273-002AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080424B			04/24/08 16:40	
Solids, Total Dissolved TDS @ 180 C	350	mg/L	5.0	104	80	120	1.1	10	
Sample ID: R08040290-009BMS	Sample Matrix Spike				Run: BAL-4-R_080424B			04/24/08 16:52	
Solids, Total Dissolved TDS @ 180 C	18000	mg/L	5.0	232	80	120			S
Sample ID: R08040290-009BMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080424B			04/24/08 16:53	
Solids, Total Dissolved TDS @ 180 C	18000	mg/L	5.0	252	80	120	0.2	10	S
Method: A3114 B		Analytical Run: SUB-C100349							
Sample ID: 288-66-6	Initial Calibration Verification Standard							04/29/08 12:37	
Selenium-IV	0.050	mg/L	0.0010	100	90	110			
Method: A3114 B		Batch: C_SE3114-080429B							
Sample ID: MBLK	Method Blank				Run: SUB-C100349			04/29/08 12:43	
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-66-6	Laboratory Control Sample				Run: SUB-C100349			04/29/08 12:45	
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: R08040287-001E	Sample Matrix Spike				Run: SUB-C100349			04/29/08 13:31	
Selenium-IV	0.049	mg/L	0.0010	98	85	115			
Sample ID: R08040287-001E	Sample Matrix Spike Duplicate				Run: SUB-C100349			04/29/08 13:34	
Selenium-IV	0.050	mg/L	0.0010	100	85	115	1.8	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: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B							Batch: C_SE3114-080429D		
Sample ID: MBLK	Method Blank					Run: SUB-C100378			04/29/08 16:10
Selenium	ND	mg/L	6E-05						
Sample ID: 288-66-6	Laboratory Control Sample					Run: SUB-C100378			04/29/08 16:12
Selenium	0.053	mg/L	0.0010	107	90	110			
Sample ID: R08040287-001E	Sample Matrix Spike					Run: SUB-C100378			04/29/08 16:58
Selenium	0.054	mg/L	0.0010	107	85	115			
Sample ID: R08040287-001E	Sample Matrix Spike Duplicate					Run: SUB-C100378			04/29/08 17:00
Selenium	0.052	mg/L	0.0010	105	85	115	2.3	10	
Method: A4500-H B							Batch: 080428_1_PH-W		
Sample ID: LCS_pH-1_080428	Laboratory Control Sample					Run: PH_COND2-R_080428A			04/28/08 10:25
pH	6.93	s.u.	0.010	101	98.55	101.45			
Sample ID: R08040287-002ADUP	Sample Duplicate					Run: PH_COND2-R_080428A			04/28/08 10:45
pH	9.16	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G		Batch: A2008-04-28_2_NH3_01							
Sample ID: MBLK-2	Method Blank					Run: TECHAA2-R_080428A			04/28/08 15:00
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank					Run: TECHAA2-R_080428A			04/28/08 15:01
Nitrogen, Ammonia as N	0.26	mg/L	0.10	104	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank					Run: TECHAA2-R_080428A			04/28/08 15:02
Nitrogen, Ammonia as N	0.25	mg/L	0.10	100	90	110			
Sample ID: R08040273-003CMS	Sample Matrix Spike					Run: TECHAA2-R_080428A			04/28/08 16:15
Nitrogen, Ammonia as N	0.21	mg/L	0.10	86	80	120			
Sample ID: R08040273-003CMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080428A			04/28/08 16:16
Nitrogen, Ammonia as N	0.24	mg/L	0.10	94	80	120	9.8	10	
Sample ID: R08040287-003BMS	Sample Matrix Spike					Run: TECHAA2-R_080428A			04/28/08 16:31
Nitrogen, Ammonia as N	1.0	mg/L	0.10	89	80	120			
Sample ID: R08040287-003BMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080428A			04/28/08 16:32
Nitrogen, Ammonia as N	1.0	mg/L	0.10	81	80	120	2.0	10	
Sample ID: R08040290-004EMS	Sample Matrix Spike					Run: TECHAA2-R_080428A			04/28/08 17:01
Nitrogen, Ammonia as N	0.89	mg/L	0.10	55	80	120			S
Sample ID: R08040290-004EMSD	Sample Matrix Spike Duplicate					Run: TECHAA2-R_080428A			04/28/08 17:02
Nitrogen, Ammonia as N	0.94	mg/L	0.10	77	80	120	6.0	10	S
Method: D5072-92		Batch: C_R100290							
Sample ID: C08041066-001ADUP	Sample Duplicate					Run: SUB-C100290			04/24/08 13:29
Radon 222	2010	pCi/L	100				3.5	30	
Sample ID: MB-R100290	Method Blank					Run: SUB-C100290			04/24/08 13:29
Radon 222	20	pCi/L							
Sample ID: LCS-R100290	Laboratory Control Sample					Run: SUB-C100290			04/24/08 13:29
Radon 222	304	pCi/L	100	95	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18465		
Sample ID: MB-18465	Method Blank		Run: SUB-C100898				05/08/08 23:51		
Boron	ND	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-18465	Laboratory Control Sample		Run: SUB-C100898				05/08/08 23:55		
Boron	0.499	mg/L	0.10	100	85	115			
Iron	2.85	mg/L	0.030	114	85	115			
Sample ID: C08041226-001B MS3	Sample Matrix Spike		Run: SUB-C100898				05/09/08 01:28		
Boron	5.98	mg/L	0.10		70	130			A
Iron	2.59	mg/L	0.043	104	70	130			
Sample ID: C08041226-001B MSD3	Sample Matrix Spike Duplicate		Run: SUB-C100898				05/09/08 01:32		
Boron	5.81	mg/L	0.10		70	130	2.9	20	A
Iron	2.53	mg/L	0.043	101	70	130	2.3	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

Report Date: 06/24/08

Project: Edgemont

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R100898		
Sample ID: MB-080508A	Method Blank		Run: SUB-C100898				05/08/08 13:02		
Silica	0.02	mg/L							
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-080508A	Laboratory Fortified Blank		Run: SUB-C100898				05/08/08 13:06		
Silica	0.31	mg/L	0.10	57	85	125			S
Aluminum	0.95	mg/L	0.10	95	85	125			
Boron	1.1	mg/L	0.10	103	85	125			
Calcium	54	mg/L	0.50	108	85	125			
Iron	1.1	mg/L	0.030	106	85	125			
Magnesium	53	mg/L	0.50	107	85	125			
Potassium	46	mg/L	0.50	93	85	125			
Sodium	51	mg/L	0.77	102	85	125			
Sample ID: R08040287-004C	Sample Matrix Spike		Run: SUB-C100898				05/08/08 21:45		
Aluminum	2.06	mg/L	0.10	100	70	130			
Boron	2.17	mg/L	0.10	104	70	130			
Iron	4.56	mg/L	0.030	101	70	130			
Calcium	466	mg/L	1.0	98	70	130			
Magnesium	232	mg/L	1.0	102	70	130			
Potassium	109	mg/L	1.0	91	70	130			
Silica	6.57	mg/L	0.10	88	70	130			
Sodium	191	mg/L	1.5	99	70	130			
Sample ID: R08040287-004C	Sample Matrix Spike Duplicate		Run: SUB-C100898				05/08/08 21:49		
Aluminum	2.01	mg/L	0.10	97	70	130	2.7	20	
Boron	2.19	mg/L	0.10	106	70	130	1.0	20	
Iron	4.58	mg/L	0.030	102	70	130	0.5	20	
Calcium	463	mg/L	1.0	95	70	130	0.6	20	
Magnesium	233	mg/L	1.0	102	70	130	0.3	20	
Potassium	108	mg/L	1.0	90	70	130	0.9	20	
Silica	6.67	mg/L	0.10	93	70	130	1.5	20	
Sodium	190	mg/L	1.5	99	70	130	0.1	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_18450		
<b>Sample ID: MB-18450</b>	Method Blank				Run: SUB-C100604		05/05/08 05:17		
Uranium	4E-05	mg/L	2E-05						
<b>Sample ID: LCS1-18450</b>	Laboratory Control Sample				Run: SUB-C100604		05/05/08 05:21		
Uranium	0.0505	mg/L	0.00030	96	80	120			
<b>Sample ID: R08040287-003I</b>	Post Digestion Spike				Run: SUB-C100604		05/05/08 06:19		
Uranium	0.0132	mg/L	0.00030	98	70	130			
<b>Sample ID: R08040287-003I</b>	Post Digestion Spike Duplicate				Run: SUB-C100604		05/05/08 06:23		
Uranium	0.0135	mg/L	0.00030	100	70	130	2.0	20	
<b>Method: E200.8</b>							Batch: C_18459		
<b>Sample ID: MB-18459</b>	Method Blank				Run: SUB-C100604		05/05/08 06:27		
Uranium	3E-05	mg/L	1E-05						
<b>Sample ID: LCS1-18459</b>	Laboratory Control Sample				Run: SUB-C100604		05/05/08 06:44		
Uranium	0.0473	mg/L	0.00030	95	80	120			
<b>Sample ID: C08041156-006FMS4</b>	Post Digestion Spike				Run: SUB-C100604		05/05/08 07:42		
Uranium	0.0131	mg/L	0.00030	94	70	130			
<b>Sample ID: C08041156-006FMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C100604		05/05/08 07:46		
Uranium	0.0132	mg/L	0.00030	95	70	130	0.4	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18465		
Sample ID: MB-18465	Method Blank		Run: SUB-C100685				05/05/08 15:37		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0004	mg/L	5E-05						
Barium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	3E-05						
Chromium	0.0007	mg/L	5E-05						
Copper	ND	mg/L	0.0001						
Lead	2E-05	mg/L							
Manganese	0.0002	mg/L	3E-05						
Molybdenum	ND	mg/L	7E-05						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0002						
Silver	7E-05	mg/L	4E-05						
Strontium	ND	mg/L	8E-05						
Thallium	8E-05	mg/L	3E-05						
Uranium	4E-05	mg/L	3E-05						
Zinc	0.001	mg/L	0.0003						
Sample ID: LCS3-18465	Laboratory Control Sample		Run: SUB-C100685				05/05/08 15:43		
Antimony	0.545	mg/L	0.050	109	85	115			
Arsenic	0.544	mg/L	0.0010	109	85	115			
Barium	0.540	mg/L	0.10	108	85	115			
Cadmium	0.266	mg/L	0.010	107	85	115			
Chromium	0.540	mg/L	0.050	108	85	115			
Copper	0.524	mg/L	0.010	105	85	115			
Lead	0.523	mg/L	0.050	105	85	115			
Manganese	2.86	mg/L	0.010	114	85	115			
Molybdenum	0.523	mg/L	0.10	105	85	115			
Nickel	0.531	mg/L	0.050	106	85	115			
Selenium	0.548	mg/L	0.0020	110	85	115			
Silver	0.0497	mg/L	0.010	99	85	115			
Strontium	0.563	mg/L	0.10	113	85	115			
Thallium	0.521	mg/L	0.10	104	85	115			
Uranium	0.525	mg/L	0.00032	105	85	115			
Zinc	0.552	mg/L	0.010	110	85	115			
Sample ID: C08041226-001BMS3	Sample Matrix Spike		Run: SUB-C100685				05/05/08 17:38		
Antimony	0.606	mg/L	0.050	121	70	130			
Arsenic	0.609	mg/L	0.0010	121	70	130			
Barium	0.656	mg/L	0.10	123	70	130			
Cadmium	0.285	mg/L	0.010	114	70	130			
Chromium	0.568	mg/L	0.050	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18465		
Sample ID: C08041226-001BMS3	Sample Matrix Spike			Run: SUB-C100685			05/05/08 17:38		
Copper	0.598	mg/L	0.010	114	70	130			
Lead	0.588	mg/L	0.050	117	70	130			
Manganese	2.99	mg/L	0.010	120	70	130			
Molybdenum	0.601	mg/L	0.10	120	70	130			
Nickel	1.06	mg/L	0.050	123	70	130			
Selenium	0.600	mg/L	0.0020	117	70	130			
Silver	0.0528	mg/L	0.010	106	70	130			
Strontium	2.29	mg/L	0.10	162	70	130			S
Thallium	0.587	mg/L	0.10	117	70	130			
Uranium	0.621	mg/L	0.00032	124	70	130			
Zinc	0.552	mg/L	0.010	108	70	130			
Sample ID: C08041226-001BMSD3	Sample Matrix Spike Duplicate			Run: SUB-C100685			05/05/08 18:05		
Antimony	0.586	mg/L	0.050	117	70	130	3.3	20	
Arsenic	0.575	mg/L	0.0010	114	70	130	5.8	20	
Barium	0.607	mg/L	0.10	113	70	130	7.7	20	
Cadmium	0.268	mg/L	0.010	107	70	130	6.1	20	
Chromium	0.530	mg/L	0.050	105	70	130	7.0	20	
Copper	0.565	mg/L	0.010	107	70	130	5.7	20	
Lead	0.559	mg/L	0.050	112	70	130	5.1	20	
Manganese	2.81	mg/L	0.010	112	70	130	6.3	20	
Molybdenum	0.580	mg/L	0.10	116	70	130	3.5	20	
Nickel	1.02	mg/L	0.050	115	70	130	4.0	20	
Selenium	0.566	mg/L	0.0020	110	70	130	5.7	20	
Silver	0.0502	mg/L	0.010	100	70	130	5.0	20	
Strontium	2.22	mg/L	0.10	148	70	130	3.2	20	S
Thallium	0.555	mg/L	0.10	111	70	130	5.6	20	
Uranium	0.582	mg/L	0.00032	116	70	130	6.4	20	
Zinc	0.525	mg/L	0.010	102	70	130	5.0	20	
Sample ID: MB-18465	Method Blank			Run: SUB-C100732			05/06/08 19:39		
Beryllium	ND	mg/L	0.0001						
Sample ID: LCS3-18465	Laboratory Control Sample			Run: SUB-C100732			05/06/08 19:46		
Beryllium	0.256	mg/L	0.010	102	85	115			
Sample ID: C08041226-001BMS3	Sample Matrix Spike			Run: SUB-C100732			05/06/08 21:27		
Beryllium	0.271	mg/L	0.010	108	70	130			
Sample ID: C08041226-001BMSD3	Sample Matrix Spike Duplicate			Run: SUB-C100732			05/06/08 21:34		
Beryllium	0.266	mg/L	0.010	106	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100732		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C100732				05/06/08 11:52		
Arsenic	ND	mg/L	6E-05						
Barium	4E-05	mg/L	3E-05						
Cadmium	ND	mg/L	1E-05						
Chromium	4E-05	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Lead	ND	mg/L	3E-05						
Manganese	ND	mg/L	5E-05						
Mercury	0.0001	mg/L	8E-05						
Molybdenum	ND	mg/L	5E-05						
Nickel	ND	mg/L	0.0007						
Silver	5E-05	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Zinc	0.002	mg/L	0.0003						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C100732				05/06/08 11:59		
Arsenic	0.0520	mg/L	0.0010	104	85	115			
Barium	0.0534	mg/L	0.0010	107	85	115			
Cadmium	0.0525	mg/L	0.0010	105	85	115			
Chromium	0.0514	mg/L	0.0010	103	85	115			
Copper	0.0528	mg/L	0.0010	106	85	115			
Lead	0.0535	mg/L	0.0010	107	85	115			
Manganese	0.0517	mg/L	0.0010	103	85	115			
Mercury	0.00525	mg/L	0.0010	103	85	115			
Molybdenum	0.0524	mg/L	0.0010	105	85	115			
Nickel	0.0530	mg/L	0.0010	106	85	115			
Silver	0.0211	mg/L	0.0010	105	85	115			
Thorium 232	0.0525	mg/L	0.0010	105	85	115			
Uranium	0.0522	mg/L	0.00030	104	85	115			
Vanadium	0.0518	mg/L	0.0010	104	85	115			
Zinc	0.0546	mg/L	0.0010	106	85	115			
<b>Sample ID: R08040287-001C</b>	Post Digestion Spike		Run: SUB-C100732				05/07/08 01:51		
Arsenic	0.0520	mg/L	0.0010	102	70	130			
Barium	0.0607	mg/L	0.10	98	70	130			
Cadmium	0.0494	mg/L	0.010	99	70	130			
Chromium	0.0475	mg/L	0.050	94	70	130			
Copper	0.0505	mg/L	0.010	100	70	130			
Lead	0.0506	mg/L	0.050	101	70	130			
Manganese	0.123	mg/L	0.010	92	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_R100732		
Sample ID: R08040287-001C	Post Digestion Spike			Run: SUB-C100732			05/07/08 01:51		
Mercury	0.00502	mg/L	0.0010	100	70	130			
Molybdenum	0.0574	mg/L	0.10	106	70	130			
Nickel	0.0511	mg/L	0.050	101	70	130			
Silver	0.0144	mg/L	0.010	72	70	130			
Thorium 232	0.0518	mg/L	0.0010	103	70	130			
Uranium	0.0547	mg/L	0.00030	104	70	130			
Vanadium	0.0487	mg/L	0.10	97	70	130			
Zinc	0.0500	mg/L	0.010	96	70	130			
Sample ID: R08040287-001C	Post Digestion Spike Duplicate			Run: SUB-C100732			05/07/08 01:58		
Arsenic	0.0518	mg/L	0.0010	101	70	130	0.5	20	
Barium	0.0621	mg/L	0.10	101	70	130	0.0	20	
Cadmium	0.0495	mg/L	0.010	99	70	130	0.2	20	
Chromium	0.0497	mg/L	0.050	99	70	130	0.0	20	
Copper	0.0505	mg/L	0.010	100	70	130	0.1	20	
Lead	0.0513	mg/L	0.050	103	70	130	1.4	20	
Manganese	0.128	mg/L	0.010	102	70	130	3.9	20	
Mercury	0.00510	mg/L	0.0010	102	70	130	1.6	20	
Molybdenum	0.0578	mg/L	0.10	107	70	130	0.0	20	
Nickel	0.0506	mg/L	0.050	100	70	130	1.1	20	
Silver	0.0151	mg/L	0.010	76	70	130	5.0	20	
Thorium 232	0.0527	mg/L	0.0010	105	70	130	1.8	20	
Uranium	0.0557	mg/L	0.00030	106	70	130	1.8	20	
Vanadium	0.0513	mg/L	0.10	102	70	130	0.0	20	
Zinc	0.0496	mg/L	0.010	95	70	130	0.8	20	
Sample ID: R08040287-007C	Post Digestion Spike			Run: SUB-C100732			05/07/08 02:45		
Arsenic	0.0524	mg/L	0.0010	103	70	130			
Barium	0.0648	mg/L	0.10	102	70	130			
Cadmium	0.0502	mg/L	0.010	100	70	130			
Chromium	0.0488	mg/L	0.050	97	70	130			
Copper	0.0501	mg/L	0.010	99	70	130			
Lead	0.0518	mg/L	0.050	103	70	130			
Manganese	0.106	mg/L	0.010	97	70	130			
Mercury	0.00507	mg/L	0.0010	101	70	130			
Molybdenum	0.0576	mg/L	0.10	109	70	130			
Nickel	0.0506	mg/L	0.050	101	70	130			
Silver	0.0152	mg/L	0.010	76	70	130			
Thorium 232	0.0535	mg/L	0.0010	107	70	130			
Uranium	0.0541	mg/L	0.00030	108	70	130			
Vanadium	0.0500	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R100732		
<b>Sample ID: R08040287-007C</b>	Post Digestion Spike				Run: SUB-C100732		05/07/08 02:45		
Zinc	0.0501	mg/L	0.010	96	70	130			
<b>Sample ID: R08040287-007C</b>	Post Digestion Spike Duplicate				Run: SUB-C100732		05/07/08 03:12		
Arsenic	0.0532	mg/L	0.0010	104	70	130	1.4	20	
Barium	0.0644	mg/L	0.10	101	70	130	0.0	20	
Cadmium	0.0496	mg/L	0.010	99	70	130	1.1	20	
Chromium	0.0492	mg/L	0.050	98	70	130	0.0	20	
Copper	0.0508	mg/L	0.010	101	70	130	1.5	20	
Lead	0.0515	mg/L	0.050	103	70	130	0.5	20	
Manganese	0.106	mg/L	0.010	98	70	130	0.5	20	
Mercury	0.00515	mg/L	0.0010	103	70	130	1.6	20	
Molybdenum	0.0573	mg/L	0.10	108	70	130	0.0	20	
Nickel	0.0510	mg/L	0.050	102	70	130	0.7	20	
Silver	0.0168	mg/L	0.010	84	70	130	9.7	20	
Thorium 232	0.0537	mg/L	0.0010	107	70	130	0.4	20	
Uranium	0.0534	mg/L	0.00030	106	70	130	1.5	20	
Vanadium	0.0503	mg/L	0.10	100	70	130	0.0	20	
Zinc	0.0501	mg/L	0.010	96	70	130	0.0	20	
<b>Method: E200.8</b>							Batch: C_R100862		
<b>Sample ID: LRB</b>	Method Blank				Run: SUB-C100862		05/08/08 12:41		
Aluminum	ND	mg/L	0.0001						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank				Run: SUB-C100862		05/08/08 12:48		
Aluminum	0.0519	mg/L	0.0010	104	85	115			
<b>Sample ID: C08040783-001KMS4</b>	Post Digestion Spike				Run: SUB-C100862		05/08/08 14:50		
Aluminum	0.0503	mg/L	0.10	98	70	130			
<b>Sample ID: C08040783-001KMSD4</b>	Post Digestion Spike Duplicate				Run: SUB-C100862		05/08/08 14:56		
Aluminum	0.0494	mg/L	0.10	96	70	130	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E245.1</b>							Batch: C_B_32271		
<b>Sample ID: MB-32271</b>	Method Blank				Run: SUB-C100762		05/06/08 16:10		
Mercury	ND	mg/L	5E-05						
<b>Sample ID: LFB-32271</b>	Laboratory Fortified Blank				Run: SUB-C100762		05/06/08 16:12		
Mercury	0.0019	mg/L	0.0010	93	85	115			
<b>Sample ID: B08050247-007DMS</b>	Sample Matrix Spike				Run: SUB-C100762		05/06/08 16:55		
Mercury	0.0020	mg/L	0.0010	102	70	130			
<b>Sample ID: B08050247-007DMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C100762		05/06/08 16:57		
Mercury	0.0019	mg/L	0.0010	96	70	130	5.6	30	
<b>Method: E300.0</b>							Batch: G_R159465		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: SUB-G159465		05/10/08 14:58		
Chloride	28.1	mg/L	1.0	93	90	110			
Fluoride	20.2	mg/L	0.10	100	90	110			
Sulfate	142	mg/L	1.0	94	90	110			
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-G159465		05/10/08 15:10		
Chloride	ND	mg/L	0.08						
Fluoride	ND	mg/L	0.007						
Sulfate	ND	mg/L	0.04						
<b>Sample ID: G08050352-005AMS</b>	Sample Matrix Spike				Run: SUB-G159465		05/10/08 21:11		
Chloride	191	mg/L	1.0	95	80	120			
Fluoride	19.4	mg/L	0.10	97	80	120			
Sulfate	559	mg/L	1.0	94	80	120			
<b>Sample ID: G08050352-005AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-G159465		05/10/08 21:23		
Chloride	193	mg/L	1.0	96	80	120	0.7	20	
Fluoride	19.6	mg/L	0.10	97	80	120	0.7	20	
Sulfate	561	mg/L	1.0	95	80	120	0.3	20	
<b>Sample ID: G08050354-007BMS</b>	Sample Matrix Spike				Run: SUB-G159465		05/11/08 08:04		
Chloride	1060	mg/L	2.1	100	80	120			
Fluoride	99.9	mg/L	0.18	101	80	120			
<b>Sample ID: G08050354-007BMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-G159465		05/11/08 08:16		
Chloride	1080	mg/L	2.1	102	80	120	1.8	20	
Fluoride	102	mg/L	0.18	103	80	120	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:** 06/24/08

**Work Order:** R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: G_R159560		
<b>Sample ID: LCS</b>	Laboratory Control Sample				Run: SUB-G159560		05/12/08 13:35		
Sulfate	137	mg/L	1.0	91	90	110			
<b>Sample ID: MBLK</b>	Method Blank				Run: SUB-G159560		05/12/08 13:46		
Sulfate	ND	mg/L	0.04						
<b>Sample ID: G08050391-001AMS</b>	Sample Matrix Spike				Run: SUB-G159560		05/12/08 14:45		
Sulfate	320	mg/L	1.0	99	80	120			
<b>Sample ID: G08050391-001AMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-G159560		05/12/08 14:56		
Sulfate	319	mg/L	1.0	99	80	120	0.4	20	
<b>Method: E353.2</b>							Batch: A2008-04-24_3_NO2_01		
<b>Sample ID: MBLK-2</b>	Method Blank				Run: TECHAA1-R_080424A		04/24/08 11:53		
Nitrogen, Nitrite as N	ND	mg/L	0.02						
<b>Sample ID: LFB-3</b>	Laboratory Fortified Blank				Run: TECHAA1-R_080424A		04/24/08 11:55		
Nitrogen, Nitrite as N	0.275	mg/L	0.050	110	90	110			
<b>Sample ID: LFB-4</b>	Laboratory Fortified Blank				Run: TECHAA1-R_080424A		04/24/08 11:57		
Nitrogen, Nitrite as N	0.269	mg/L	0.050	108	90	110			
<b>Sample ID: R08040287-001AMS</b>	Sample Matrix Spike				Run: TECHAA1-R_080424A		04/24/08 12:17		
Nitrogen, Nitrite as N	0.260	mg/L	0.050	104	90	110			
<b>Sample ID: R08040287-001AMSD</b>	Sample Matrix Spike Duplicate				Run: TECHAA1-R_080424A		04/24/08 12:19		
Nitrogen, Nitrite as N	0.269	mg/L	0.050	108	90	110	3.4	10	
<b>Sample ID: R08040290-004BMS</b>	Sample Matrix Spike				Run: TECHAA1-R_080424A		04/24/08 13:09		
Nitrogen, Nitrite as N	0.293	mg/L	0.050	107	90	110			
<b>Sample ID: R08040290-004BMSD</b>	Sample Matrix Spike Duplicate				Run: TECHAA1-R_080424A		04/24/08 13:11		
Nitrogen, Nitrite as N	0.293	mg/L	0.050	107	90	110	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: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: C_GrAB-0440		
Sample ID: MB-GrAB-0440	Method Blank				Run: SUB-C100953			05/10/08 05:58	
Gross Alpha	-0.2	pCi/L							U
Gross Beta	-2	pCi/L							U
Sample ID: UNAT-GrAB-0440	Laboratory Control Sample				Run: SUB-C100953			05/10/08 05:58	
Gross Alpha	260	pCi/L	105		70	130			
Sample ID: Cs137-GrAB-0440	Laboratory Control Sample				Run: SUB-C100953			05/10/08 05:58	
Gross Beta	78	pCi/L	84		70	130			
Sample ID: C08041059-001DMS	Sample Matrix Spike				Run: SUB-C100953			05/10/08 05:58	
Gross Alpha	317	pCi/L	130		70	130			
Sample ID: C08041059-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C100953			05/10/08 05:58	
Gross Alpha	317	pCi/L	130		70	130	0.1	15.5	
Sample ID: C08041059-001DMS	Sample Matrix Spike				Run: SUB-C100953			05/10/08 05:58	
Gross Beta	95.7	pCi/L	103		70	130			
Sample ID: C08041059-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C100953			05/10/08 05:58	
Gross Beta	98.7	pCi/L	106		70	130	3.1	16	
Method: E901.1							Batch: C_R100708		
Sample ID: LCS-R100708	Laboratory Control Sample				Run: SUB-C100708			05/01/08 17:22	
Americium 241	720	pCi/L	20	88	70	130			
Cesium 137	1200	pCi/L	20	109	70	130			
Sample ID: MB-R100708	Method Blank				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	ND	pCi/L							
Sample ID: R08040364-001H	Sample Duplicate				Run: SUB-C100708			05/01/08 17:22	
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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_18450		
Sample ID: C08041110-001AMS	Sample Matrix Spike				Run: SUB-C100770		05/06/08 15:27		
Radium 226	125	pCi/Filter	101		70	130			
Sample ID: C08041110-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100770		05/06/08 15:27		
Radium 226	127	pCi/Filter	102		70	130	1.2	25.7	
Sample ID: LCS-18450	Laboratory Control Sample				Run: SUB-C100770		05/06/08 15:27		
Radium 226	13	pCi/L	109		70	130			
Sample ID: MB-18450	Method Blank				Run: SUB-C100770		05/06/08 15:27		
Radium 226	-2	pCi/L							U
Method: E903.0							Batch: C_R101119		
Sample ID: C08041156-005FMS	Sample Matrix Spike				Run: SUB-C101119		05/13/08 13:14		
Radium 226	120	pCi/L	94		70	130			
Sample ID: C08041156-005FMDS	Sample Matrix Spike Duplicate				Run: SUB-C101119		05/13/08 13:14		
Radium 226	110	pCi/L	91		70	130	3.5	24.7	
Sample ID: LCS-18459	Laboratory Control Sample				Run: SUB-C101119		05/13/08 14:53		
Radium 226	11	pCi/L	95		70	130			
Sample ID: MB-18459	Method Blank				Run: SUB-C101119		05/13/08 14:53		
Radium 226	-0.8	pCi/L							U
Method: E903.0							Batch: C_RA226-2771		
Sample ID: C08041060-002HMS	Sample Matrix Spike				Run: SUB-C101060		05/13/08 08:49		
Radium 226	12	pCi/L	90		70	130			
Sample ID: C08041060-002HMDS	Sample Matrix Spike Duplicate				Run: SUB-C101060		05/13/08 08:49		
Radium 226	12	pCi/L	93		70	130	2.4	21.9	
Sample ID: MB-RA226-2771	Method Blank				Run: SUB-C101060		05/13/08 13:15		
Radium 226	-0.03	pCi/L							U
Sample ID: LCS-RA226-2771	Laboratory Control Sample				Run: SUB-C101060		05/13/08 13:15		
Radium 226	5.3	pCi/L	83		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: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: C_18450		
Sample ID: C08041060-004IMS	Sample Matrix Spike				Run: SUB-C100959			05/01/08 15:30	
Thorium 230	21.6	pCi/L	0.20	98	70	130			
Sample ID: C08041060-004IMSD	Sample Matrix Spike Duplicate				Run: SUB-C100959			05/01/08 15:30	
Thorium 230	18.9	pCi/L	0.20	82	70	130	13	30	
Sample ID: LCS-18450	Laboratory Control Sample				Run: SUB-C100959			05/01/08 15:30	
Thorium 230	47.0	pCi/L	0.20	98	70	130			
Sample ID: MB-18450	Method Blank				Run: SUB-C100959			05/01/08 15:30	
Thorium 230	ND	pCi/L							
Method: E907.0							Batch: C_18459		
Sample ID: C08041170-001AMS	Sample Matrix Spike				Run: SUB-C100981			05/02/08 15:30	
Thorium 230	42.4	pCi/Filter	0.20	99	70	130			
Sample ID: C08041170-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C100981			05/02/08 15:30	
Thorium 230	50.6	pCi/Filter	0.20	109	70	130	18	30	
Sample ID: LCS-18459	Laboratory Control Sample				Run: SUB-C100981			05/02/08 15:30	
Thorium 230	9.40	pCi/L	0.20	90	70	130			
Sample ID: MB-18459	Method Blank				Run: SUB-C100981			05/02/08 15:30	
Thorium 230	ND	pCi/L							
Method: E907.0							Batch: C_R100724		
Sample ID: LCS-R100724	Laboratory Control Sample				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	7.20	pCi/L	0.20	103	70	130			
Sample ID: R08040287-001H	Sample Matrix Spike				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	9.50	pCi/L	0.20	97	70	130			
Sample ID: R08040287-001H	Sample Matrix Spike Duplicate				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	9.40	pCi/L	0.20	96	70	130	1.1	30	
Sample ID: MB-R100724	Method Blank				Run: SUB-C100724			04/29/08 15:30	
Thorium 230	ND	pCi/L							

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/24/08  
Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M							Batch: C_18450		
Sample ID: C08041052-003BMS	Sample Matrix Spike				Run: SUB-C101784		05/16/08 07:00		
Lead 210	1000	pCi/L	1.0	85	70	130			
Sample ID: C08041052-003BMSD	Sample Matrix Spike Duplicate				Run: SUB-C101784		05/16/08 07:00		
Lead 210	1200	pCi/L	1.0	101	70	130	18	30	
Sample ID: MB-R101784	Method Blank				Run: SUB-C101784		05/16/08 07:00		
Lead 210	ND	pCi/L							
Sample ID: LCS-R101784	Laboratory Control Sample				Run: SUB-C101784		05/16/08 07:00		
Lead 210	130	pCi/L	1.0	106	70	130			
Method: E909.0M							Batch: C_18459		
Sample ID: C08041156-003FMS	Sample Matrix Spike				Run: SUB-C101646		05/14/08 06:30		
Lead 210	570	pCi/L	1.0	48	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the MSD is acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C08041156-003FMSD	Sample Matrix Spike Duplicate				Run: SUB-C101646		05/14/08 06:30		
Lead 210	940	pCi/L	1.0	79	70	130	49	30	R
Sample ID: MB-R101646	Method Blank				Run: SUB-C101646		05/14/08 06:30		
Lead 210	ND	pCi/L							
Sample ID: LCS-R101646	Laboratory Control Sample				Run: SUB-C101646		05/14/08 06:30		
Lead 210	120	pCi/L	1.0	100	70	130			
Method: E909.0M							Batch: C_R102383		
Sample ID: R08040287-004H	Sample Matrix Spike				Run: SUB-C102383		05/23/08 08:45		
Lead 210	600	pCi/L	1.0	102	70	130			
Sample ID: R08040287-004H	Sample Matrix Spike Duplicate				Run: SUB-C102383		05/23/08 08:45		
Lead 210	700	pCi/L	1.0	119	70	130	16	30	
Sample ID: MB-R102383	Method Blank				Run: SUB-C102383		05/23/08 08:45		
Lead 210	ND	pCi/L							
Sample ID: LCS-R102383	Laboratory Control Sample				Run: SUB-C102383		05/23/08 08:45		
Lead 210	130	pCi/L	1.0	114	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: 06/24/08

Work Order: R08040287

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: RMO-3008</b>							Batch: C_18459		
<b>Sample ID: C08041156-006FMS</b>	Sample Matrix Spike				Run: SUB-C100914		05/06/08 12:00		
Polonium 210	99	pCi/L	1.0	108	70	130			
<b>Sample ID: C08041156-006FMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C100914		05/06/08 12:00		
Polonium 210	93	pCi/L	1.0	101	70	130	6.2	30	
<b>Sample ID: MB-18459</b>	Method Blank				Run: SUB-C100914		05/06/08 12:00		
Polonium 210	1	pCi/L							
<b>Sample ID: LCS-18459</b>	Laboratory Control Sample				Run: SUB-C100914		05/06/08 12:00		
Polonium 210	180	pCi/L	1.0	105	70	130			
<b>Method: RMO-3008</b>							Batch: C_R100704		
<b>Sample ID: R08040287-003I</b>	Sample Matrix Spike				Run: SUB-C100704		05/01/08 14:15		
Polonium 210	88	pCi/L	1.0	107	70	130			
<b>Sample ID: R08040287-003I</b>	Sample Matrix Spike Duplicate				Run: SUB-C100704		05/01/08 14:15		
Polonium 210	89	pCi/L	1.0	107	70	130	0.8	30	
<b>Sample ID: LCS-18424</b>	Laboratory Control Sample				Run: SUB-C100704		05/01/08 14:15		
Polonium 210	180	pCi/L	1.0	102	70	130			
<b>Sample ID: MB-18424</b>	Method Blank				Run: SUB-C100704		05/01/08 14:15		
Polonium 210	0.5	pCi/L							U
<b>Method: RMO-3008</b>							Batch: C_R100979		
<b>Sample ID: R08040364-007H</b>	Sample Matrix Spike				Run: SUB-C100979		05/06/08 17:00		
Polonium 210	160	pCi/L	1.0	90	70	130			
<b>Sample ID: R08040364-007H</b>	Sample Matrix Spike Duplicate				Run: SUB-C100979		05/06/08 17:00		
Polonium 210	150	pCi/L	1.0	88	70	130	1.9	30	
<b>Sample ID: LCS-R100979</b>	Laboratory Control Sample				Run: SUB-C100979		05/06/08 17:00		
Polonium 210	81	pCi/L	1.0	92	70	130			
<b>Sample ID: MB-R100979</b>	Method Blank				Run: SUB-C100979		05/06/08 17:00		
Polonium 210	0.9	pCi/L							

### 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. Refer to corresponding notes on reverse side.

Company Name: <b>DESIE</b>		Project Name, PWS #, Permit #, Etc.: <b>Power Tech Perry Burdock</b>	
Report Mail Address: <b>DESIE</b>		Contact Name, Phone, Fax, E-mail: <b>Cory Foreman @ respec.com</b>	
Invoice Address: <b>DESIE</b>		Invoice Contact & Phone #: <b>Cory Foreman respec.com</b>	
Report Required For: POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____		Purchase Order #:	
Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____		ELI Quote #:	
EDED/ET <input type="checkbox"/> Format _____		Notify ELI prior to RUSH sample submittal for additional charges and scheduling	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		ANALYSIS REQUESTED <b>As per Quot</b>	
Collection Date		SEE ATTACHED	
Collection Time		Normal Turnaround (TAT)	
MATRIX		RUSH Turnaround (TAT)	
Number of Containers		Comments: <b>All Grandwater</b>	
Sample Type: A W S V B O		Custody Seal Y N	
Air Water Soils/Solids Vegetation		Intact Y N	
Bioassay Other		Signature Y N	
Match		Lab ID	
1 Des Burd GW 695		Set 10	
2 Des Burd GW 688		Set 28	
3 Des Burd GW 3026		Set 24	
4 Des Burd GW 698		Set 23	
5 Des Burd GW 697		Set 26	
6 Des Burd BLK 01		Set 31	
7 Des Burd GW 696		Set 31	
8			
9			
10			
Custody Record MUST be Signed		LABORATORY USE ONLY	
Relinquished by: <b>[Signature]</b>		Received by: <b>[Signature]</b>	
Relinquished by: <b>[Signature]</b>		Received by: <b>[Signature]</b>	
Date/Time: <b>4/23/08 8:15</b>		Date/Time: <b>4/23/08 8:15</b>	
Sample Disposal: Return to client: _____		Sample Type: _____	
Lab Disposal: _____		# of fractions: _____	

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 free schedule forms & literature.



## ANALYTICAL SUMMARY REPORT

June 27, 2008

Cory Foreman

RESPEC Inc

3824 Jet Dr

Rapid City, SD 57701-

Workorder No.: R08040364

Quote ID: R286

Project Name: Edgemont

Energy Laboratories Inc. received the following 7 samples from RESPEC Inc on 4/30/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R08040364-001	DewBurd GW676	04/29/08 12:27	04/30/08	Aqueous	Metals by ICP/CPMS, Dissolved Metals by ICP/CPMS, Suspended Metals by ICP/CPMS, Total Alkalinity Anion - Cation Balance Conductivity Hg By CVAA, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrite Nitrogen, Nitrate + Nitrite Nitrogen, Nitrate Only Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R08040364-002	DewBurd GW678	04/29/08 13:41	04/30/08	Aqueous	Same As Above
R08040364-003	DewBurd GW677	04/29/08 15:14	04/30/08	Aqueous	Same As Above
R08040364-004	DewBurd GW675	04/29/08 17:47	04/30/08	Aqueous	Same As Above
R08040364-005	DewBurd GW675	04/29/08 17:50	04/30/08	Aqueous	Same As Above



R08040364-006 DewBurd BLK01	04/29/08 18:00 04/30/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Conductivity Hg By CVAA, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrite Nitrogen, Nitrate + Nitrite Nitrogen, Nitrate Only Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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
R08040364-007 DewBurd GW635	04/29/08 19:00 04/30/08	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Hg By CVAA, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrite Nitrogen, Nitrate + Nitrite Nitrogen, Nitrate Only Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration 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



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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: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Linda Larson", written over a horizontal line.

Linda Larson

Rapid City - Project Manager



## CASE NARRATIVE

The following Case Narrative contains exceptions or comments pertaining to the analysis of samples submitted by RESPEC Inc on 4/30/2008 8:05:00 AM. These samples were assigned ELI Workorder Number R08040364.

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.

-The total Mercury analysis was not run within hold due to lab error. The method used was a standard method cold vapor analysis. It is an approved method and was the method available at the time of analysis.

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).



## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-001  
Client Sample ID: DewBurd GW676

Report Date: 06/27/08  
Collection Date: 04/29/08 12:27  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	220	mg/L		5		1	A2320 B	05/01/08 10:37/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 10:37/mb
Bicarbonate as HCO3	268	mg/L		5		1	A2320 B	05/01/08 10:37/mb
Calcium	561	mg/L		0.5		2	E200.7	05/19/08 15:47/eli-c
Chloride	13	mg/L		1		5	E300.0	05/12/08 22:06/eli-g
Fluoride	0.3	mg/L		0.1		5	E300.0	05/12/08 22:06/eli-g
Magnesium	129	mg/L		0.5		2	E200.7	05/19/08 15:47/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:00/jmh
Potassium	10.9	mg/L		0.5		2	E200.7	05/19/08 15:47/eli-c
Silica	6.4	mg/L		0.5		2	E200.7	05/19/08 15:47/eli-c
Sodium	94	mg/L	D	2		2	E200.7	05/19/08 15:47/eli-c
Sulfate	1760	mg/L		1		25	E300.0	05/11/08 05:21/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	3100	umhos/cm		5.0		1	A2510 B	05/08/08 14:14/tb
Oxidation-Reduction Potential	280	mV				1	A2580 B	05/05/08 00:00/jmh
pH	7.46	s.u.		0.01		1	A4500-H B	05/06/08 14:10/jmh
Sodium Adsorption Ratio (SAR)	0.93	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	2600	mg/L		5		1	A2540 C	05/01/08 15:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 15:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/20/08 12:31/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 15:47/eli-c
Boron	0.5	mg/L		0.1		2	E200.7	05/19/08 15:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/20/08 12:31/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 15:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 12:31/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/19/08 15:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 12:31/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	05/19/08 15:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 12:31/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 15:47/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 15:47/eli-c
Selenium	0.009	mg/L		0.001		1	A3114 B	05/08/08 16:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 12:31/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 12:31/eli-c
Uranium	0.0557	mg/L		0.0003		1	E200.8	05/20/08 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: R08040364-001  
Client Sample ID: DewBurd GW676

Report Date: 06/27/08  
Collection Date: 04/29/08 12:27  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 15:47/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 15:47/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:13/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.76	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 12:50/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:30/eli-ca
Selenium-VI	0.009	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
METALS, TOTAL								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:24/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	51.6	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	9.1	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	8.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	9.2	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	5.8	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	9.4	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	-0.9	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.3	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.2	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/21/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/21/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-6.7	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/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.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-001  
Client Sample ID: DewBurd GW676

Report Date: 06/27/08  
Collection Date: 04/29/08 12:27  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210 precision (±)	12.9	pCi/L				1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008	06/02/08 13:40/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/19/08 16:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Radon 222	755	pCi/L		100		1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	96.4	pCi/L				1	D5072-92	05/04/08 18:36/eli-c
<b>TOTAL METALS ANALYSES</b>								
Antimony	ND	mg/L		0.003		1	E200.8	05/08/08 23:42/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/08/08 23:42/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	05/09/08 02:05/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/08/08 23:42/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/08/08 23:42/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/08/08 23:42/eli-c
Iron	0.57	mg/L		0.03		2	E200.7	05/09/08 02:05/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	05/08/08 23:42/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/08/08 23:42/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/08/08 23:42/eli-c
Selenium	0.012	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/08/08 23:42/eli-c
Strontium	8.6	mg/L		0.1		1	E200.8	05/08/08 23:42/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/08/08 23:42/eli-c
Uranium	0.0591	mg/L		0.0003		1	E200.8	05/08/08 23:42/eli-c
Zinc	0.03	mg/L		0.01		1	E200.8	05/08/08 23:42/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	1.76					1	A1030 E	06/19/08 00:00/ADM
Anions	41.4	meq/L				1	A1030 E	06/19/08 00:00/ADM
Cations	430	meq/L				1	A1030 E	06/19/08 00:00/ADM
Solids, Total Dissolved Calculated	2720	mg/L				1	A1030 E	06/19/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	06/19/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-002  
Client Sample ID: DewBurd GW678

Report Date: 06/27/08  
Collection Date: 04/29/08 13:41  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	478	mg/L		5		1	A2320 B	05/01/08 10:51/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 10:51/mb
Bicarbonate as HCO3	583	mg/L		5		1	A2320 B	05/01/08 10:51/mb
Calcium	457	mg/L		0.5		2	E200.7	05/19/08 16:58/eli-c
Chloride	54	mg/L		1		5	E300.0	05/12/08 22:17/eli-g
Fluoride	1.0	mg/L		0.1		5	E300.0	05/12/08 22:17/eli-g
Magnesium	500	mg/L		0.5		2	E200.7	05/19/08 16:58/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:01/jmh
Potassium	17.4	mg/L		0.5		2	E200.7	05/19/08 16:58/eli-c
Silica	7.9	mg/L		0.5		2	E200.7	05/19/08 16:58/eli-c
Sodium	643	mg/L	D	2		2	E200.7	05/19/08 16:58/eli-c
Sulfate	3740	mg/L		1		25	E300.0	05/11/08 05:32/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6300	umhos/cm		5.0		1	A2510 B	05/08/08 14:18/tb
Oxidation-Reduction Potential	260	mV				1	A2580 B	05/05/08 00:00/jmh
pH	7.55	s.u.		0.01		1	A4500-H B	05/06/08 14:11/jmh
Sodium Adsorption Ratio (SAR)	4.9	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	5400	mg/L		5		1	A2540 C	05/01/08 15:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 16:58/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/20/08 12:38/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 16:58/eli-c
Boron	1.4	mg/L		0.1		2	E200.7	05/19/08 16:58/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	05/19/08 16:58/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 16:58/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 12:38/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/19/08 16:58/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 12:38/eli-c
Manganese	2.66	mg/L		0.01		1	E200.8	05/20/08 12:38/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 12:38/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 16:58/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 16:58/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 16:46/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 12:38/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 12:38/eli-c
Uranium	0.0355	mg/L		0.0003		1	E200.8	05/20/08 12:38/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: R08040364-002  
Client Sample ID: DewBurd GW678

Report Date: 06/27/08  
Collection Date: 04/29/08 13:41  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	0.2	mg/L		0.1		2	E200.7	05/19/08 16:58/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 16:58/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:17/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.09	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 12:56/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:37/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
METALS, TOTAL								
Mercury	0.00010	mg/L	H	0.00010		1	A3112 B	06/12/08 14:32/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	54.7	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	15.8	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	18.4	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	12.8	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	16.6	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	27.6	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	-1.2	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	23.9	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.2	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.07	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	05/29/08 16:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	05/29/08 16:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-1.5	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/eli-c

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.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-002  
Client Sample ID: DewBurd GW678

Report Date: 06/27/08  
Collection Date: 04/29/08 13:41  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Lead 210 precision (±)	13.0	pCi/L				1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.17	pCi/L				1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.7	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	687	pCi/L		100		1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	94.7	pCi/L				1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/08/08 23:49/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/08/08 23:49/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Boron	1.4	mg/L		0.1		2	E200.7	05/09/08 02:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/08/08 23:49/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/08/08 23:49/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/08/08 23:49/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/09/08 02:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Manganese	2.61	mg/L		0.01		1	E200.8	05/08/08 23:49/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/08/08 23:49/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/08/08 23:49/eli-c
Selenium	0.003	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/08/08 23:49/eli-c
Strontium	11.0	mg/L		0.1		1	E200.8	05/08/08 23:49/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/08/08 23:49/eli-c
Uranium	0.0387	mg/L		0.0003		1	E200.8	05/08/08 23:49/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/08/08 23:49/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.90					1	A1030 E	06/19/08 00:00/ADM
Anions	89.1	meq/L				1	A1030 E	06/19/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc

Project: Edgemont

Lab ID: R08040364-002

Client Sample ID: DewBurd GW678

Report Date: 06/27/08

Collection Date: 04/29/08 13:41

Date Received: 04/30/08

Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	92.6	meq/L				1	A1030 E	06/19/08 00:00/ADM
Solids, Total Dissolved Calculated	5730	mg/L				1	A1030 E	06/19/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	06/19/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-003  
Client Sample ID: DewBurd GW677

Report Date: 06/27/08  
Collection Date: 04/29/08 15:14  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	480	mg/L		5		1	A2320 B	05/01/08 11:00/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 11:00/mb
Bicarbonate as HCO3	585	mg/L		5		1	A2320 B	05/01/08 11:00/mb
Calcium	516	mg/L		0.5		2	E200.7	05/19/08 17:06/eli-c
Chloride	1710	mg/L	D	2		25	E300.0	05/11/08 05:44/eli-g
Fluoride	0.7	mg/L		0.1		5	E300.0	05/12/08 22:29/eli-g
Magnesium	454	mg/L		0.5		2	E200.7	05/19/08 17:06/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:02/jmh
Potassium	9.8	mg/L		0.5		2	E200.7	05/19/08 17:06/eli-c
Silica	4.2	mg/L		0.5		2	E200.7	05/19/08 17:06/eli-c
Sodium	2140	mg/L	D	8		10	E200.7	06/20/08 15:46/eli-c
Sulfate	4410	mg/L		1		25	E300.0	05/11/08 05:44/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	12100	umhos/cm		5.0		1	A2510 B	05/08/08 14:22/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	05/05/08 00:00/jmh
pH	7.28	s.u.		0.01		1	A4500-H B	05/06/08 14:11/jmh
Sodium Adsorption Ratio (SAR)	17	unitless		0.10		1	Calculation	06/24/08 10:21/ADM
Solids, Total Dissolved TDS @ 180 C	9100	mg/L		5		1	A2540 C	05/01/08 15:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 17:06/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/20/08 12:45/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 17:06/eli-c
Boron	0.7	mg/L		0.1		2	E200.7	05/19/08 17:06/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	05/19/08 17:06/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 17:06/eli-c
Copper	ND	mg/L		0.01		1	E200.7	05/20/08 14:46/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/19/08 17:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 12:45/eli-c
Manganese	1.62	mg/L		0.01		1	E200.8	05/20/08 12:45/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 12:45/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 17:06/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 17:06/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 16:48/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 12:45/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 12:45/eli-c
Uranium	0.0450	mg/L		0.0003		1	E200.8	05/20/08 12:45/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: R08040364-003  
Client Sample ID: DewBurd GW677

Report Date: 06/27/08  
Collection Date: 04/29/08 15:14  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 17:06/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 17:06/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:22/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.11	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 12:58/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:39/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
METALS, TOTAL								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:34/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	43.1	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	23.4	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	32.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	-30	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	20.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	35.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.5	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.70	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.1	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.07	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/29/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 16:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-2.3	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/eli-c

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.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040364-003  
**Client Sample ID:** DewBurd GW677

**Report Date:** 06/27/08  
**Collection Date:** 04/29/08 15:14  
**Date Received:** 04/30/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Lead 210 precision (±)	13.0	pCi/L				1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.024	pCi/L				1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.3	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/21/08 08:27/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1250	pCi/L		100		1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	101	pCi/L				1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/08/08 23:55/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/08/08 23:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Boron	0.7	mg/L		0.1		2	E200.7	05/09/08 02:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/08/08 23:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/08/08 23:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/08/08 23:55/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	05/09/08 02:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Manganese	1.71	mg/L		0.01		1	E200.8	05/08/08 23:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/08/08 23:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/08/08 23:55/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/08/08 23:55/eli-c
Strontium	11.6	mg/L		0.1		1	E200.8	05/08/08 23:55/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/08/08 23:55/eli-c
Uranium	0.0471	mg/L		0.0003		1	E200.8	05/08/08 23:55/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	05/08/08 23:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.30					1	A1030 E	06/26/08 00:00/jmh
Anions	150	meq/L				1	A1030 E	06/26/08 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:** R08040364-003

**Client Sample ID:** DewBurd GW677

**Report Date:** 06/27/08

**Collection Date:** 04/29/08 15:14

**Date Received:** 04/30/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	157	meq/L				1	A1030 E	06/26/08 00:00/jmh
Solids, Total Dissolved Calculated	9550	mg/L				1	A1030 E	06/26/08 00:00/jmh
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	06/26/08 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: R08040364-004  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:47  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	422	mg/L		5		1	A2320 B	05/01/08 12:17/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 12:17/mb
Bicarbonate as HCO3	514	mg/L		5		1	A2320 B	05/01/08 12:17/mb
Calcium	450	mg/L		0.5		2	E200.7	05/19/08 17:10/eli-c
Chloride	64	mg/L		1		5	E300.0	05/12/08 22:41/eli-g
Fluoride	0.5	mg/L		0.1		5	E300.0	05/12/08 22:41/eli-g
Magnesium	408	mg/L		0.5		2	E200.7	05/19/08 17:10/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:06/jmh
Potassium	21.7	mg/L		0.5		2	E200.7	05/19/08 17:10/eli-c
Silica	7.3	mg/L		0.5		2	E200.7	05/19/08 17:10/eli-c
Sodium	809	mg/L	D	2		2	E200.7	05/19/08 17:10/eli-c
Sulfate	3810	mg/L		1		25	E300.0	05/11/08 05:56/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6560	umhos/cm		5.0		1	A2510 B	05/08/08 14:24/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	05/05/08 00:00/jmh
pH	7.53	s.u.		0.01		1	A4500-H B	05/06/08 14:12/jmh
Sodium Adsorption Ratio (SAR)	6.6	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	5700	mg/L		5		1	A2540 C	05/01/08 15:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 17:10/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/20/08 12:51/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 17:10/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	05/19/08 17:10/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/20/08 12:51/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 17:10/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 12:51/eli-c
Iron	1.88	mg/L		0.03		2	E200.7	05/19/08 17:10/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 12:51/eli-c
Manganese	3.02	mg/L		0.01		2	E200.7	05/19/08 17:10/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 12:51/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 17:10/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 17:10/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 16:51/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 12:51/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 12:51/eli-c
Uranium	0.0493	mg/L		0.0003		1	E200.8	05/20/08 12:51/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: R08040364-004  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:47  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 17:10/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 17:10/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:26/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	0.07	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 13:01/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:41/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
METALS, TOTAL								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:36/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	55.2	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	15.9	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	18.4	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	8.0	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	16.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	27.4	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.5	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	0.6	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.2	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/21/08 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	05/21/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-19.2	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/eli-c

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.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-004  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:47  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Lead 210 precision (±)	12.7	pCi/L					1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	0.3	pCi/L	U	1.0			1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.38	pCi/L					1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.7	pCi/L					1	E903.0	05/21/08 08:27/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	05/21/08 08:27/eli-c
Radium 226 MDC	0.3	pCi/L					1	E903.0	05/21/08 08:27/eli-c
Thorium 230	0.0	pCi/L	U	0.2			1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	960	pCi/L		100			1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	95.5	pCi/L					1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	05/09/08 00:02/eli-c
Arsenic	0.002	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Barium	ND	mg/L		0.1			1	E200.8	05/09/08 00:02/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Boron	0.3	mg/L		0.1			2	E200.7	05/09/08 02:17/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	05/09/08 00:02/eli-c
Chromium	ND	mg/L		0.05			1	E200.8	05/09/08 00:02/eli-c
Copper	ND	mg/L		0.01			1	E200.8	05/09/08 00:02/eli-c
Iron	5.03	mg/L		0.03			2	E200.7	05/09/08 02:17/eli-c
Lead	ND	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Manganese	3.02	mg/L		0.01			1	E200.8	05/09/08 00:02/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Molybdenum	ND	mg/L		0.1			1	E200.8	05/09/08 00:02/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	05/09/08 00:02/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Silver	ND	mg/L		0.005			1	E200.8	05/09/08 00:02/eli-c
Strontium	8.8	mg/L		0.1			1	E200.8	05/09/08 00:02/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	05/09/08 00:02/eli-c
Uranium	0.0502	mg/L		0.0003			1	E200.8	05/09/08 00:02/eli-c
Zinc	ND	mg/L		0.01			1	E200.8	05/09/08 00:02/eli-c
DATA QUALITY									
A/C Balance (± 5)	1.42						1	A1030 E	06/19/08 00:00/ADM
Anions	89.5	meq/L					1	A1030 E	06/19/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040364-004

**Client Sample ID:** DewBurd GW675

**Report Date:** 06/27/08

**Collection Date:** 04/29/08 17:47

**Date Received:** 04/30/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	92.1	meq/L				1	A1030 E	06/19/08 00:00/ADM
Solids, Total Dissolved Calculated	5830	mg/L				1	A1030 E	06/19/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	06/19/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-005  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:50  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
MAJOR IONS								
Alkalinity, Total as CaCO3	428	mg/L		5		1	A2320 B	05/01/08 14:04/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 14:04/mb
Bicarbonate as HCO3	522	mg/L		5		1	A2320 B	05/01/08 14:04/mb
Calcium	452	mg/L		0.5		2	E200.7	05/19/08 17:14/eli-c
Chloride	64	mg/L		1		5	E300.0	05/12/08 23:16/eli-g
Fluoride	0.5	mg/L		0.1		5	E300.0	05/12/08 23:16/eli-g
Magnesium	416	mg/L		0.5		2	E200.7	05/19/08 17:14/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:09/jmh
Potassium	21.4	mg/L		0.5		2	E200.7	05/19/08 17:14/eli-c
Silica	7.4	mg/L		0.5		2	E200.7	05/19/08 17:14/eli-c
Sodium	789	mg/L	D	2		2	E200.7	05/19/08 17:14/eli-c
Sulfate	3840	mg/L		1		25	E300.0	05/11/08 06:07/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	6530	umhos/cm		5.0		1	A2510 B	05/08/08 14:28/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	05/05/08 00:00/jmh
pH	7.79	s.u.		0.01		1	A4500-H B	05/06/08 14:12/jmh
Sodium Adsorption Ratio (SAR)	6.4	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	4800	mg/L		5		1	A2540 C	05/01/08 15:05/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 17:14/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/20/08 12:58/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 17:14/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	05/19/08 17:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/20/08 12:58/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 17:14/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 12:58/eli-c
Iron	2.32	mg/L		0.03		2	E200.7	05/19/08 17:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 12:58/eli-c
Manganese	2.66	mg/L		0.01		1	E200.8	05/20/08 12:58/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 12:58/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 17:14/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 17:14/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 16:53/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 12:58/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 12:58/eli-c
Uranium	0.0485	mg/L		0.0003		1	E200.8	05/20/08 12:58/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: R08040364-005  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:50  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 17:14/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 17:14/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:30/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	0.07	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 13:03/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:43/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
<b>METALS, TOTAL</b>								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:38/eli-ca
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	51.1	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	15.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	18.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	-0.4	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	16.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	27.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.5	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	1.2	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.2	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	05/29/08 16:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/29/08 16:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-5.2	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/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.

H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-005  
Client Sample ID: DewBurd GW675

Report Date: 06/27/08  
Collection Date: 04/29/08 17:50  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		DF	Method	Analysis Date / By
					QCL				
RADIONUCLIDES - SUSPENDED									
Lead 210 precision (±)	12.9	pCi/L					1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	-0.1	pCi/L	U	1.0			1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.024	pCi/L					1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.7	pCi/L					1	E903.0	05/21/08 10:15/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	05/21/08 10:15/eli-c
Radium 226 MDC	0.3	pCi/L					1	E903.0	05/21/08 10:15/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL									
Radon 222	960	pCi/L		100			1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	95.5	pCi/L					1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES									
Antimony	ND	mg/L		0.003			1	E200.8	05/09/08 00:36/eli-c
Arsenic	0.002	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Barium	ND	mg/L		0.1			1	E200.8	05/09/08 00:36/eli-c
Beryllium	ND	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Boron	0.3	mg/L		0.1			2	E200.7	05/09/08 02:21/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8	05/09/08 00:36/eli-c
Chromium	ND	mg/L		0.05			1	E200.8	05/09/08 00:36/eli-c
Copper	ND	mg/L		0.01			1	E200.8	05/09/08 00:36/eli-c
Iron	5.12	mg/L		0.03			2	E200.7	05/09/08 02:21/eli-c
Lead	ND	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Manganese	2.75	mg/L		0.01			1	E200.8	05/09/08 00:36/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Molybdenum	ND	mg/L		0.1			1	E200.8	05/09/08 00:36/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	05/09/08 00:36/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Silver	ND	mg/L		0.005			1	E200.8	05/09/08 00:36/eli-c
Strontium	8.6	mg/L		0.1			1	E200.8	05/09/08 00:36/eli-c
Thallium	ND	mg/L		0.001			1	E200.8	05/09/08 00:36/eli-c
Uranium	0.0516	mg/L		0.0003			1	E200.8	05/09/08 00:36/eli-c
Zinc	0.01	mg/L		0.01			1	E200.8	05/09/08 00:36/eli-c
DATA QUALITY									
A/C Balance (± 5)	0.840						1	A1030 E	06/19/08 00:00/ADM
Anions	90.4	meq/L					1	A1030 E	06/19/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R08040364-005

**Client Sample ID:** DewBurd GW675

**Report Date:** 06/27/08

**Collection Date:** 04/29/08 17:50

**Date Received:** 04/30/08

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	91.9	meq/L				1	A1030 E	06/19/08 00:00/ADM
Solids, Total Dissolved Calculated	5860	mg/L				1	A1030 E	06/19/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.820					1	A1030 E	06/19/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/27/08  
Collection Date: 04/29/08 18:00  
Date Received: 04/30/08  
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	05/01/08 12:31/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 12:31/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	05/01/08 12:31/mb
Calcium	ND	mg/L		0.5		2	E200.7	05/19/08 17:18/eli-c
Chloride	ND	mg/L		1		1	E300.0	05/11/08 06:19/eli-g
Fluoride	ND	mg/L		0.1		1	E300.0	05/11/08 06:19/eli-g
Magnesium	ND	mg/L		0.5		2	E200.7	05/19/08 17:18/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:10/jmh
Potassium	ND	mg/L		0.5		2	E200.7	05/19/08 17:18/eli-c
Silica	ND	mg/L		0.5		2	E200.7	05/19/08 17:18/eli-c
Sodium	ND	mg/L	D	2		2	E200.7	05/19/08 17:18/eli-c
Sulfate	ND	mg/L		1		1	E300.0	05/11/08 06:19/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	05/08/08 14:28/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	05/05/08 00:00/jmh
pH	6.66	s.u.		0.01		1	A4500-H B	05/06/08 14:15/jmh
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		5		1	A2540 C	06/26/08 00:00/mb
- SAR calculations may not be appropriate for near blank results.								
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 17:18/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/20/08 13:25/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 17:18/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/19/08 17:18/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/20/08 13:25/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 17:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 13:25/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/19/08 17:18/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 13:25/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	05/19/08 17:18/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 13:25/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 17:18/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 17:18/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 16:55/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 13:25/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 13:25/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/20/08 13:25/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: R08040364-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/27/08  
Collection Date: 04/29/08 18:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 17:18/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 17:18/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:34/eli-c
NUTRIENT PARAMETERS								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 13:05/jmh
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 11:59/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
METALS, TOTAL								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:41/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	0.4	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	0.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	0.8	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	-0.3	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	1.5	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	2.6	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.4	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	0.80	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	0.1	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/19/08 18:41/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/21/08 15:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/21/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-3.0	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/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.

H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-006  
Client Sample ID: DewBurd BLK01

Report Date: 06/27/08  
Collection Date: 04/29/08 18:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Lead 210 precision (±)	13.0	pCi/L				1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.024	pCi/L				1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.4	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	194	pCi/L		100		1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	85.4	pCi/L				1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/09/08 00:43/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/09/08 00:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Boron	ND	mg/L		0.1		2	E200.7	05/09/08 02:25/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/09/08 00:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/09/08 00:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/09/08 00:43/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/09/08 02:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	05/09/08 00:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/09/08 00:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/09/08 00:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/09/08 00:43/eli-c
Strontium	ND	mg/L		0.1		1	E200.8	05/09/08 00:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/09/08 00:43/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/09/08 00:43/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/09/08 00:43/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: R08040364-007  
Client Sample ID: DewBurd GW635

Report Date: 06/27/08  
Collection Date: 04/29/08 19:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
MAJOR IONS								
Alkalinity, Total as CaCO3	118	mg/L		5		1	A2320 B	05/01/08 12:36/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/01/08 12:36/mb
Bicarbonate as HCO3	144	mg/L		5		1	A2320 B	05/01/08 12:36/mb
Calcium	136	mg/L		0.5		2	E200.7	05/19/08 17:22/eli-c
Chloride	20	mg/L		1		5	E300.0	05/12/08 23:51/eli-g
Fluoride	0.4	mg/L		0.1		5	E300.0	05/12/08 23:51/eli-g
Magnesium	54.1	mg/L		0.5		2	E200.7	05/19/08 17:22/eli-c
Nitrogen, Ammonia as N	0.5	mg/L		0.1		1	A4500-NH3 G	05/06/08 15:11/jmh
Potassium	7.3	mg/L		0.5		2	E200.7	05/19/08 17:22/eli-c
Silica	4.9	mg/L		0.5		2	E200.7	05/19/08 17:22/eli-c
Sodium	545	mg/L	D	2		2	E200.7	05/19/08 17:22/eli-c
Sulfate	1430	mg/L		1		25	E300.0	05/11/08 06:31/eli-g
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2810	umhos/cm		5.0		1	A2510 B	05/08/08 14:39/tb
Oxidation-Reduction Potential	180	mV				1	A2580 B	05/05/08 00:00/jmh
pH	8.20	s.u.		0.01		1	A4500-H B	05/06/08 14:16/jmh
Sodium Adsorption Ratio (SAR)	10	unitless		0.10		1	Calculation	06/18/08 18:05/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	05/01/08 15:06/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	05/19/08 17:22/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/20/08 13:32/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/19/08 17:22/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	05/19/08 17:22/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/20/08 13:32/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	05/19/08 17:22/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/20/08 13:32/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/19/08 17:22/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/20/08 13:32/eli-c
Manganese	0.06	mg/L		0.01		2	E200.7	05/19/08 17:22/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/20/08 13:32/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/19/08 17:22/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	05/19/08 17:22/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/08/08 17:01/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/20/08 13:32/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/20/08 13:32/eli-c
Uranium	0.0017	mg/L		0.0003		1	E200.8	05/20/08 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.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-007  
Client Sample ID: DewBurd GW635

Report Date: 06/27/08  
Collection Date: 04/29/08 19:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		2	E200.7	05/19/08 17:22/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/19/08 17:22/eli-c
<b>METALS - SUSPENDED</b>								
Uranium	ND	mg/L		0.0003		1	E200.8	05/18/08 13:38/eli-c
<b>NUTRIENT PARAMETERS</b>								
Nitrogen, Nitrate as N	ND	mg/L		0.05		1	E353.2	05/14/08 00:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.05		1	E353.2	05/01/08 13:07/jmh
<b>METALS - SPECIATED</b>								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/08/08 12:01/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/09/08 10:02/eli-ca
<b>METALS, TOTAL</b>								
Mercury	ND	mg/L	H	0.00010		1	A3112 B	06/12/08 14:48/eli-ca
<b>RADIONUCLIDES - DISSOLVED</b>								
Gross Alpha	13.2	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha precision (±)	5.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Alpha MDC	6.9	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta	-8	pCi/L	U			1	E900.0	05/20/08 10:25/eli-c
Gross Beta precision (±)	5.3	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Gross Beta MDC	9.2	pCi/L				1	E900.0	05/20/08 10:25/eli-c
Lead 210	0.0	pCi/L	U	1.0		1	E909.0M	05/27/08 08:30/eli-c
Lead 210 precision (±)	14.5	pCi/L				1	E909.0M	05/27/08 08:30/eli-c
Polonium 210	1.1	pCi/L		1.0		1	RMO-3008	05/06/08 17:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	05/06/08 17:00/eli-c
Radium 226	1.3	pCi/L				1	E903.0	05/19/08 18:42/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/19/08 18:42/eli-c
Radium 226 MDC	0.08	pCi/L				1	E903.0	05/19/08 18:42/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	05/21/08 15:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	05/21/08 15:00/eli-c
Gross Gamma	0.0	pCi/L	U	20		1	E901.1	05/01/08 17:22/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	05/01/08 17:22/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-9.6	pCi/L	U	1.0		1	E909.0M	05/22/08 09:00/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.  
H - Analysis performed past recommended holding time.

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-007  
Client Sample ID: DewBurd GW635

Report Date: 06/27/08  
Collection Date: 04/29/08 19:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
RADIONUCLIDES - SUSPENDED								
Lead 210 precision (±)	12.8	pCi/L				1	E909.0M	05/22/08 09:00/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	06/02/08 13:40/eli-c
Polonium 210 precision (±)	0.33	pCi/L				1	RMO-3008	06/02/08 13:40/eli-c
Radium 226	0.3	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	05/21/08 10:15/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	05/19/08 16:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	05/19/08 16:00/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	1070	pCi/L		100		1	D5072-92	05/04/08 18:36/eli-c
Radon 222 precision (±)	96.1	pCi/L				1	D5072-92	05/04/08 18:36/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	05/09/08 00:49/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/09/08 00:49/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	05/09/08 02:29/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/09/08 00:49/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/09/08 00:49/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/09/08 00:49/eli-c
Iron	1.08	mg/L		0.03		2	E200.7	05/09/08 02:29/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	05/09/08 00:49/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/09/08 00:49/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/09/08 00:49/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/09/08 00:49/eli-c
Strontium	4.6	mg/L		0.1		1	E200.8	05/09/08 00:49/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/09/08 00:49/eli-c
Uranium	0.0017	mg/L		0.0003		1	E200.8	05/09/08 00:49/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/09/08 00:49/eli-c
DATA QUALITY								
A/C Balance (± 5)	3.52					1	A1030 E	06/19/08 00:00/ADM
Anions	32.8	meq/L				1	A1030 E	06/19/08 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.  
U - Not detected at minimum detectable concentration

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## LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040364-007  
Client Sample ID: DewBurd GW635

Report Date: 06/27/08  
Collection Date: 04/29/08 19:00  
Date Received: 04/30/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
DATA QUALITY								
Cations	35.2	meq/L				1	A1030 E	06/19/08 00:00/ADM
Solids, Total Dissolved Calculated	2280	mg/L				1	A1030 E	06/19/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	06/19/08 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.

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B			Batch: 080430A-ALK-SEL-W						
Sample ID: R08040364-005AMS	Sample Matrix Spike				Run: PH_COND1-R_080429A			05/01/08 12:24	
Alkalinity, Total as CaCO3	534	mg/L	5.0	100	80	120			
Sample ID: R08040364-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_080429A			05/01/08 12:27	
Alkalinity, Total as CaCO3	534	mg/L	5.0	100	80	120	0.0	10	
Method: A2510 B			Batch: 080508_2_COND-PROBE-W						
Sample ID: LCS1-1_080508	Laboratory Control Sample				Run: PH_COND2-R_080508A			05/08/08 13:12	
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_080508	Laboratory Control Sample				Run: PH_COND2-R_080508A			05/08/08 13:16	
Conductivity @ 25 C	4950	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_080508	Laboratory Control Sample				Run: PH_COND2-R_080508A			05/08/08 13:18	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: R08040364-007ADUP	Sample Duplicate				Run: PH_COND2-R_080508A			05/08/08 14:42	
Conductivity @ 25 C	3090	umhos/cm	5.0				9.5	10	
Method: A2540 C			Batch: 080501A-SLDS-TDS-W						
Sample ID: LCS1_080501A	Laboratory Control Sample				Run: BAL-4-R_080501A			05/05/08 09:44	
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	108	90	110			
Sample ID: MBLK1_080501A	Method Blank				Run: BAL-4-R_080501A			05/01/08 14:28	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	3						
Sample ID: R08040362-018AMS	Sample Matrix Spike				Run: BAL-4-R_080501A			05/05/08 09:53	
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	124	80	120			S
Sample ID: R08040362-018AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_080501A			05/05/08 09:54	
Solids, Total Dissolved TDS @ 180 C	2200	mg/L	5.0	128	80	120	0.4	10	S
Method: A2580 B			Batch: 080505-ORP-ISE-W						
Sample ID: R08040364-007F	Sample Duplicate				Run: PH_COND1-R_080505A			05/05/08 00:00	
Oxidation-Reduction Potential	180	mV					1.9	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: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3112 B							Batch: C_HG3112-7470-080612		
Sample ID: MBLK	Method Blank				Run: SUB-C102580				06/12/08 14:14
Mercury	ND	mg/L	5E-05						
Sample ID: 288-88-5	Laboratory Control Sample				Run: SUB-C102580				06/12/08 14:21
Mercury	0.0051	mg/L	0.00010	103	90	110			
Sample ID: R08040364-001I	Sample Matrix Spike				Run: SUB-C102580				06/12/08 14:26
Mercury	0.0057	mg/L	0.00010	113	85	115			
Sample ID: R08040364-001I	Sample Matrix Spike Duplicate				Run: SUB-C102580				06/12/08 14:29
Mercury	0.0057	mg/L	0.00010	112	85	115	0.9	10	
Method: A3114 B							Batch: C_SE3114-080508A		
Sample ID: MBLK	Method Blank				Run: SUB-C100845				05/08/08 11:25
Selenium-IV	ND	mg/L	6E-05						
Sample ID: 288-72-6	Laboratory Control Sample				Run: SUB-C100845				05/08/08 11:28
Selenium-IV	0.050	mg/L	0.0010	101	90	110			
Sample ID: R08040364-001E	Sample Matrix Spike				Run: SUB-C100845				05/08/08 11:33
Selenium-IV	0.050	mg/L	0.0010	100	85	115			
Sample ID: R08040364-001E	Sample Matrix Spike Duplicate				Run: SUB-C100845				05/08/08 11:35
Selenium-IV	0.047	mg/L	0.0010	95	85	115	5.4	10	
Method: A3114 B							Batch: C_SE3114-080508B		
Sample ID: MBLK	Method Blank				Run: SUB-C100885				05/08/08 16:36
Selenium	ND	mg/L	6E-05						
Sample ID: 288-72-6	Laboratory Control Sample				Run: SUB-C100885				05/08/08 16:38
Selenium	0.047	mg/L	0.0010	95	90	110			
Sample ID: R08040364-001E	Sample Matrix Spike				Run: SUB-C100885				05/08/08 16:42
Selenium	0.053	mg/L	0.0010	88	85	115			
Sample ID: R08040364-001E	Sample Matrix Spike Duplicate				Run: SUB-C100885				05/08/08 16:44
Selenium	0.054	mg/L	0.0010	90	85	115	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: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B							Batch: 080506_1_PH-W		
Sample ID: LCS_pH-1_080506	Laboratory Control Sample				Run: PH_COND2-R_080506A		05/06/08 14:09		
pH	6.92	s.u.	0.010	101	98.55	101.45			
Sample ID: R08040364-001ADUP	Sample Duplicate				Run: PH_COND2-R_080506A		05/06/08 14:10		
pH	7.48	s.u.	0.010				0.3	1.25	
Method: A4500-NH3 G							Batch: A2008-05-06_2_NH3_01		
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_080506A		05/06/08 10:09		
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_080506A		05/06/08 10:10		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	108	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_080506A		05/06/08 10:12		
Nitrogen, Ammonia as N	0.27	mg/L	0.10	108	90	110			
Sample ID: R08040362-014CMS	Sample Matrix Spike				Run: TECHAA2-R_080506A		05/06/08 14:53		
Nitrogen, Ammonia as N	0.11	mg/L	0.10	45	80	120			S
Sample ID: R08040362-014CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080506A		05/06/08 14:54		
Nitrogen, Ammonia as N	0.095	mg/L	0.10	38	80	120	0.0	10	S
Sample ID: R08040364-004BMS	Sample Matrix Spike				Run: TECHAA2-R_080506A		05/06/08 15:07		
Nitrogen, Ammonia as N	0.44	mg/L	0.10	80	80	120			
Sample ID: R08040364-004BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_080506A		05/06/08 15:08		
Nitrogen, Ammonia as N	0.46	mg/L	0.10	88	80	120	4.7	10	
Method: D5072-92							Batch: C_R100659		
Sample ID: R08040364-001G	Sample Duplicate				Run: SUB-C100659		05/04/08 18:36		
Radon 222	693	pCi/L	100				8.5	30	
Sample ID: R08040364-007G	Sample Duplicate				Run: SUB-C100659		05/04/08 18:36		
Radon 222	1070	pCi/L	100				0.1	30	
Sample ID: MB-R100659	Method Blank				Run: SUB-C100659		05/04/08 18:36		
Radon 222	20	pCi/L							
Sample ID: LCS-R100659	Laboratory Control Sample				Run: SUB-C100659		05/04/08 18:36		
Radon 222	303	pCi/L	100	94	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_18513		
Sample ID: MB-18513	Method Blank		Run: SUB-C100898				05/09/08 01:36		
Boron	0.02	mg/L	0.01						
Iron	ND	mg/L	0.009						
Sample ID: LCS3-18513	Laboratory Control Sample		Run: SUB-C100898				05/09/08 01:40		
Boron	0.481	mg/L	0.10	93	85	115			
Iron	2.63	mg/L	0.030	105	85	115			
Sample ID: C08050144-001B MS3	Sample Matrix Spike		Run: SUB-C100898				05/09/08 04:07		
Boron	0.714	mg/L	0.10	95	70	130			
Iron	2.72	mg/L	0.030	108	70	130			
Sample ID: C08050144-001B MSD3	Sample Matrix Spike Duplicate		Run: SUB-C100898				05/09/08 04:11		
Boron	0.737	mg/L	0.10	100	70	130	3.2	20	
Iron	2.73	mg/L	0.030	108	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: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101361		
Sample ID: MB-080519A	Method Blank		Run: SUB-C101361				05/19/08 15:19		
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						
Cadmium	ND	mg/L	0.0008						
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	0.004	mg/L	0.003						
Zinc	ND	mg/L	0.002						
Sample ID: LFB-080519A	Laboratory Fortified Blank		Run: SUB-C101361				05/19/08 15:23		
Silica	0.30	mg/L	0.10	98	85	125			
Aluminum	1.1	mg/L	0.10	106	85	125			
Barium	1.0	mg/L	0.10	103	85	125			
Boron	1.1	mg/L	0.10	105	85	125			
Cadmium	1.1	mg/L	0.010	107	85	125			
Calcium	53	mg/L	0.50	107	85	125			
Chromium	1.0	mg/L	0.050	103	85	125			
Iron	1.1	mg/L	0.030	110	85	125			
Magnesium	54	mg/L	0.50	107	85	125			
Manganese	1.0	mg/L	0.010	102	85	125			
Molybdenum	1.0	mg/L	0.10	100	85	125			
Nickel	1.0	mg/L	0.050	103	85	125			
Potassium	47	mg/L	0.50	95	85	125			
Sodium	51	mg/L	0.77	103	85	125			
Vanadium	1.1	mg/L	0.10	107	85	125			
Zinc	1.0	mg/L	0.010	102	85	125			
Sample ID: C08050067-001CMS2	Sample Matrix Spike		Run: SUB-C101361				05/19/08 15:51		
Aluminum	2.03	mg/L	0.10	100	70	130			
Barium	2.02	mg/L	0.10	98	70	130			
Boron	2.52	mg/L	0.10	100	70	130			
Cadmium	2.05	mg/L	0.010	101	70	130			
Chromium	2.01	mg/L	0.050	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101361		
Sample ID: C08050067-001CMS2	Sample Matrix Spike		Run: SUB-C101361				05/19/08 15:51		
Iron	2.13	mg/L	0.030	104	70	130			
Manganese	2.02	mg/L	0.010	99	70	130			
Molybdenum	1.94	mg/L	0.10	95	70	130			
Nickel	2.01	mg/L	0.050	99	70	130			
Vanadium	2.17	mg/L	0.10	104	70	130			
Zinc	2.03	mg/L	0.010	99	70	130			
Calcium	654	mg/L	1.0		70	130			A
Magnesium	233	mg/L	1.0	102	70	130			
Potassium	103	mg/L	1.0	91	70	130			
Silica	7.85	mg/L	0.10	71	70	130			
Sodium	194	mg/L	1.5	98	70	130			
Sample ID: C08050067-001CMSD2	Sample Matrix Spike Duplicate		Run: SUB-C101361				05/19/08 15:55		
Aluminum	2.04	mg/L	0.10	100	70	130	0.2	20	
Barium	2.04	mg/L	0.10	99	70	130	1.1	20	
Boron	2.54	mg/L	0.10	102	70	130	1.0	20	
Cadmium	2.06	mg/L	0.010	101	70	130	0.3	20	
Chromium	2.04	mg/L	0.050	100	70	130	1.3	20	
Iron	2.20	mg/L	0.030	108	70	130	3.2	20	
Manganese	2.05	mg/L	0.010	101	70	130	1.7	20	
Molybdenum	2.00	mg/L	0.10	97	70	130	2.8	20	
Nickel	2.03	mg/L	0.050	99	70	130	0.8	20	
Vanadium	2.18	mg/L	0.10	104	70	130	0.3	20	
Zinc	2.06	mg/L	0.010	101	70	130	1.3	20	
Calcium	664	mg/L	1.0		70	130	1.5	20	A
Magnesium	239	mg/L	1.0	109	70	130	2.7	20	
Potassium	102	mg/L	1.0	90	70	130	1.0	20	
Silica	7.85	mg/L	0.10	71	70	130	0.1	20	
Sodium	192	mg/L	1.5	96	70	130	1.1	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7							Batch: C_R101431		
Sample ID: MB-080520A	Method Blank				Run: SUB-C101431		05/20/08 14:34		
Copper	ND	mg/L	0.005						
Sodium	ND	mg/L	0.8						
Sample ID: LFB-080520A	Laboratory Fortified Blank				Run: SUB-C101431		05/20/08 14:38		
Copper	1.0	mg/L	0.010	101	85	125			
Sodium	51	mg/L	0.77	103	85	125			
Sample ID: C08050094-002FMS2	Sample Matrix Spike				Run: SUB-C101431		05/20/08 15:02		
Copper	2.14	mg/L	0.010	105	70	130			
Sodium	156	mg/L	1.5	102	70	130			
Sample ID: C08050094-002FMSD2	Sample Matrix Spike Duplicate				Run: SUB-C101431		05/20/08 15:07		
Copper	2.03	mg/L	0.010	99	70	130	5.3	20	
Sodium	155	mg/L	1.5	100	70	130	1.2	20	
Method: E200.7							Batch: C_R103044		
Sample ID: MB-080620A	Method Blank				Run: SUB-C103044		06/20/08 15:38		
Sodium	ND	mg/L	0.8						
Sample ID: LFB-080620A	Laboratory Fortified Blank				Run: SUB-C103044		06/20/08 15:42		
Sodium	51	mg/L	0.77	101	85	125			
Sample ID: R08040364-003C	Sample Matrix Spike				Run: SUB-C103044		06/20/08 15:50		
Sodium	2590	mg/L	7.7		70	130			A
Sample ID: R08040364-003C	Sample Matrix Spike Duplicate				Run: SUB-C103044		06/20/08 15:54		
Sodium	2620	mg/L	7.7		70	130	1.2	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18513		
Sample ID: MB-18513	Method Blank		Run: SUB-C100862				05/08/08 23:22		
Antimony	ND	mg/L	0.0002						
Arsenic	0.0001	mg/L	5E-05						
Barium	ND	mg/L	0.0003						
Beryllium	ND	mg/L	0.0001						
Cadmium	ND	mg/L	4E-05						
Chromium	0.002	mg/L	5E-05						
Copper	0.0004	mg/L	0.0001						
Lead	ND	mg/L	5E-05						
Manganese	0.0001	mg/L	3E-05						
Molybdenum	8E-05	mg/L	5E-05						
Nickel	ND	mg/L	0.0002						
Selenium	ND	mg/L	0.0002						
Silver	ND	mg/L	5E-05						
Strontium	ND	mg/L	8E-05						
Thallium	ND	mg/L	3E-05						
Uranium	0.0001	mg/L	3E-05						
Zinc	0.001	mg/L	0.0003						
Sample ID: LCS3-18513	Laboratory Control Sample		Run: SUB-C100862				05/08/08 23:28		
Antimony	0.564	mg/L	0.050	113	85	115			
Arsenic	0.507	mg/L	0.0010	101	85	115			
Barium	0.530	mg/L	0.10	106	85	115			
Beryllium	0.263	mg/L	0.010	105	85	115			
Cadmium	0.255	mg/L	0.010	102	85	115			
Chromium	0.488	mg/L	0.050	97	85	115			
Copper	0.476	mg/L	0.010	95	85	115			
Lead	0.516	mg/L	0.050	103	85	115			
Manganese	2.47	mg/L	0.010	99	85	115			
Molybdenum	0.554	mg/L	0.10	111	85	115			
Nickel	0.485	mg/L	0.050	97	85	115			
Selenium	0.492	mg/L	0.0010	98	85	115			
Silver	0.0497	mg/L	0.010	99	85	115			
Strontium	0.512	mg/L	0.10	102	85	115			
Thallium	0.515	mg/L	0.10	103	85	115			
Uranium	0.534	mg/L	0.00030	107	85	115			
Zinc	0.470	mg/L	0.010	94	85	115			
Sample ID: C08050144-001BMS3	Sample Matrix Spike		Run: SUB-C100862				05/09/08 02:38		
Antimony	0.551	mg/L	0.050	108	70	130			
Arsenic	0.528	mg/L	0.0010	101	70	130			
Barium	0.642	mg/L	0.10	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18513		
Sample ID: C08050144-001BMS3	Sample Matrix Spike			Run: SUB-C100862			05/09/08 02:38		
Beryllium	0.245	mg/L	0.010	98	70	130			
Cadmium	0.251	mg/L	0.010	100	70	130			
Chromium	0.433	mg/L	0.050	86	70	130			
Copper	0.474	mg/L	0.010	95	70	130			
Lead	0.525	mg/L	0.050	105	70	130			
Manganese	2.14	mg/L	0.010	85	70	130			
Molybdenum	0.577	mg/L	0.10	115	70	130			
Nickel	0.486	mg/L	0.050	97	70	130			
Selenium	0.462	mg/L	0.0010	92	70	130			
Silver	0.0490	mg/L	0.010	98	70	130			
Strontium	0.840	mg/L	0.10	98	70	130			
Thallium	0.545	mg/L	0.10	109	70	130			
Uranium	0.559	mg/L	0.00030	112	70	130			
Zinc	0.449	mg/L	0.010	88	70	130			
Sample ID: C08050144-001BMSD3	Sample Matrix Spike Duplicate			Run: SUB-C100862			05/09/08 02:44		
Antimony	0.537	mg/L	0.050	106	70	130	2.4	20	
Arsenic	0.521	mg/L	0.0010	100	70	130	1.3	20	
Barium	0.634	mg/L	0.10	105	70	130	1.3	20	
Beryllium	0.248	mg/L	0.010	99	70	130	1.1	20	
Cadmium	0.244	mg/L	0.010	98	70	130	2.6	20	
Chromium	0.442	mg/L	0.050	88	70	130	2.0	20	
Copper	0.463	mg/L	0.010	92	70	130	2.3	20	
Lead	0.523	mg/L	0.050	104	70	130	0.4	20	
Manganese	2.21	mg/L	0.010	88	70	130	3.2	20	
Molybdenum	0.554	mg/L	0.10	110	70	130	4.0	20	
Nickel	0.474	mg/L	0.050	95	70	130	2.4	20	
Selenium	0.461	mg/L	0.0010	92	70	130	0.2	20	
Silver	0.0480	mg/L	0.010	96	70	130	2.1	20	
Strontium	0.841	mg/L	0.10	98	70	130	0.2	20	
Thallium	0.524	mg/L	0.10	105	70	130	3.9	20	
Uranium	0.535	mg/L	0.00030	107	70	130	4.5	20	
Zinc	0.444	mg/L	0.010	87	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: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Batch: C_18574		
Sample ID: MB-18574	Method Blank				Run: SUB-C101315		05/18/08 12:44		
Uranium	2E-05	mg/L	2E-05						
Sample ID: LCS1-18574	Laboratory Control Sample				Run: SUB-C101315		05/18/08 12:48		
Uranium	0.0471	mg/L	0.00030	89	80	120			
Sample ID: R08040364-007I	Post Digestion Spike				Run: SUB-C101315		05/18/08 13:42		
Uranium	0.0117	mg/L	0.00030	94	70	130			
Sample ID: R08040364-007I	Post Digestion Spike Duplicate				Run: SUB-C101315		05/18/08 13:46		
Uranium	0.0119	mg/L	0.00030	95	70	130	1.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R101440		
<b>Sample ID: LRB</b>	Method Blank		Run: SUB-C101440				05/20/08 12:00		
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	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	0.0002	mg/L	3E-05						
Thorium 232	0.0001	mg/L	4E-05						
Uranium	ND	mg/L	1E-05						
<b>Sample ID: LFB</b>	Laboratory Fortified Blank		Run: SUB-C101440				05/20/08 12:06		
Arsenic	0.0514	mg/L	0.0010	103	85	115			
Cadmium	0.0519	mg/L	0.0010	104	85	115			
Copper	0.0524	mg/L	0.0010	105	85	115			
Lead	0.0516	mg/L	0.0010	103	85	115			
Manganese	0.0529	mg/L	0.0010	106	85	115			
Mercury	0.00510	mg/L	0.0010	102	85	115			
Silver	0.0202	mg/L	0.0010	100	85	115			
Thorium 232	0.0516	mg/L	0.0010	103	85	115			
Uranium	0.0515	mg/L	0.00030	103	85	115			
<b>Sample ID: C08050092-001DMS4</b>	Post Digestion Spike		Run: SUB-C101440				05/20/08 14:06		
Arsenic	0.0539	mg/L	0.0010	107	70	130			
Cadmium	0.0538	mg/L	0.010	107	70	130			
Copper	0.0500	mg/L	0.010	99	70	130			
Lead	0.0530	mg/L	0.050	106	70	130			
Manganese	0.0596	mg/L	0.010	110	70	130			
Mercury	0.00529	mg/L	0.0010	106	70	130			
Silver	0.0137	mg/L	0.010	68	70	130			S
Thorium 232	0.0533	mg/L	0.0010	107	70	130			
Uranium	0.153	mg/L	0.00030	104	70	130			
<b>Sample ID: C08050092-001DMSD4</b>	Post Digestion Spike Duplicate		Run: SUB-C101440				05/20/08 14:13		
Arsenic	0.0527	mg/L	0.0010	104	70	130	2.2	20	
Cadmium	0.0525	mg/L	0.010	105	70	130	2.3	20	
Copper	0.0488	mg/L	0.010	97	70	130	2.4	20	
Lead	0.0525	mg/L	0.050	105	70	130	0.9	20	
Manganese	0.0579	mg/L	0.010	107	70	130	2.9	20	
Mercury	0.00546	mg/L	0.0010	109	70	130	3.1	20	
Silver	0.0113	mg/L	0.010	57	70	130	19	20	S
Thorium 232	0.0534	mg/L	0.0010	107	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Batch: C_R101440		
Sample ID: C08050092-001DMSD4	Post Digestion Spike Duplicate			Run: SUB-C101440			05/20/08 14:13		
Uranium	0.155	mg/L	0.00030	108	70	130	1.3	20	
<b>Method: E300.0</b>							Batch: G_R159465		
Sample ID: LCS	Laboratory Control Sample			Run: SUB-G159465			05/10/08 14:58		
Chloride	28.1	mg/L	1.0	93	90	110			
Fluoride	20.2	mg/L	0.10	100	90	110			
Sulfate	142	mg/L	1.0	94	90	110			
Sample ID: MBLK	Method Blank			Run: SUB-G159465			05/10/08 15:10		
Chloride	ND	mg/L	0.08						
Fluoride	ND	mg/L	0.007						
Sulfate	ND	mg/L	0.04						
Sample ID: R08050024-004B	Sample Matrix Spike			Run: SUB-G159465			05/11/08 02:37		
Chloride	411	mg/L	1.0	97	80	120			
Fluoride	39.2	mg/L	0.10	99	80	120			
Sulfate	660	mg/L	1.0	97	80	120			
Sample ID: R08050024-004B	Sample Matrix Spike Duplicate			Run: SUB-G159465			05/11/08 02:49		
Chloride	407	mg/L	1.0	97	80	120	0.9	20	
Fluoride	38.8	mg/L	0.10	98	80	120	1.0	20	
Sulfate	658	mg/L	1.0	96	80	120	0.3	20	
Sample ID: G08050354-007BMS	Sample Matrix Spike			Run: SUB-G159465			05/11/08 08:04		
Chloride	1060	mg/L	2.1	100	80	120			
Fluoride	99.9	mg/L	0.18	101	80	120			
Sample ID: G08050354-007BMSD	Sample Matrix Spike Duplicate			Run: SUB-G159465			05/11/08 08:16		
Chloride	1080	mg/L	2.1	102	80	120	1.8	20	
Fluoride	102	mg/L	0.18	103	80	120	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: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E300.0</b>							Batch: G_R159560		
<b>Sample ID: LCS</b>	Laboratory Control Sample			Run: SUB-G159560			05/12/08 13:35		
Chloride	27.4	mg/L	1.0	91	90	110			
Fluoride	19.0	mg/L	0.10	94	90	110			
<b>Sample ID: MBLK</b>	Method Blank			Run: SUB-G159560			05/12/08 13:46		
Chloride	ND	mg/L	0.08						
Fluoride	ND	mg/L	0.007						
<b>Sample ID: G08050351-005AMS</b>	Sample Matrix Spike			Run: SUB-G159560			05/12/08 23:27		
Chloride	261	mg/L	1.0	101	80	120			
Fluoride	19.8	mg/L	0.10	98	80	120			
<b>Sample ID: G08050351-005AMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-G159560			05/12/08 23:39		
Chloride	263	mg/L	1.0	102	80	120	0.9	20	
Fluoride	20.0	mg/L	0.10	100	80	120	1.1	20	
<b>Sample ID: G08050409-001AMS</b>	Sample Matrix Spike			Run: SUB-G159560			05/13/08 15:35		
Chloride	204	mg/L	1.0	101	80	120			
Fluoride	21.3	mg/L	0.10	101	80	120			
<b>Sample ID: G08050409-001AMSD</b>	Sample Matrix Spike Duplicate			Run: SUB-G159560			05/13/08 15:47		
Chloride	202	mg/L	1.0	101	80	120	0.6	20	
Fluoride	21.1	mg/L	0.10	100	80	120	0.9	20	
<b>Method: E353.2</b>							Batch: A2008-05-01_3_NO2_01		
<b>Sample ID: MBLK-2</b>	Method Blank			Run: TECHAA1-R_080501A			05/01/08 12:43		
Nitrogen, Nitrite as N	ND	mg/L	0.02						
<b>Sample ID: LFB-3</b>	Laboratory Fortified Blank			Run: TECHAA1-R_080501A			05/01/08 12:45		
Nitrogen, Nitrite as N	0.249	mg/L	0.050	100	90	110			
<b>Sample ID: LFB-4</b>	Laboratory Fortified Blank			Run: TECHAA1-R_080501A			05/01/08 12:47		
Nitrogen, Nitrite as N	0.250	mg/L	0.050	100	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: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E900.0</b>							Batch: C_R101650		
<b>Sample ID: C08050092-001IMS</b>	Sample Matrix Spike				Run: SUB-C101650			05/20/08 10:25	
Gross Alpha	220	pCi/L		111	70	130			
Gross Beta	120	pCi/L		101	70	130			
<b>Sample ID: C08050092-001IMSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C101650			05/20/08 10:25	
Gross Alpha	220	pCi/L		110	70	130	0.4	30	
Gross Beta	120	pCi/L		99	70	130	2.0	30	
<b>Sample ID: MB-R101650</b>	Method Blank				Run: SUB-C101650			05/20/08 10:25	
Gross Alpha	0.1	pCi/L							
Gross Beta	-2	pCi/L							
<b>Sample ID: LCS-R101650</b>	Laboratory Control Sample				Run: SUB-C101650			05/20/08 10:25	
Gross Alpha	140	pCi/L		98	70	130			
Gross Beta	93	pCi/L		101	70	130			
<b>Method: E901.1</b>							Batch: C_R100708		
<b>Sample ID: LCS-R100708</b>	Laboratory Control Sample				Run: SUB-C100708			05/01/08 17:22	
Americium 241	720	pCi/L	20	88	70	130			
Cesium 137	1200	pCi/L	20	109	70	130			
<b>Sample ID: MB-R100708</b>	Method Blank				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	ND	pCi/L							
<b>Sample ID: R08040364-001H</b>	Sample Duplicate				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	ND	pCi/L	20				0.0	30	U
<b>Sample ID: R08040364-007H</b>	Sample Duplicate				Run: SUB-C100708			05/01/08 17:22	
Gross Gamma	ND	pCi/L	20				0.0	30	U
<b>Method: E903.0</b>							Batch: C_18574		
<b>Sample ID: R08040364-003I</b>	Sample Matrix Spike				Run: SUB-C101573			05/21/08 08:27	
Radium 226	80	pCi/L		101	70	130			
<b>Sample ID: R08040364-003I</b>	Sample Matrix Spike Duplicate				Run: SUB-C101573			05/21/08 08:27	
Radium 226	76	pCi/L		96	70	130	5.7	22.9	
<b>Sample ID: MB-18574</b>	Method Blank				Run: SUB-C101573			05/21/08 10:15	
Radium 226	3	pCi/L							
<b>Sample ID: LCS-18574</b>	Laboratory Control Sample				Run: SUB-C101573			05/21/08 10:15	
Radium 226	15	pCi/L		95	70	130			

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: C_RA226-2792		
Sample ID: C08050086-001JMS	Sample Matrix Spike				Run: SUB-C101353				05/19/08 18:41
Radium 226	7.7	pCi/L		106	70	130			
Sample ID: C08050086-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-C101353				05/19/08 18:41
Radium 226	7.8	pCi/L		107	70	130	1.0	21.2	
Sample ID: MB-RA226-2792	Method Blank				Run: SUB-C101353				05/19/08 22:54
Radium 226	0.09	pCi/L							U
Sample ID: LCS-RA226-2792	Laboratory Control Sample				Run: SUB-C101353				05/19/08 22:54
Radium 226	6.9	pCi/L		107	70	130			
Method: E907.0							Batch: C_18574		
Sample ID: C08041302-003AMS	Sample Matrix Spike				Run: SUB-C101858				05/19/08 16:00
Thorium 230	86.9	pCi/Filter	0.20	92	70	130			
Sample ID: C08041302-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C101858				05/19/08 16:00
Thorium 230	90.6	pCi/Filter	0.20	97	70	130	4.2	30	
Sample ID: LCS-R101858	Laboratory Control Sample				Run: SUB-C101858				05/19/08 16:00
Thorium 230	22.5	pCi/L	0.20	98	70	130			
Sample ID: MB-R101858	Method Blank				Run: SUB-C101858				05/19/08 16:00
Thorium 230	0.1	pCi/L							
Method: E907.0							Batch: C_R101862		
Sample ID: LCS-R101862	Laboratory Control Sample				Run: SUB-C101862				05/21/08 15:00
Thorium 230	6.30	pCi/L	0.20	91	70	130			
Sample ID: R08040364-001H	Sample Matrix Spike				Run: SUB-C101862				05/21/08 15:00
Thorium 230	15.8	pCi/L	0.20	102	70	130			
Sample ID: R08040364-001H	Sample Matrix Spike Duplicate				Run: SUB-C101862				05/21/08 15:00
Thorium 230	16.1	pCi/L	0.20	99	70	130	1.9	30	
Sample ID: MB-R101862	Method Blank				Run: SUB-C101862				05/21/08 15:00
Thorium 230	ND	pCi/L							U

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## QA/QC Summary Report

Client: RESPEC Inc  
Project: Edgemont

Report Date: 06/27/08  
Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E907.0</b>							Batch: C_R102417		
<b>Sample ID: LCS-R102417</b>	Laboratory Control Sample				Run: SUB-C102417		05/29/08 16:00		
Thorium 230	10.4	pCi/L	0.20	94	70	130			
<b>Sample ID: MB-R102417</b>	Method Blank				Run: SUB-C102417		05/29/08 16:00		
Thorium 230	0.1	pCi/L							
<b>Sample ID: TAP WATER MS</b>	Sample Matrix Spike				Run: SUB-C102417		05/29/08 16:00		
Thorium 230	10.1	pCi/L	0.20	92	70	130			
- MS and MSD are using the MB as a reference because the analyst forgot to include an unspiked Tap Water with the run. The recoveries are within limits so the batch is acceptable.									
<b>Sample ID: TAP WATER MSD</b>	Sample Matrix Spike Duplicate				Run: SUB-C102417		05/29/08 16:00		
Thorium 230	9.20	pCi/L	0.20	84	70	130	9.3	30	
- MS and MSD are using the MB as a reference because the analyst forgot to include an unspiked Tap Water with the run. The recoveries are within limits so the batch is acceptable.									
<b>Method: E909.0M</b>							Batch: C_18556		
<b>Sample ID: C08050730-007FMD</b>	Sample Duplicate				Run: SUB-C102106		05/22/08 09:00		
Lead 210	-41	pCi/L	1.0				0.0	30	
<b>Sample ID: C08050730-007FMS</b>	Sample Matrix Spike				Run: SUB-C102106		05/22/08 09:00		
Lead 210	500	pCi/L	1.0	87	70	130			
<b>Sample ID: MB-R102106</b>	Method Blank				Run: SUB-C102106		05/22/08 09:00		
Lead 210	ND	pCi/L							
<b>Sample ID: LCS-R102106</b>	Laboratory Control Sample				Run: SUB-C102106		05/22/08 09:00		
Lead 210	120	pCi/L	1.0	103	70	130			
<b>Method: E909.0M</b>							Batch: C_R102460		
<b>Sample ID: R08040364-002H</b>	Sample Matrix Spike				Run: SUB-C102460		05/27/08 08:30		
Lead 210	520	pCi/L	1.0	89	70	130			
<b>Sample ID: R08040364-002H</b>	Sample Matrix Spike Duplicate				Run: SUB-C102460		05/27/08 08:30		
Lead 210	640	pCi/L	1.0	109	70	130	20	30	
<b>Sample ID: MB-R102460</b>	Method Blank				Run: SUB-C102460		05/27/08 08:30		
Lead 210	ND	pCi/L						U	
<b>Sample ID: LCS-R102460</b>	Laboratory Control Sample				Run: SUB-C102460		05/27/08 08:30		
Lead 210	130	pCi/L	1.0	111	70	130			

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## QA/QC Summary Report

Client: RESPEC Inc

Project: Edgemont

Report Date: 06/27/08

Work Order: R08040364

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RMO-3008							Batch: C_18574		
Sample ID: C08050370-001BMS	Sample Matrix Spike				Run: SUB-C102360			06/02/08 13:40	
Polonium 210	48	pCi/L	1.0	98	70	130			
Sample ID: C08050370-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C102360			06/02/08 13:40	
Polonium 210	52	pCi/L	1.0	106	70	130	7.1	30	
Sample ID: LCS-R102360	Laboratory Control Sample				Run: SUB-C102360			06/02/08 13:40	
Polonium 210	76	pCi/L	1.0	88	70	130			
Sample ID: MB-R102360	Method Blank				Run: SUB-C102360			06/02/08 13:40	
Polonium 210	-0.5	pCi/L							
Method: RMO-3008							Batch: C_R100979		
Sample ID: R08040364-007H	Sample Matrix Spike				Run: SUB-C100979			05/06/08 17:00	
Polonium 210	160	pCi/L	1.0	90	70	130			
Sample ID: R08040364-007H	Sample Matrix Spike Duplicate				Run: SUB-C100979			05/06/08 17:00	
Polonium 210	150	pCi/L	1.0	88	70	130	1.9	30	
Sample ID: LCS-R100979	Laboratory Control Sample				Run: SUB-C100979			05/06/08 17:00	
Polonium 210	81	pCi/L	1.0	92	70	130			
Sample ID: MB-R100979	Method Blank				Run: SUB-C100979			05/06/08 17:00	
Polonium 210	0.9	pCi/L							

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## Chain of Custody and Analytical Request Record

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

PLEASE PRINT. Provide as much information as possible.

Company Name: <b>RESEC</b>		Project Name, PWS, Permit, Etc. <b>PowerTech</b>		Sample Origin State: <b>SD</b>		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Report Mail Address: <b>LESTER</b>		Contact Name: <b>copy for m e r s p e . c o m</b>		Phone/Fax:		Email: <b>Earl Kautz</b>			
Invoice Address: <b>LESTER</b>		Invoice Contact & Phone: <b>#</b>		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"/> 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				ANALYSIS REQUESTED <b>See Attached</b> Normal Turnaround (TAT) <b>U S H</b>				Contact EI prior to RUSH sample submittal for charges and scheduling – See Instruction Page Comments: <b>At 1 GW</b>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)				Collection Date		Collection Time		MATRIX	
1. <b>Don Burd GW 674</b>				4/29/08		12:27		W	
2. <b>Don Burd GW 678</b>				4/29/08		13:41		W	
3. <b>Don Burd GW 677</b>				4/29/08		15:14		W	
4. <b>Don Burd GW 675</b>				4/29/08		17:47		W	
5. <b>Don Burd GW 675</b>				4/29/08		13:50		W	
6. <b>Don Burd GW 675</b>				4/29/08		18:00		W	
7. <b>Don Burd GW 675</b>				4/29/08		19:00		W	
8. <b>Don Burd GW 675</b>				4/29/08		19:00		W	
9. <b>Don Burd GW 675</b>				4/29/08		19:00		W	
10. <b>Don Burd GW 675</b>				4/29/08		19:00		W	
Custody Record Relinquished by (print): <b>Earl Kautz</b> Date/Time: <b>4/30/08 08:05</b> Signature: <b>Earl Kautz</b> Relinquished by (print): <b>Kurt R. Schmitz</b> Date/Time: <b>4/30/08 08:05</b> Signature: <b>Kurt R. Schmitz</b>				Received by Laboratory: <b>Earl Kautz</b> Date/Time: <b>4/30/08 08:05</b> Signature: <b>Earl Kautz</b>				Signature: <b>Earl Kautz</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.