

July 6, 2012

Attn: Document Control Desk
Deputy Director
Decommission and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
US Nuclear Regulatory Commission
Washington DC 20555
Mail Stop T8F5

Deputy Director
Decommission and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
US Nuclear Regulatory Commission
11545 Rockville Pike
Mail Stop T8F5
Rockville, Maryland 20852-2738

**RE: Source Material License SUA-56; Western Nuclear, Inc., Split Rock Uranium Mill Tailings Facility;
Surface Water and Groundwater Monitoring Report**

Dear Deputy Director:

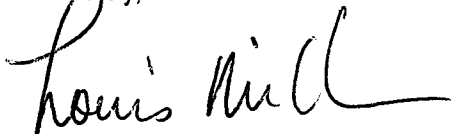
The surface water and groundwater sampling results for the first half of 2012 for the Split Rock Uranium mill tailings facility are enclosed. This monitoring was performed as required by license conditions 24 and 74.

Figure 1 shows the location of the monitor wells and the surface water sample locations. The table presents the analytical results. Figures are also included in the enclosure, which show the temporal changes in water quality for key constituents. Laboratory data sheets are for each well and surface water locations are also included.

Water quality data indicates that all parameters meet the required limits in the license and are consistent with previous values and with values predicted by the site model.

If you have any questions, please contact me at your convenience.

Sincerely,



Louis Miller
Consulting Engineer

Enclosure

cc. Steve Hall, Stoller
Scott Surovchak, DOE
Deb Harris, WDEQ
Anne Thomas, WNI

FSME20

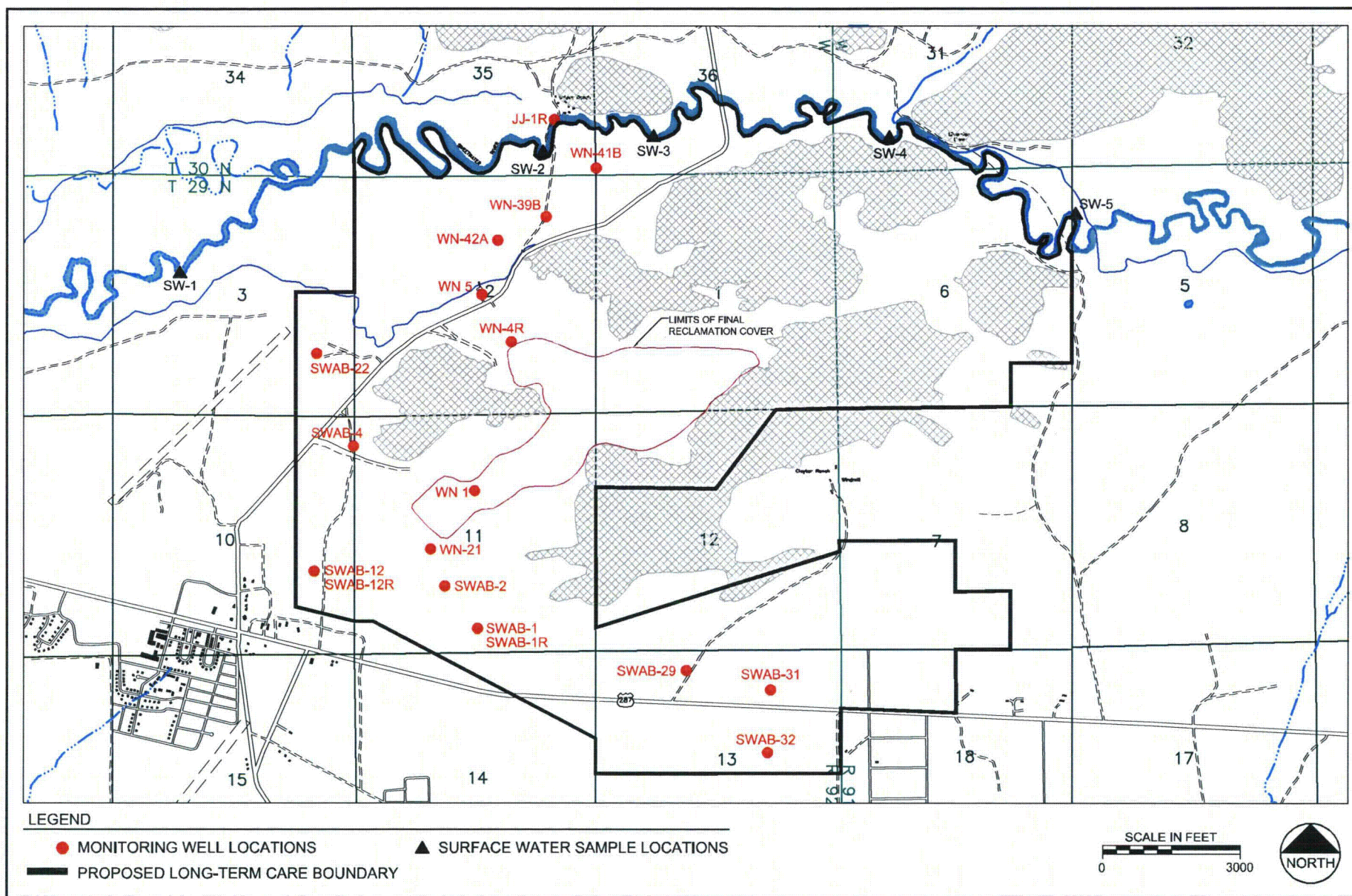


FIGURE 1
SURFACE WATER AND GROUND WATER MONITORING LOCATIONS

Date:	JULY 2010
Project:	
File:	SW-GW-MON-10-1

WNI Split Rock Mill Groundwater and Surface Water Quality Semi-Annual Report

1st Half 2012 (Sampled: 4/4/12 to 4/5/12)

Parameter ⁽¹⁾	JJ-1R	SWAB-1R ⁽³⁾	SWAB-2	SWAB-12R ⁽⁴⁾	SWAB-4	SWAB-22	SWAB-29	SWAB-31	SWAB-32	WN-1	WN-4R
Aluminum (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.4
Ammonia, Free as N ⁽²⁾ (mg/L)										0.0841	0.1133
Antimony (mg/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Arsenic (mg/L)	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Beryllium (mg/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.021
Chloride (mg/L)	14	26	37	14	37	10	6	8	11	91	81
Conductivity Field (µS/cm)	605	3120	4640	547	1620	463	436	295	522	5140	6420
Fluoride (mg/L)	0.4	0.1	0.4	0.2	0.2	0.3	0.2	0.2	0.3	0.2	7.2
Lead (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (mg/L)	0.12	<0.05	2.13	<0.05	0.4	0.05	<0.05	<0.05	<0.05	32.5	85.3
Molybdenum (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.51
Nitrate + Nitrite as N (mg/L)										13	95
pH Field (std units)	7.14	6.93	6.59	7.61	7.09	7.39	7.31	6.81	7.7	6.18	5.96
pH Lab (std units)	7.49	7.45	6.95	7.83	7.33	7.56	7.68	7.78	7.9	6.53	6.44
Radium-226 (pCi/L)										1.0 +/-0.31	0.15 +/-0.17
Radium-228 (pCi/L)										2.9 +/-1.6	5.1 +/-1.7
Selenium (mg/L)	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	0.01	0.009	0.013	0.038
Sulfate (mg/L)	51	1010	1330	76	591	39	42	28	47	2290	2980
TDS (mg/L)	351	2350	3640	353	1420	273	286	283	318	3750	4880
Temperature Field (C)	5.9	12.2	13.2	11.7	11.7	13.2	12.6	10	15.1	10.6	11.0
Thallium (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001
Thorium-230 (pCi/L)										0.02 +/-0.08	0.1 +/-0.2
Uranium (mg/L)	0.01	1.88	1.15	0.051	1.08	0.023	0.04	0.026	0.113	1.81	0.309
Water Elevation (ft)	NA	6295.70	6293.40	6298.80	6291.70	6387.30	6278.10	6270.85	6272.75	6294.85	6285.40

Notes:

- (1) All metals are dissolved analyte concentrations.
 - (2) Free ammonia concentration calculated from the laboratory reported total ammonia concentration and field measured pH, consistent with the method used to determine the ACL for ammonia.
 - (3) Well SWAB-1R installed as replacement for SWAB-1. Water Elevation taken at SWAB-1.
 - (4) Well SWAB-12R installed as replacement for SWAB-12. Water Elevation taken at SWAB-12.
- < -Indicates analyte result less than Laboratory Reporting Limit

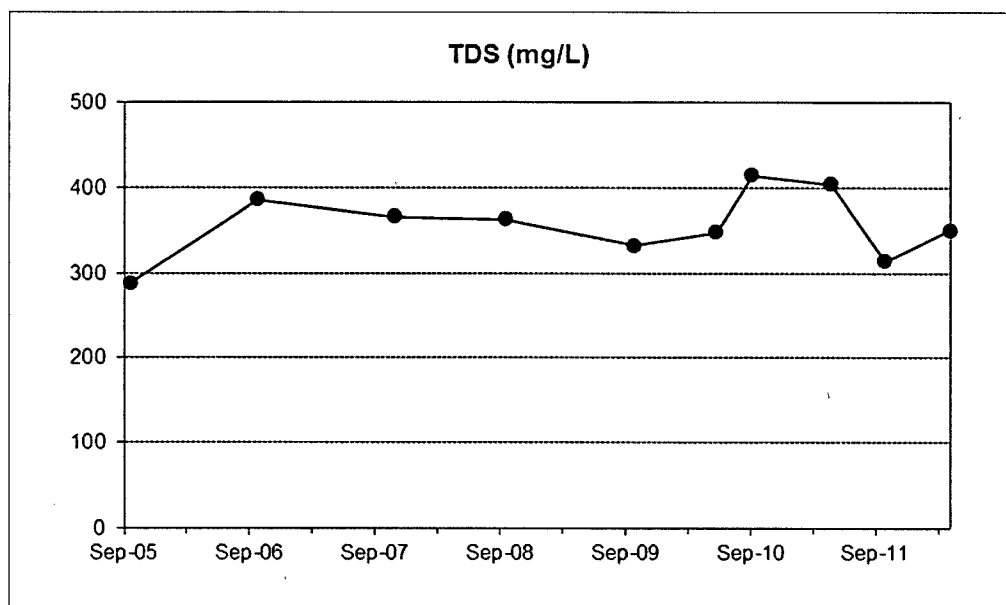
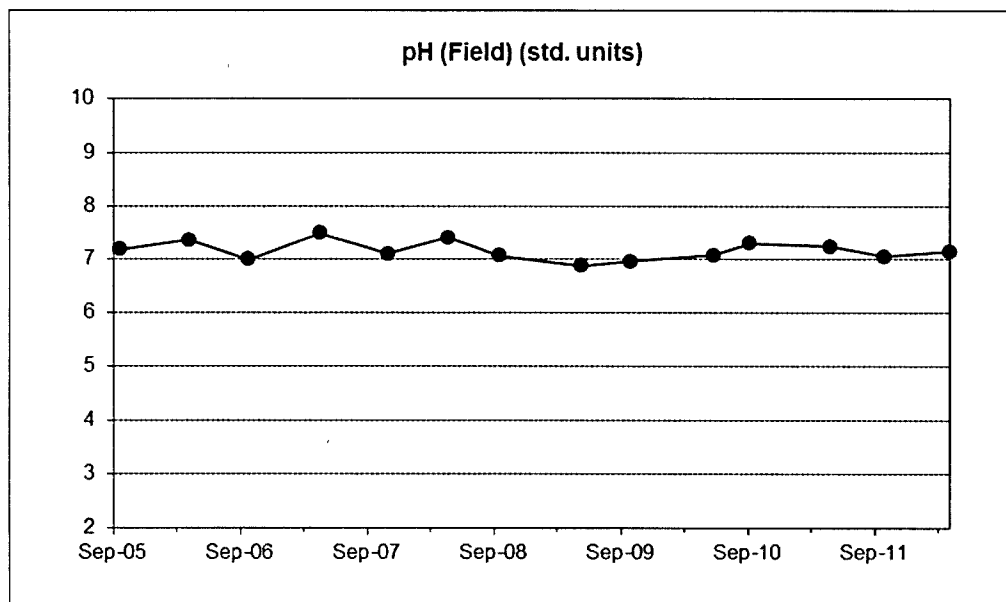
WNI Split Rock Mill Groundwater and Surface Water Quality Semi-Annual Report

1st Half 2012 (Sampled: 4/4/12 to 4/5/12)

Parameter ⁽¹⁾	WN-5	WN-21	WN-39B	WN-41B	WN-42A	SW-1	SW-2	SW-3	SW-4	SW-5
Aluminum (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1
Ammonia, Free as N ⁽²⁾ (mg/L)	<0.00013	0.0209								
Antimony (mg/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Arsenic (mg/L)	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Beryllium (mg/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.001
Chloride (mg/L)	95	12	24	397	49	4	4	4	4	4
Conductivity Field (µS/cm)	4770	592	1190	2810	4920	190	192	205	222	231
Fluoride (mg/L)	0.2	0.2	0.2	1.1	<0.1	0.2	0.2	0.2	0.2	0.2
Lead (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (mg/L)	0.45	0.22	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrate + Nitrite as N (mg/L)	65	2.7								
pH Field (std units)	6.72	7.45	7.55	8.03	6.89	8.05	8.15	8.23	8.21	8.09
pH Lab (std units)	7.02	7.8	7.76	8.09	7.1	7.97	7.97	7.96	7.96	7.96
Radium-226 (pCi/L)	0.03 +/-0.21	-0.1 +/-0.14								
Radium-228 (pCi/L)	4.8 +/- 2.2	4.7 +/- 1.9								
Selenium (mg/L)	0.019	<0.005	<0.005	<0.005	0.041	<0.005	<0.005	<0.005	<0.005	<0.005
Sulfate (mg/L)	1630	77	236	378	1760	12	11	11	11	10
TDS (mg/L)	3630	373	718	1460	4090	122	96	112	106	144
Temperature Field (C)	10.6	11.2	8.9	8	9.4	4.4	4.5	4	4.9	5.9
Thallium (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Thorium-230 (pCi/L)	0.07 +/-0.1	0.0007 +/-0.07								
Uranium (mg/L)	1.47	0.053	0.403	0.009	1.08	0.002	0.001	0.001	0.001	0.001
Water Elevation (ft)	6281.80	6295.55	6274.50	6272.75	6277.75	NA	NA	NA	NA	NA

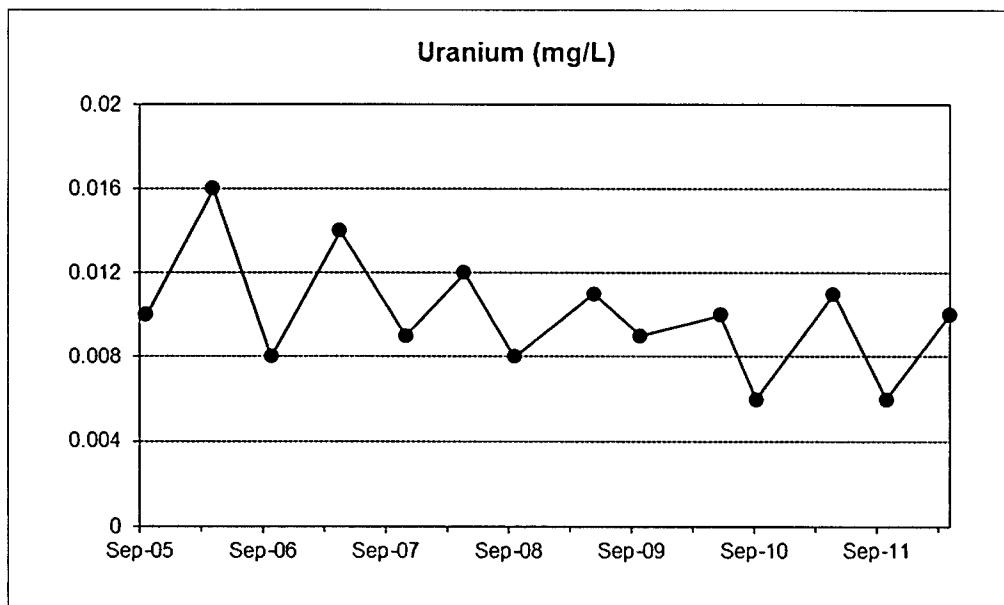
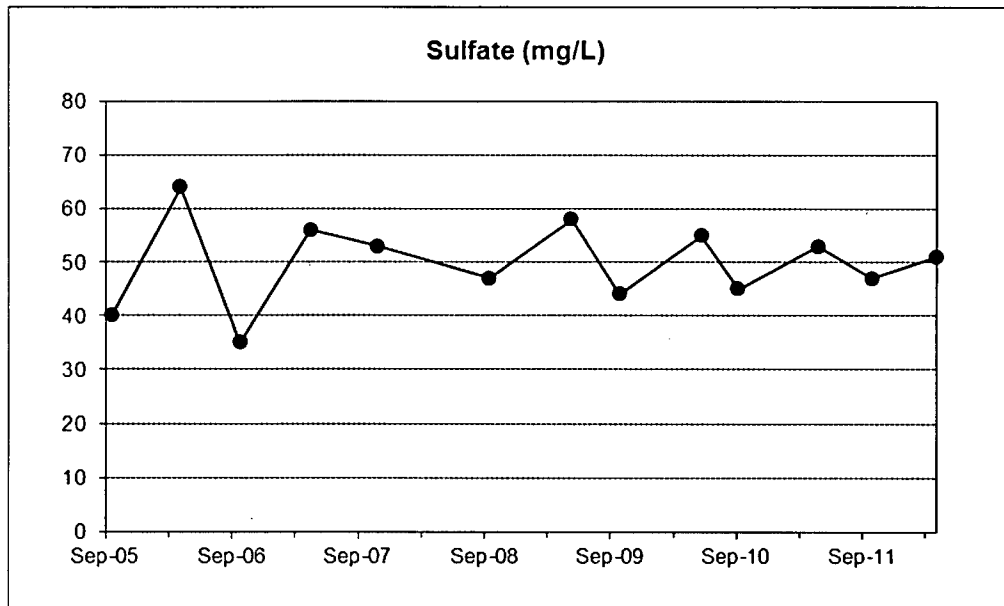
Notes:

- (1) All metals are dissolved analyte concentrations.
 - (2) Free ammonia concentration calculated from the laboratory reported total ammonia concentration and field measured pH, consistent with the method used to determine the ACL for ammonia.
 - (3) Well SWAB-1R installed as replacement for SWAB-1. Water Elevation taken at SWAB-1.
 - (4) Well SWAB-12R installed as replacement for SWAB-12. Water Elevation taken at SWAB-12.
- < -Indicates analyte result less than Laboratory Reporting Limit



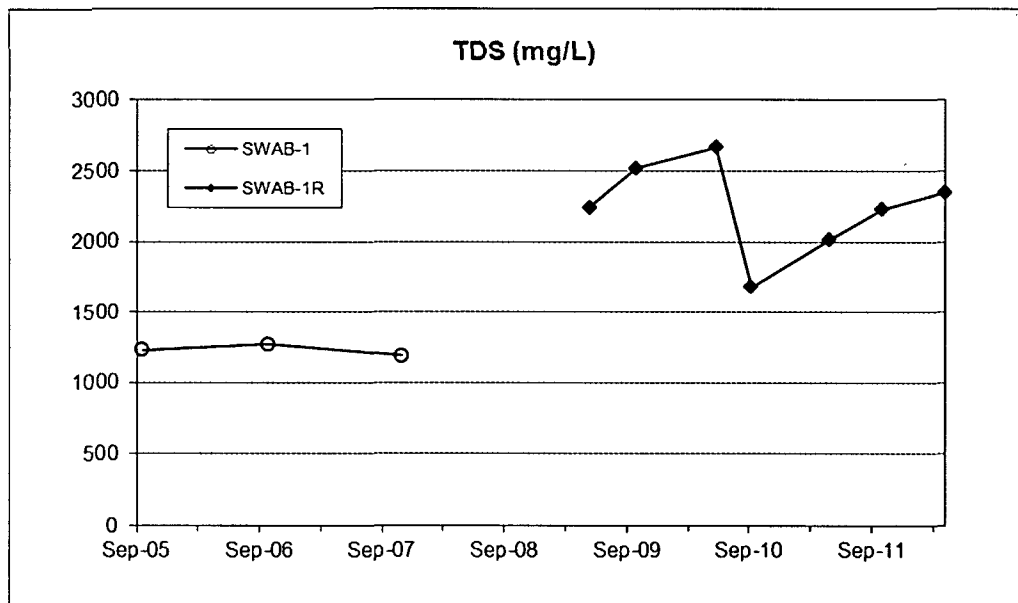
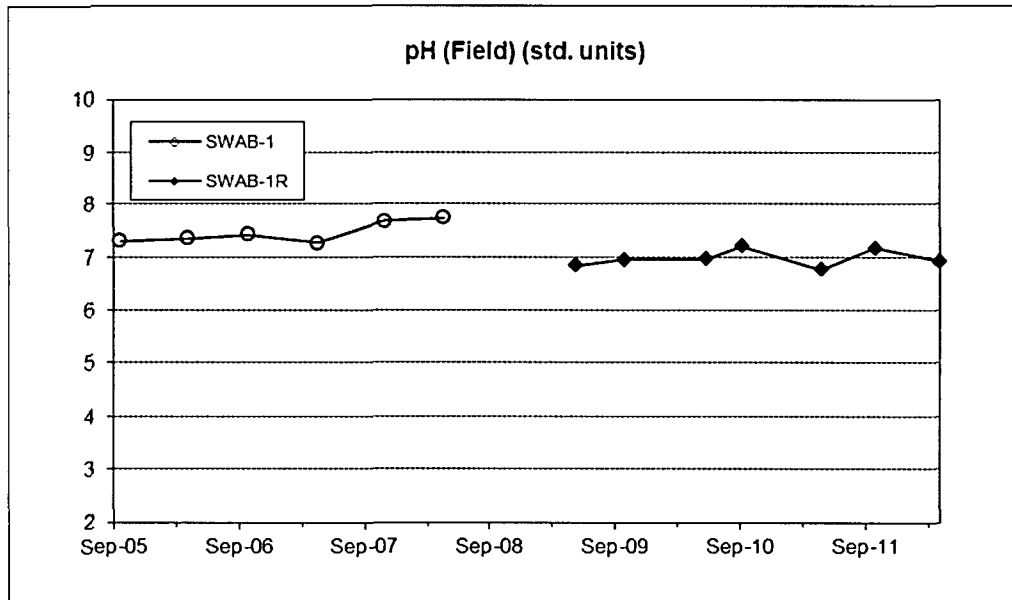
Split Rock

JJ-1R



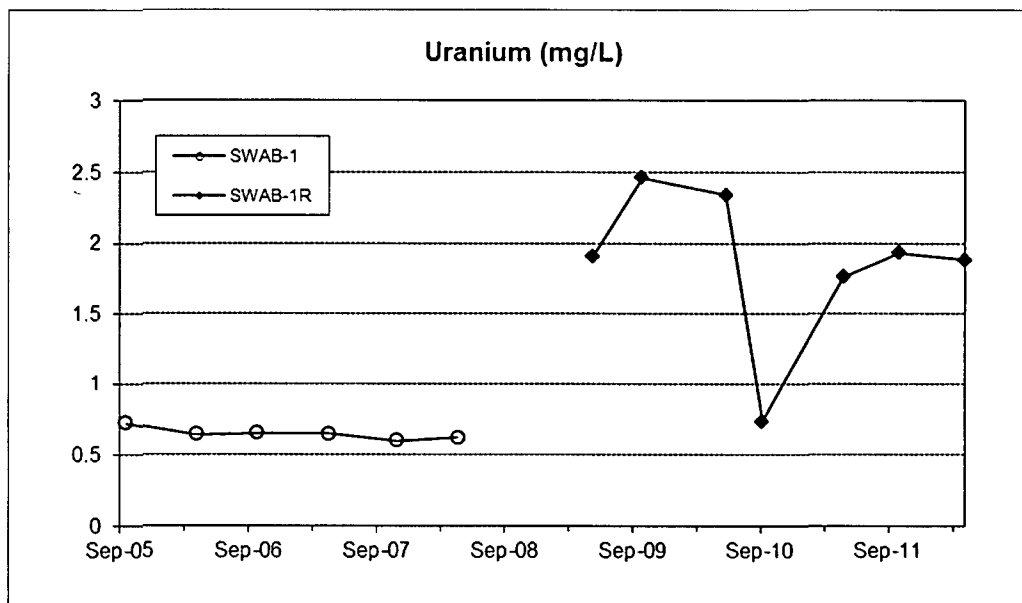
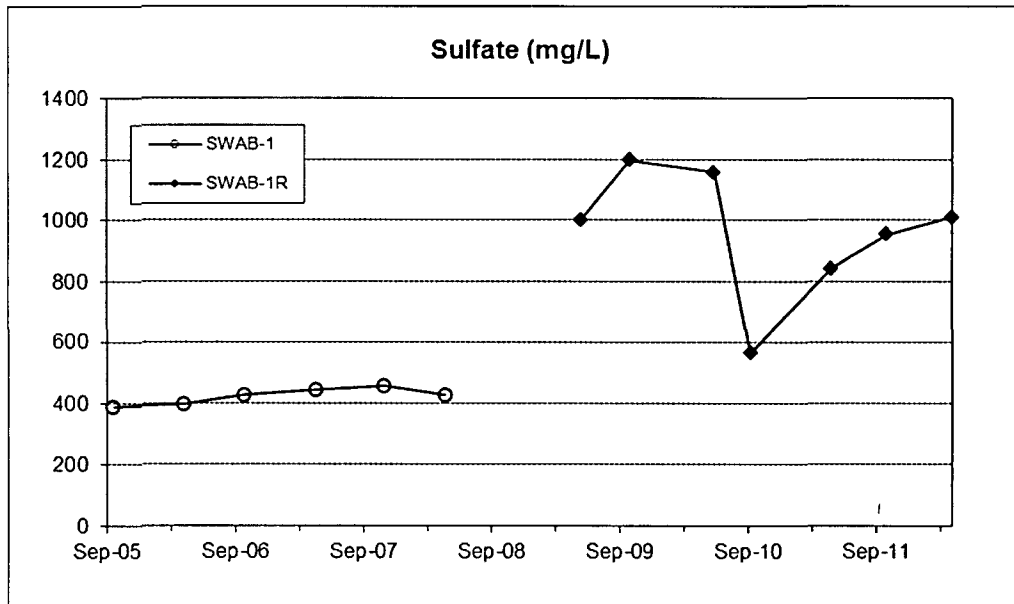
Split Rock

SWAB-1 and 1R



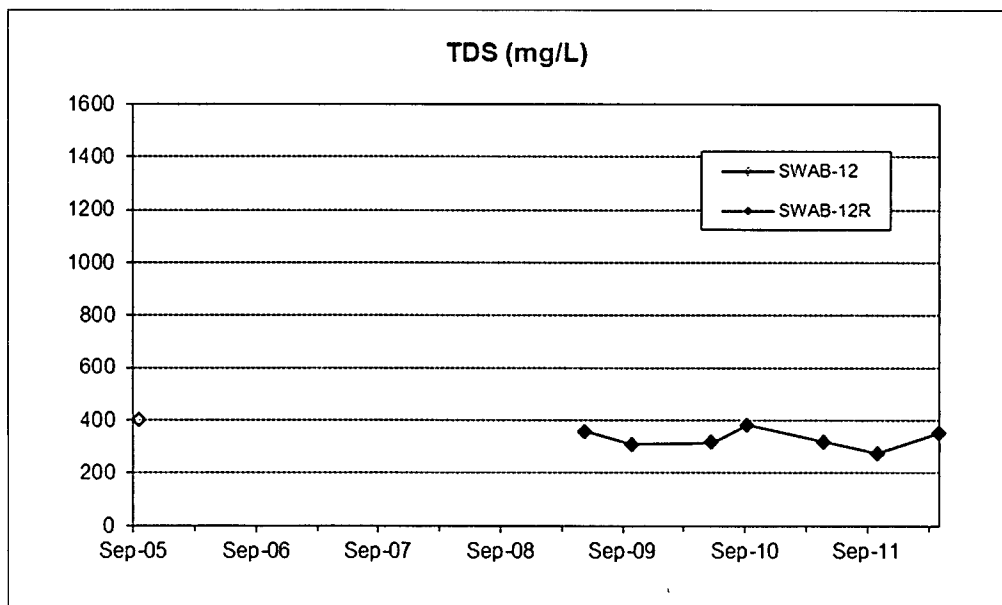
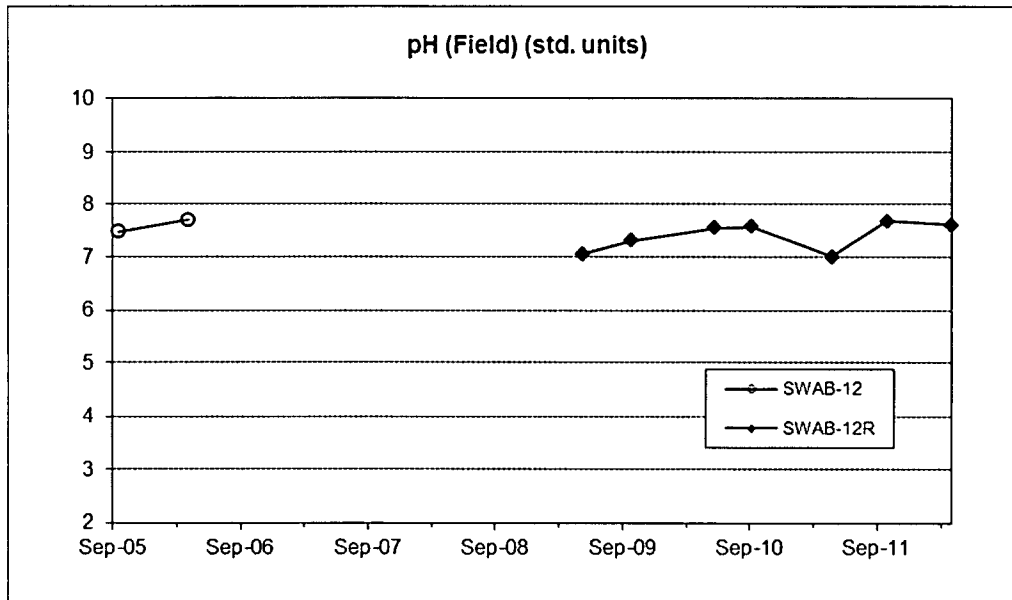
Split Rock

SWAB-1 and 1R



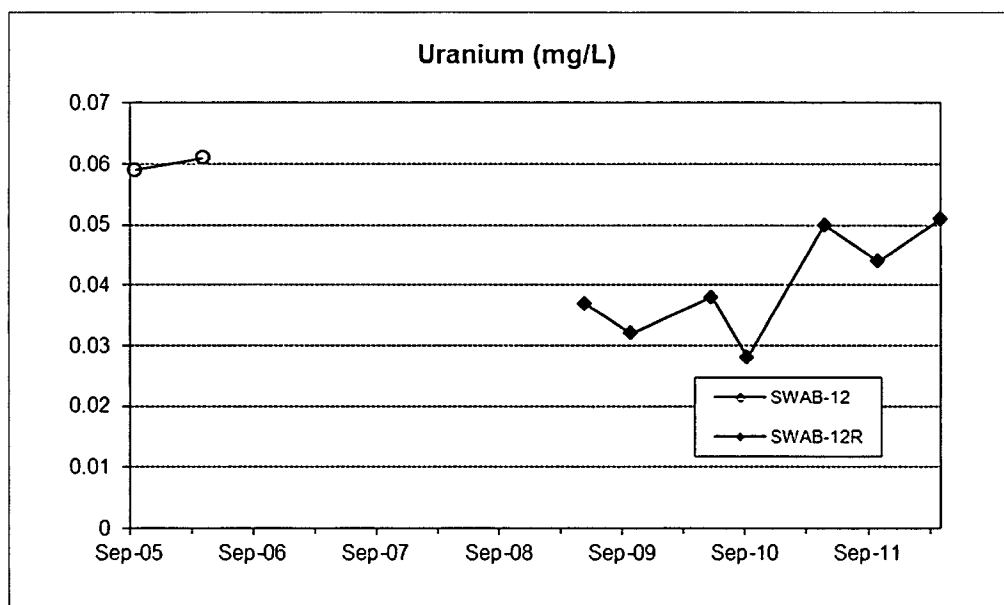
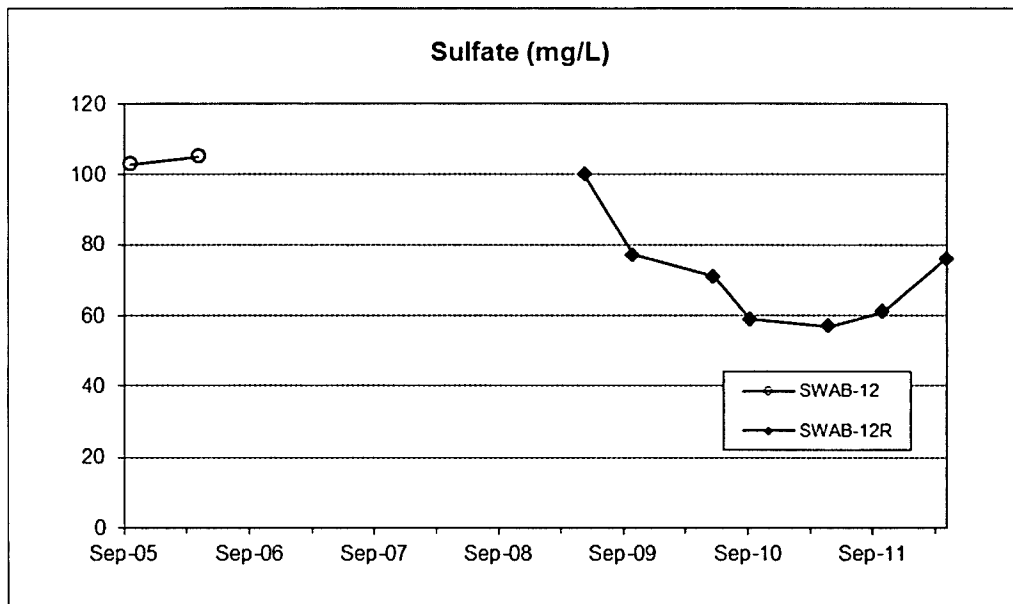
Split Rock

SWAB-12 and 12R



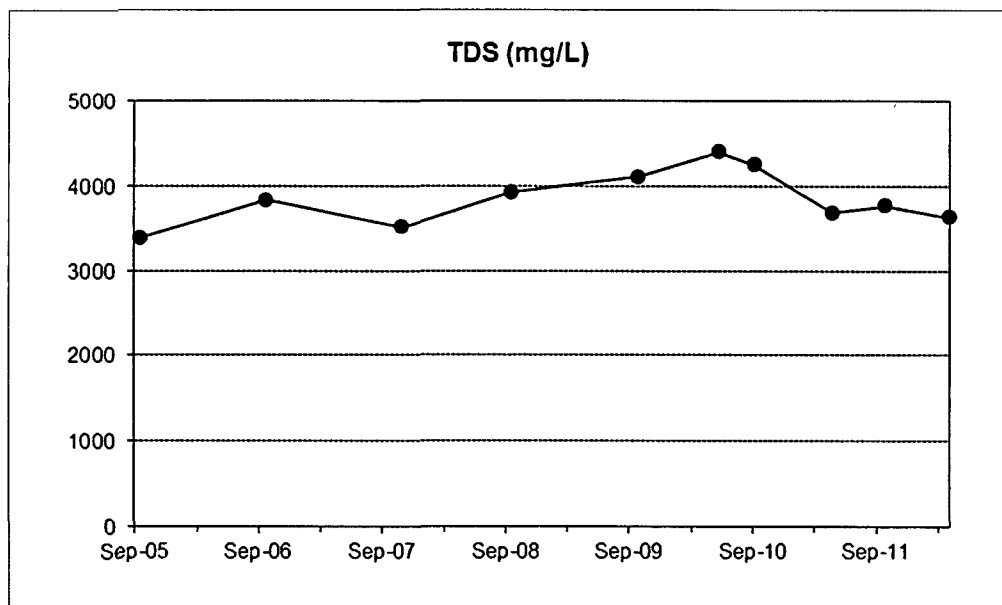
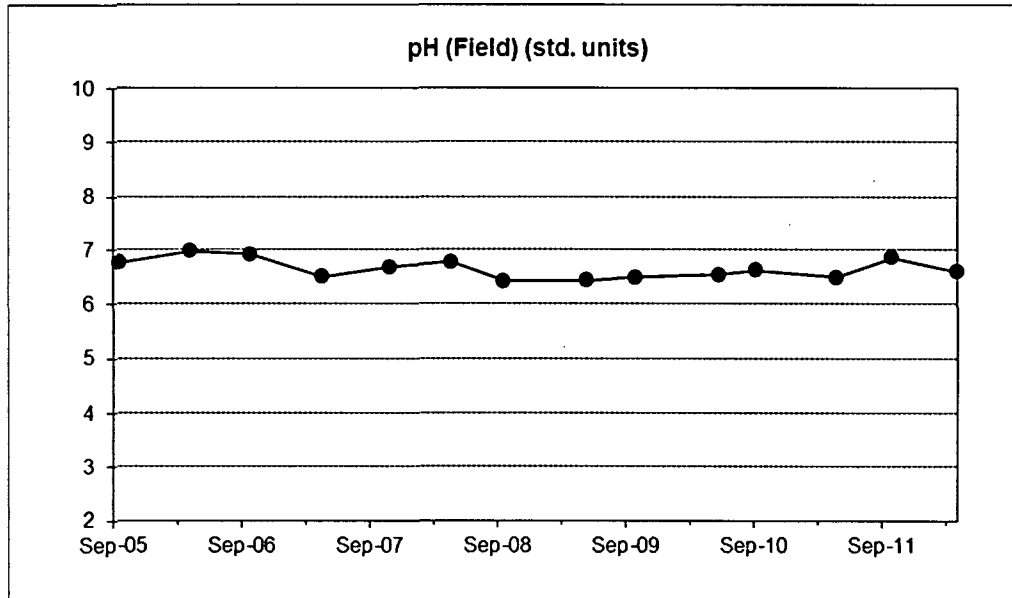
Split Rock

SWAB-12 and 12R



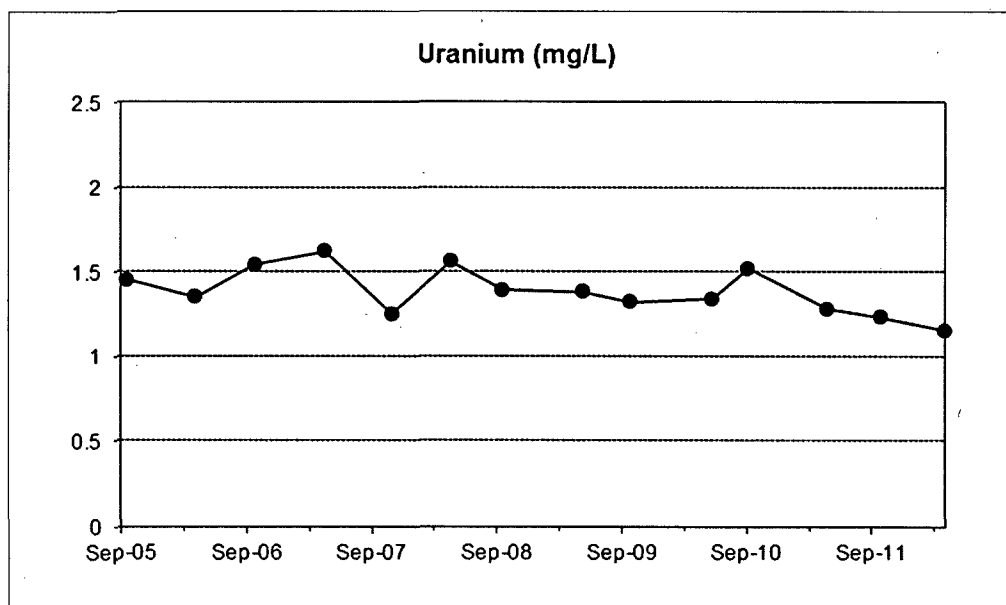
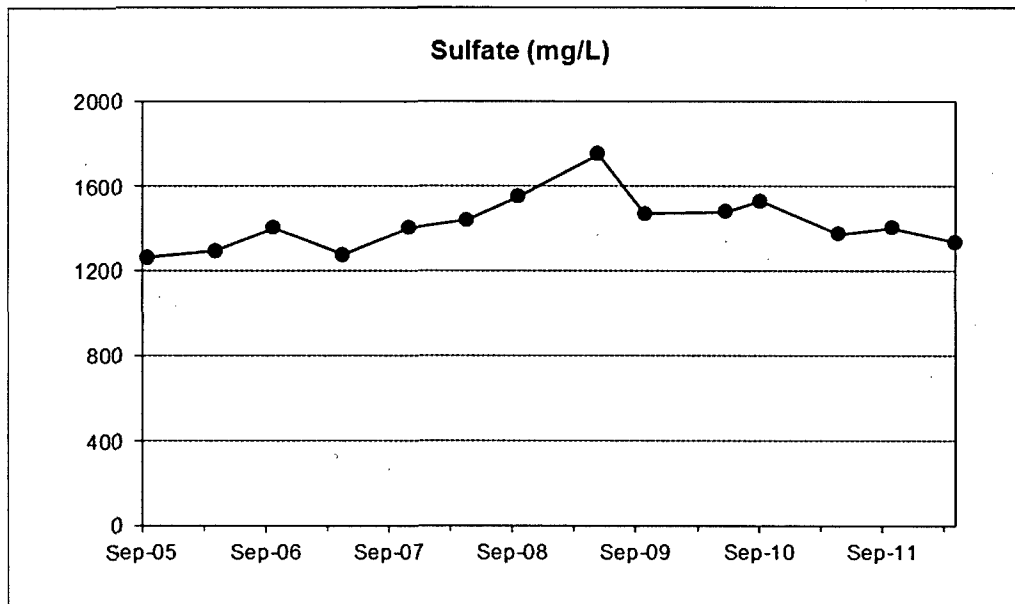
Split Rock

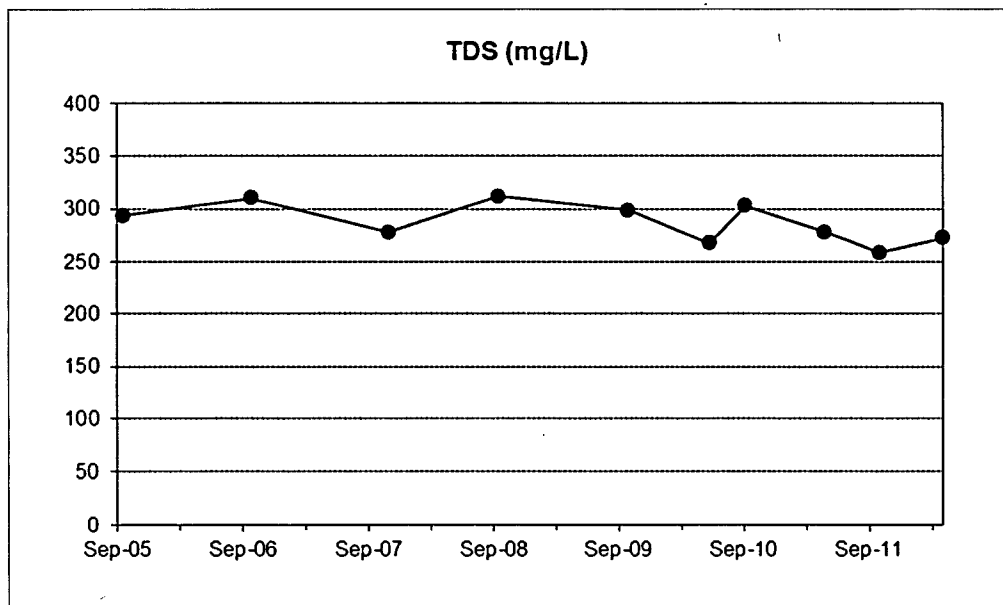
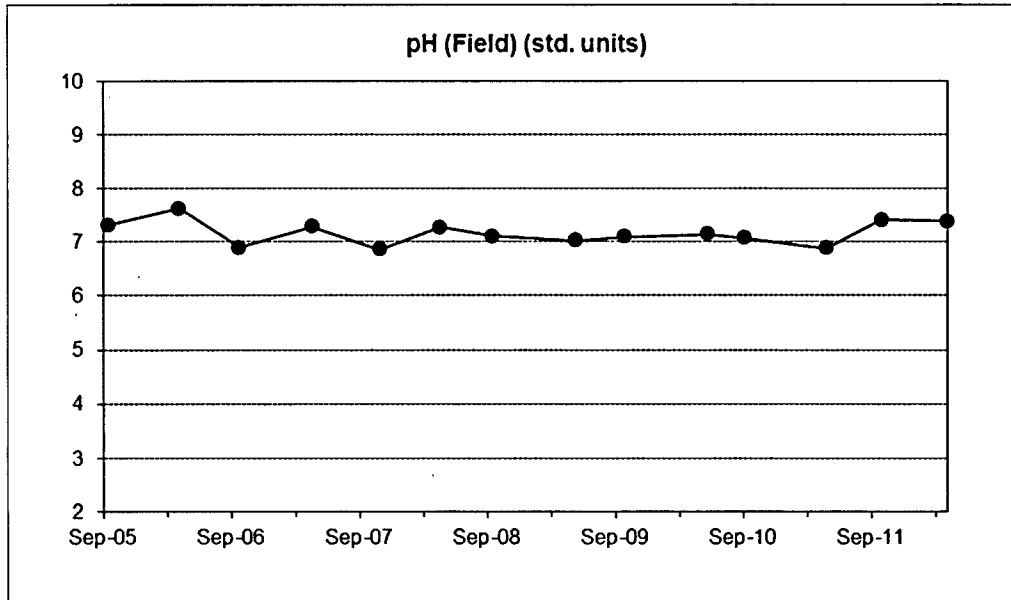
SWAB-2

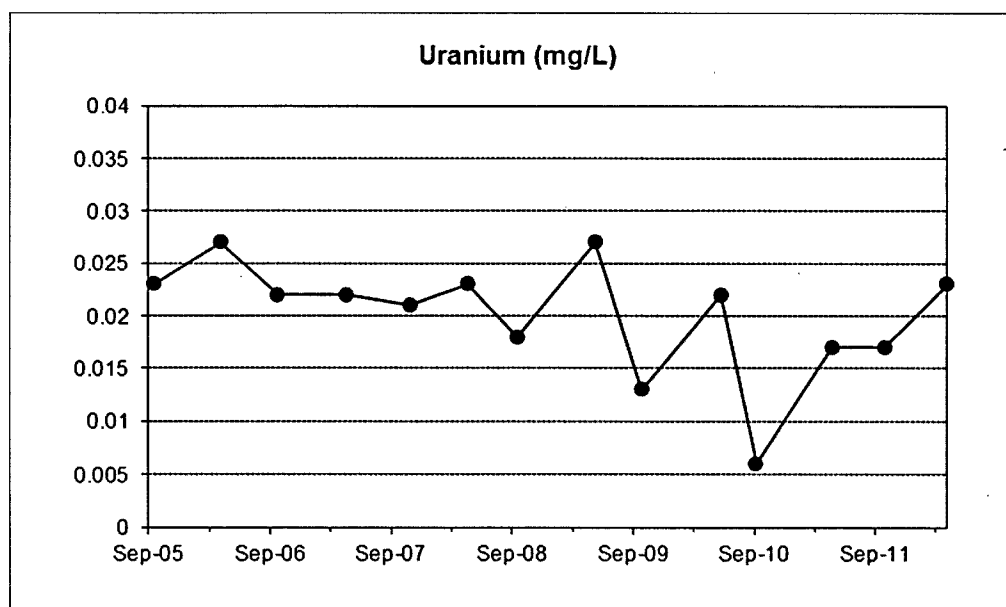
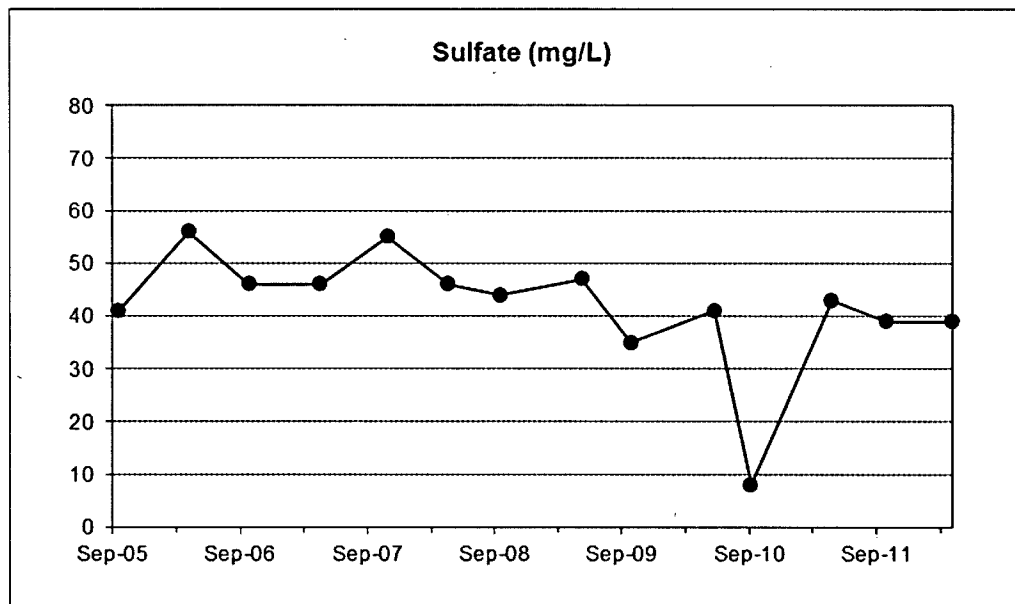


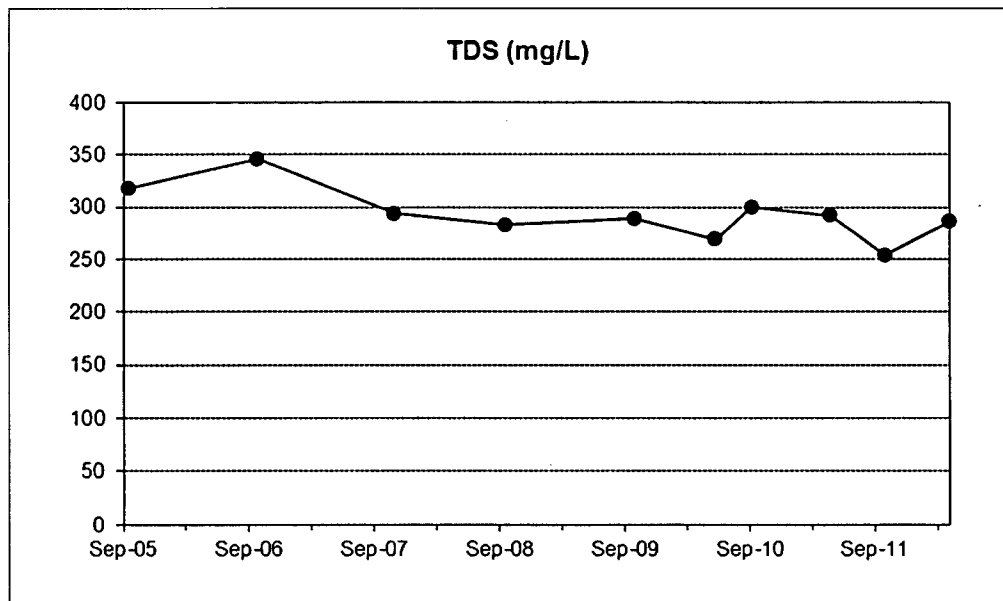
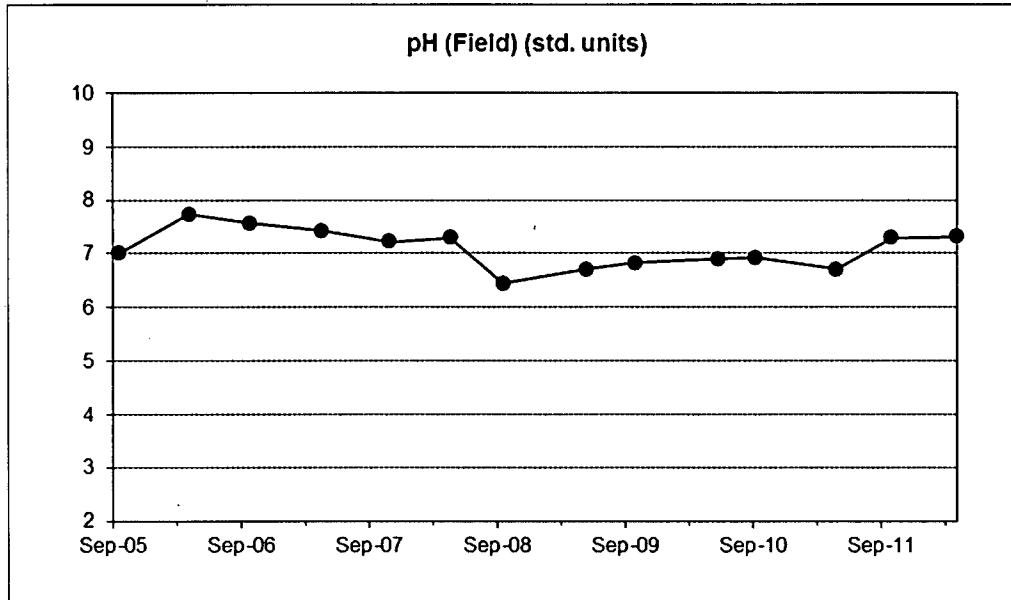
Split Rock

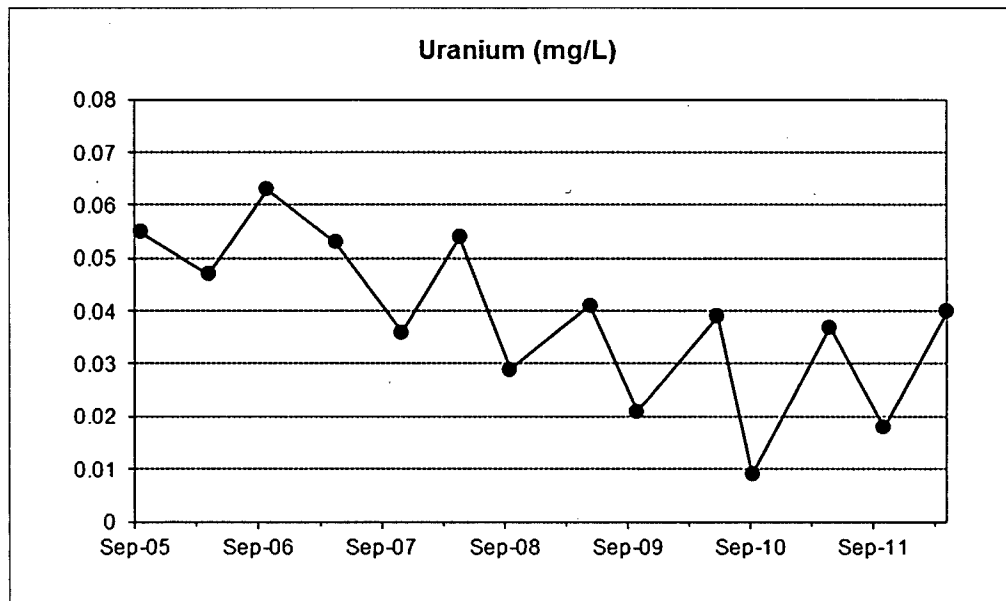
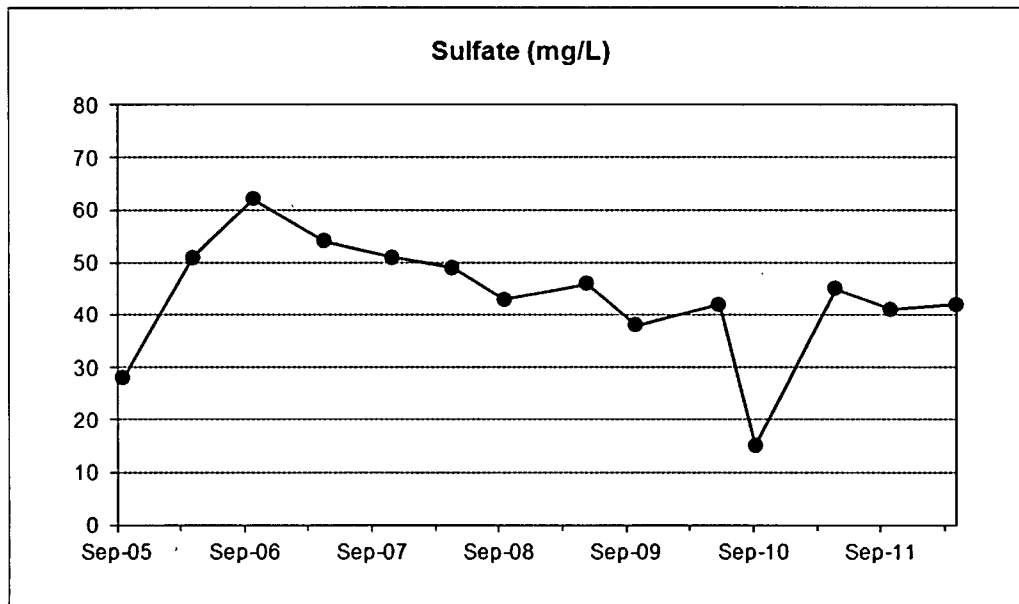
SWAB-2

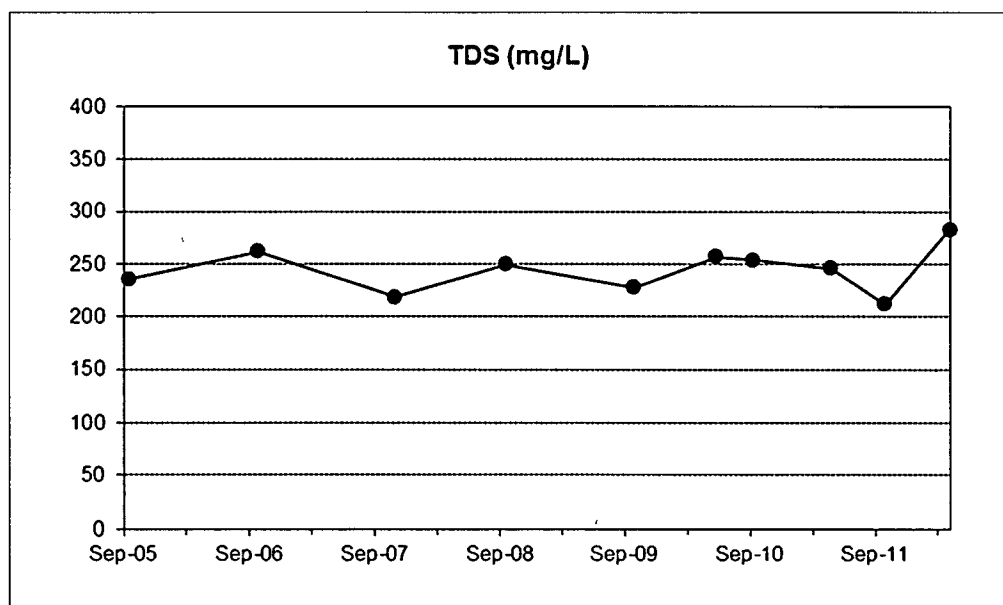
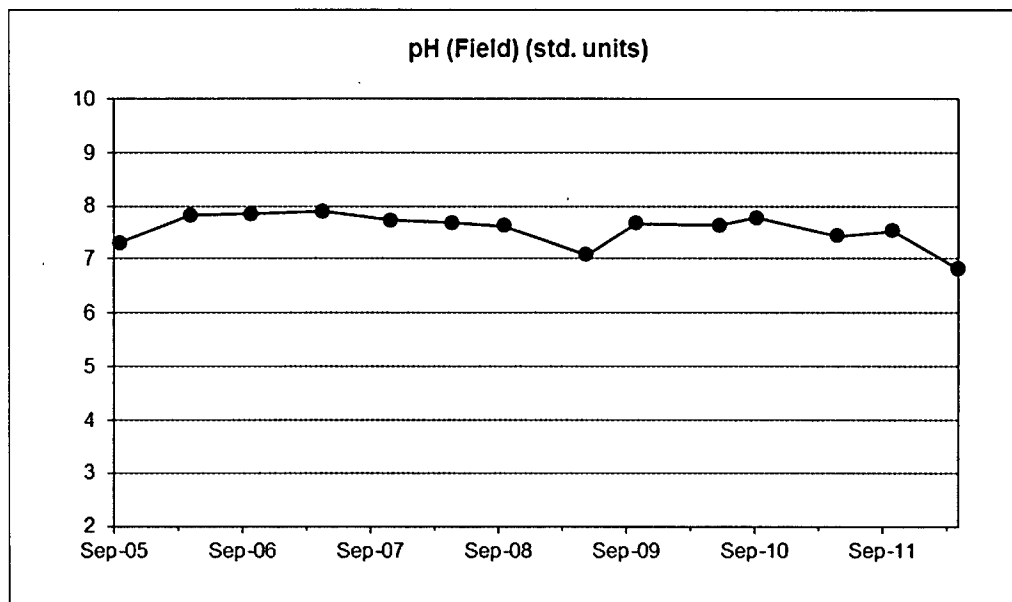


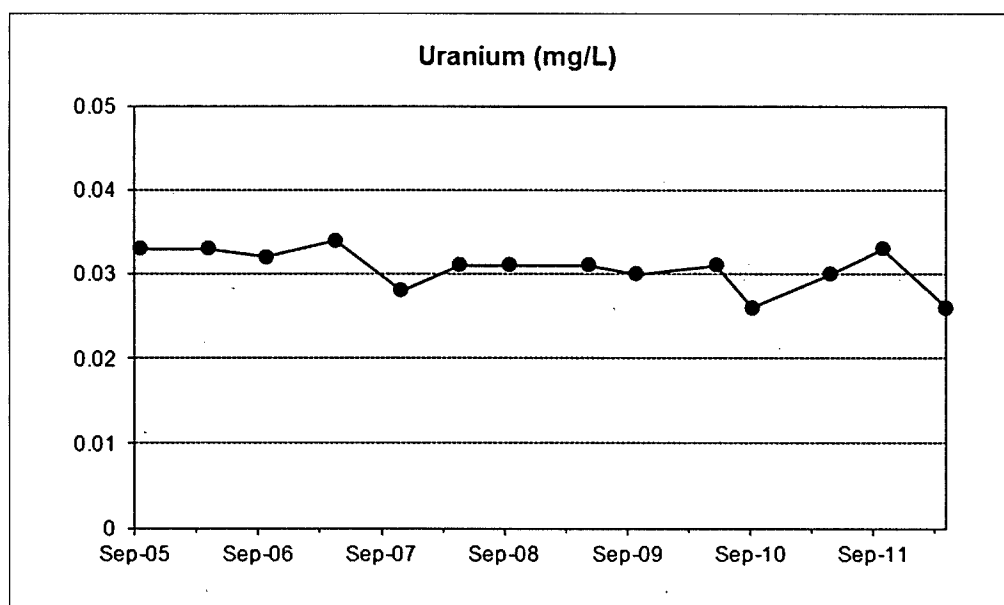
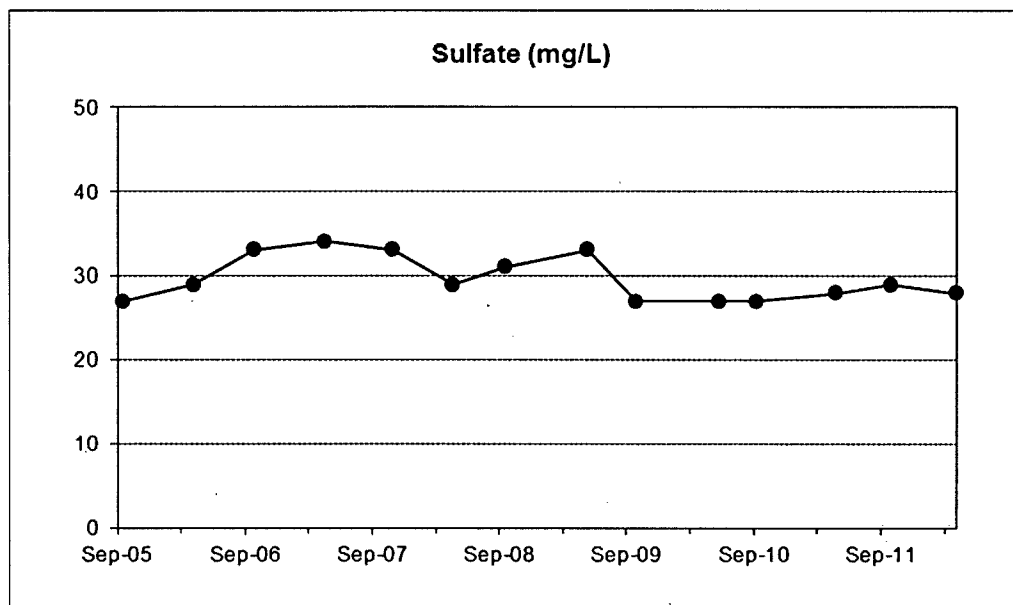


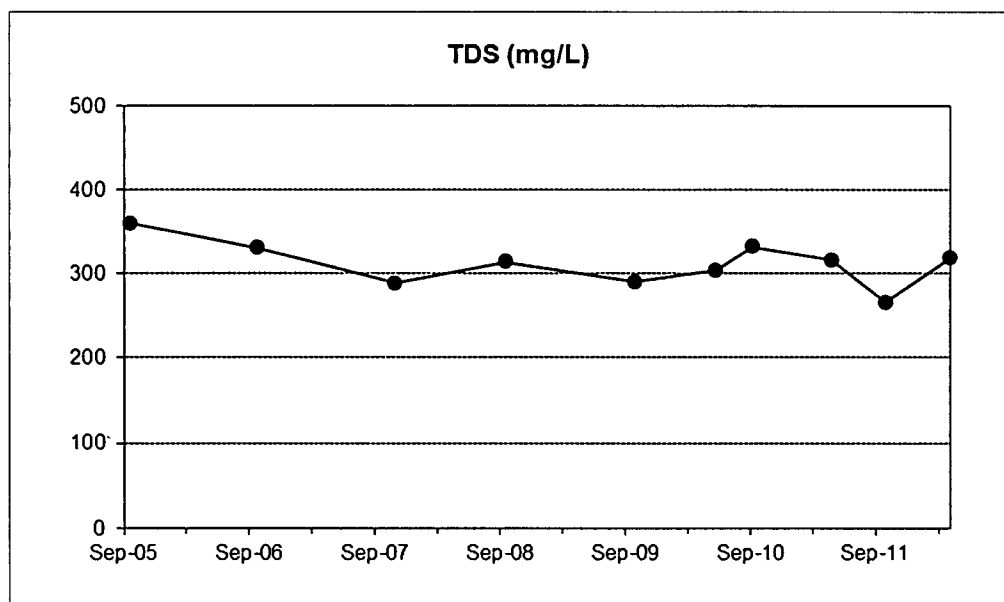
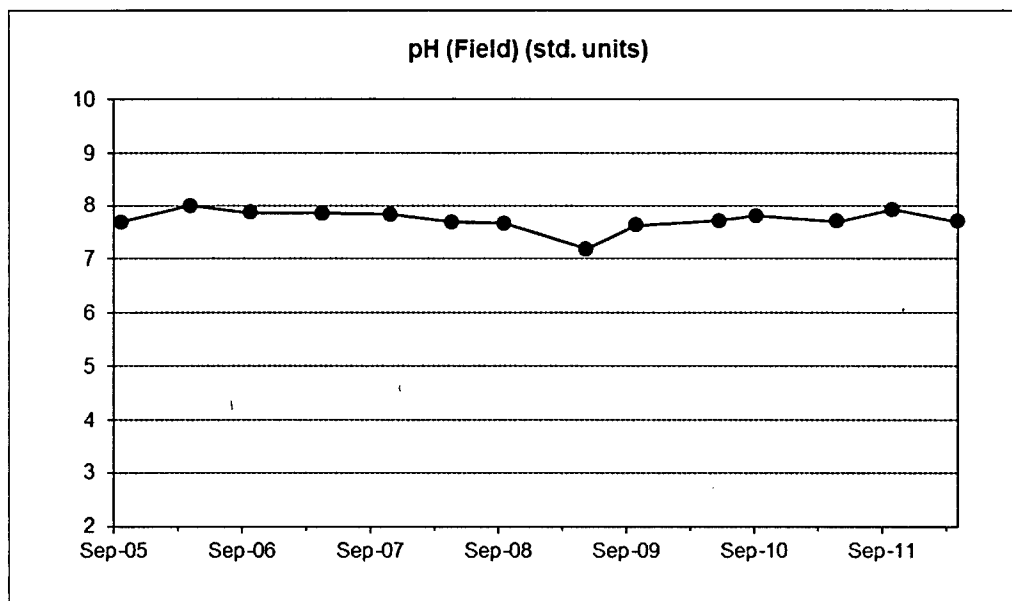


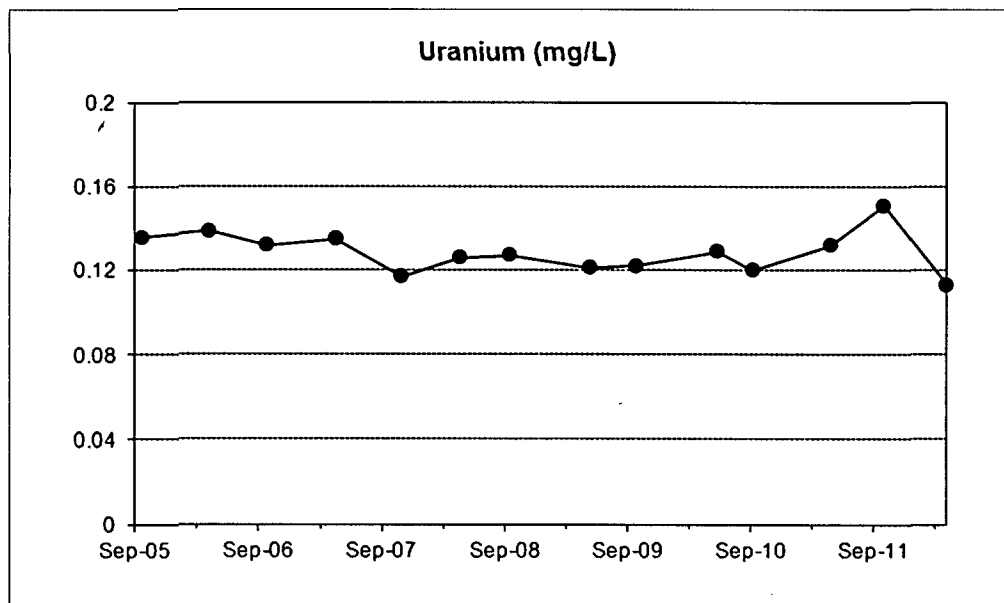
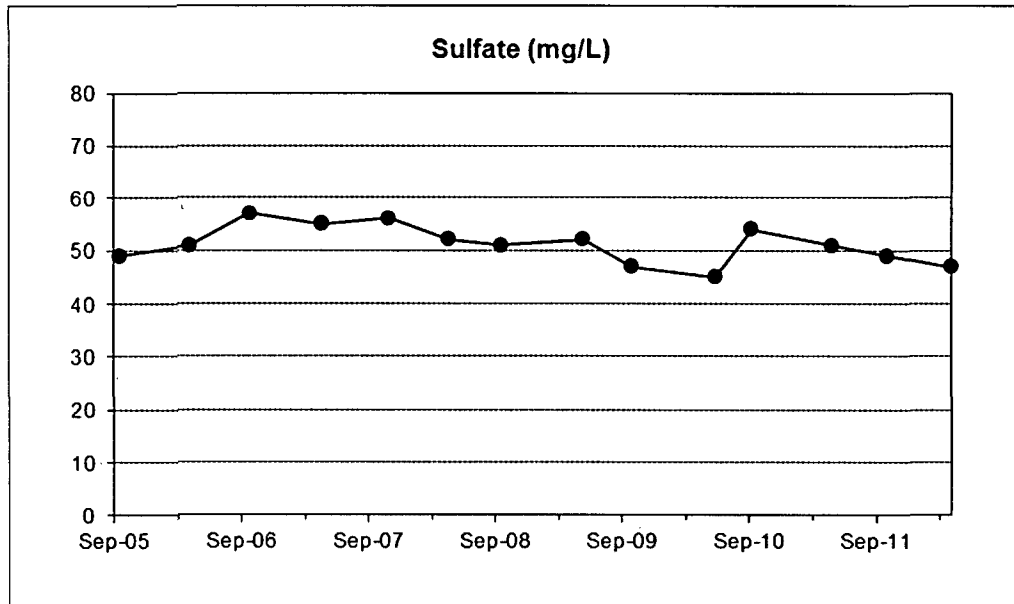






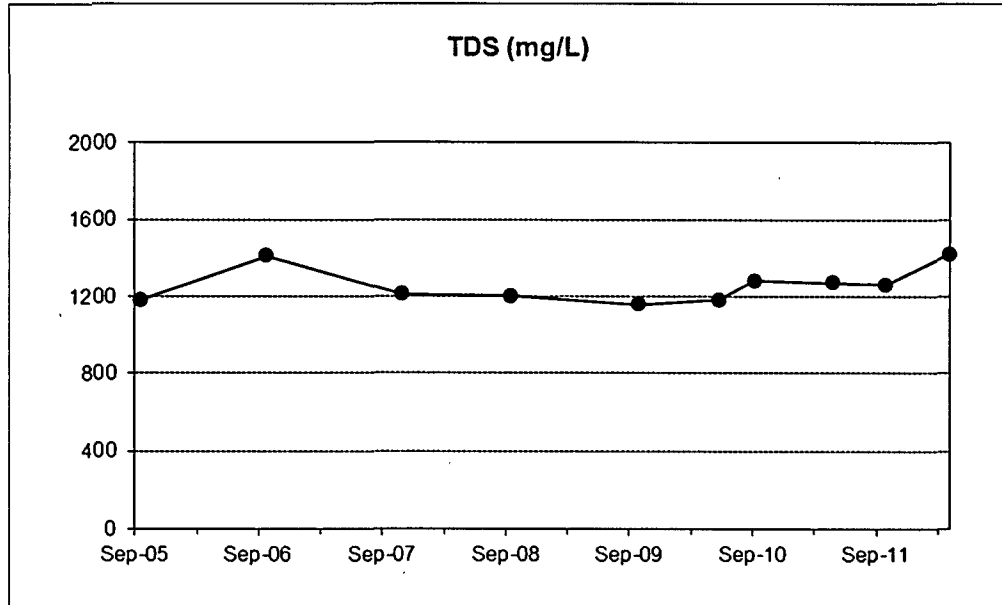
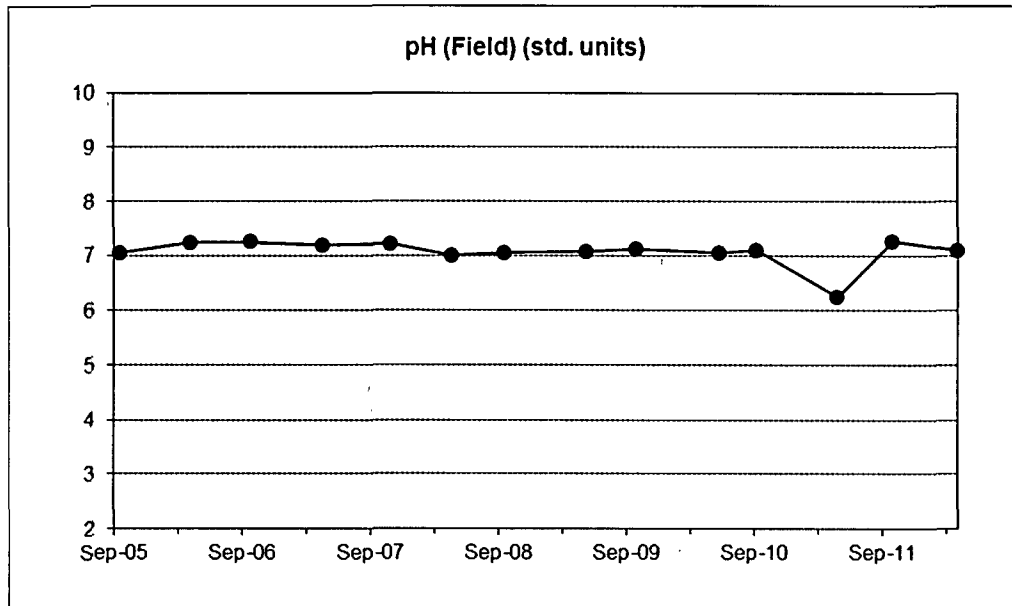


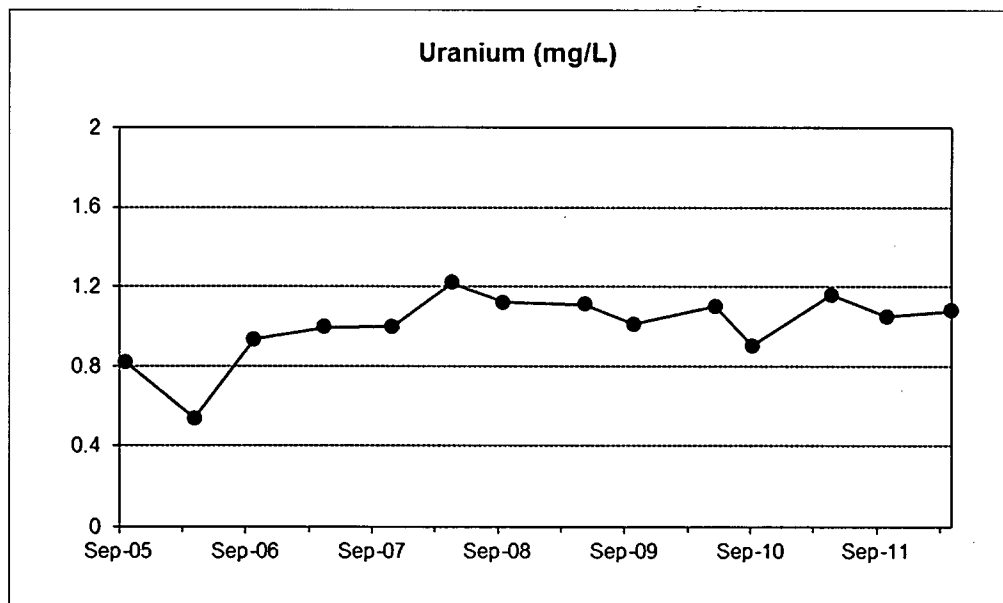
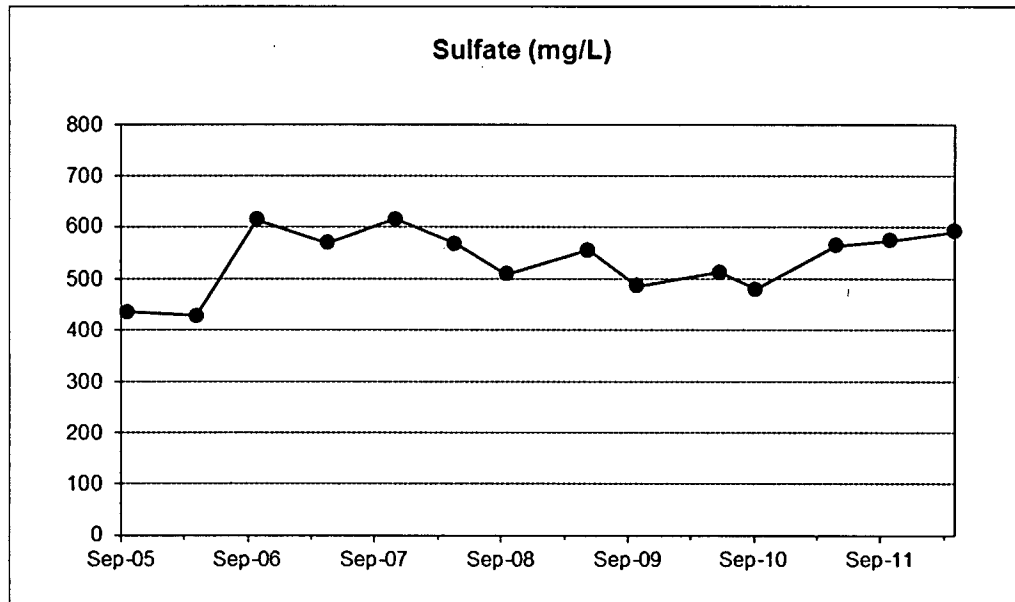




Split Rock

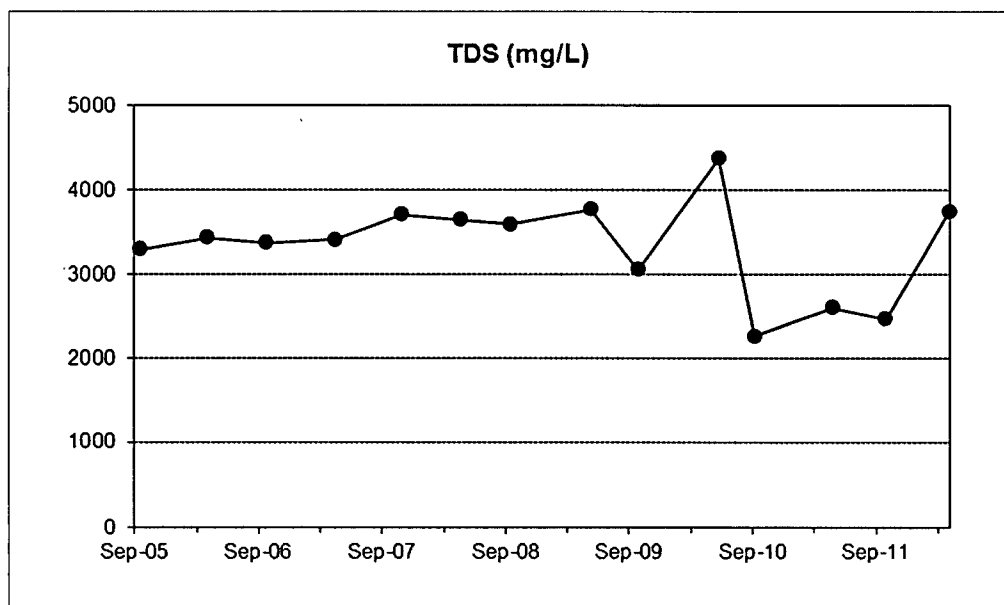
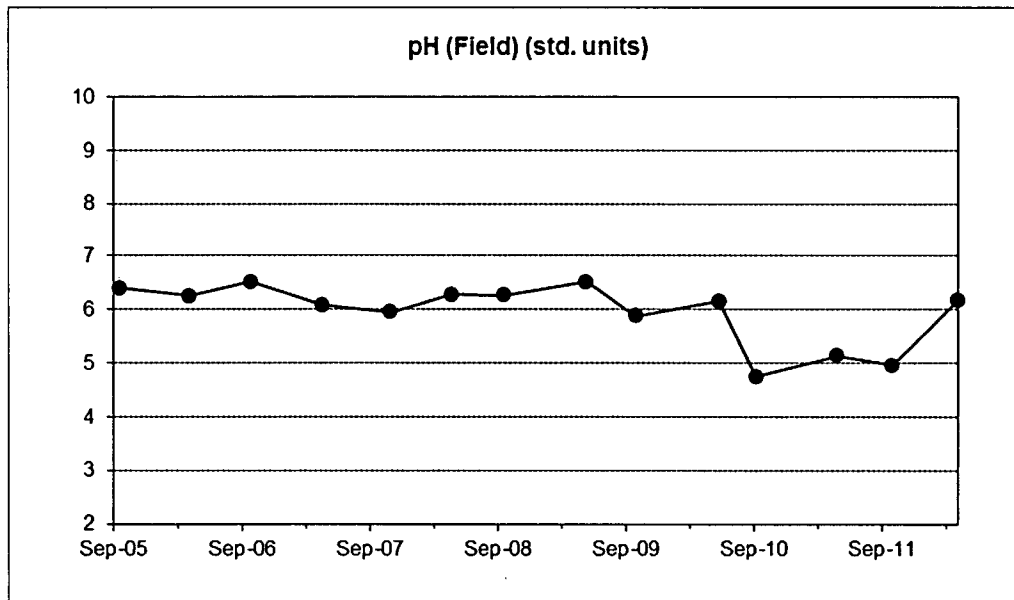
SWAB-4

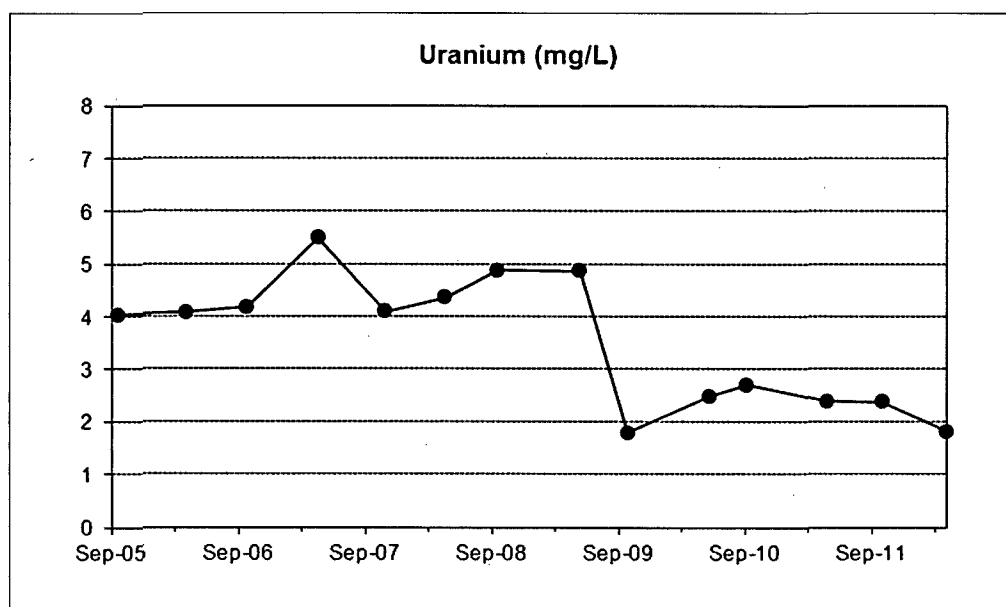
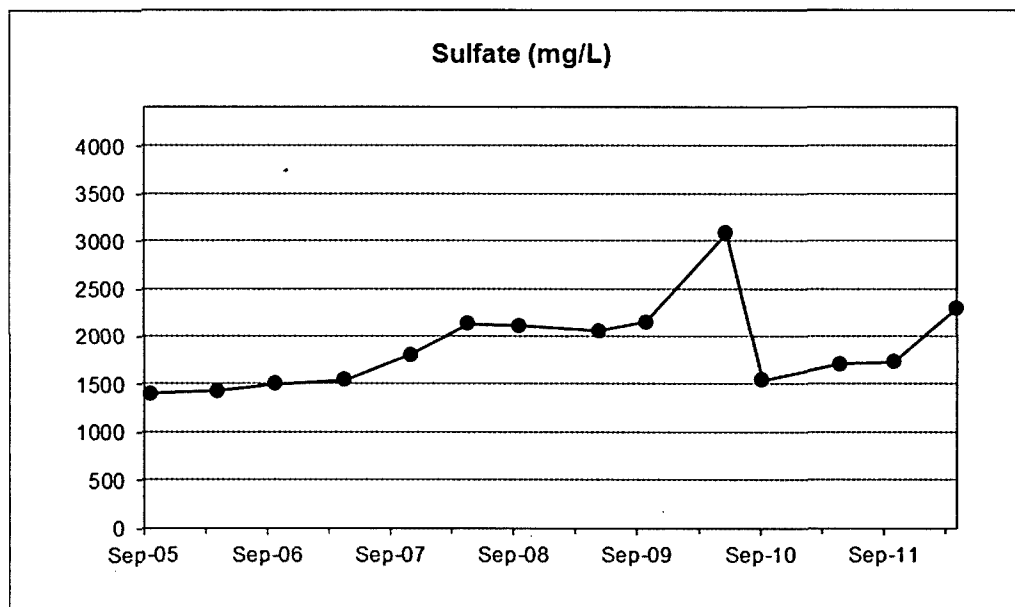




Split Rock

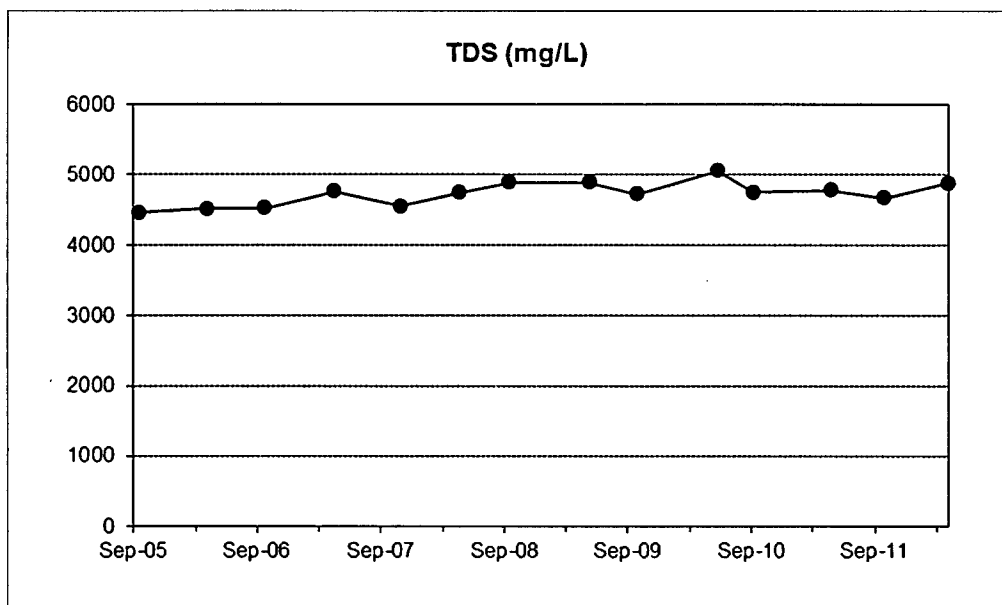
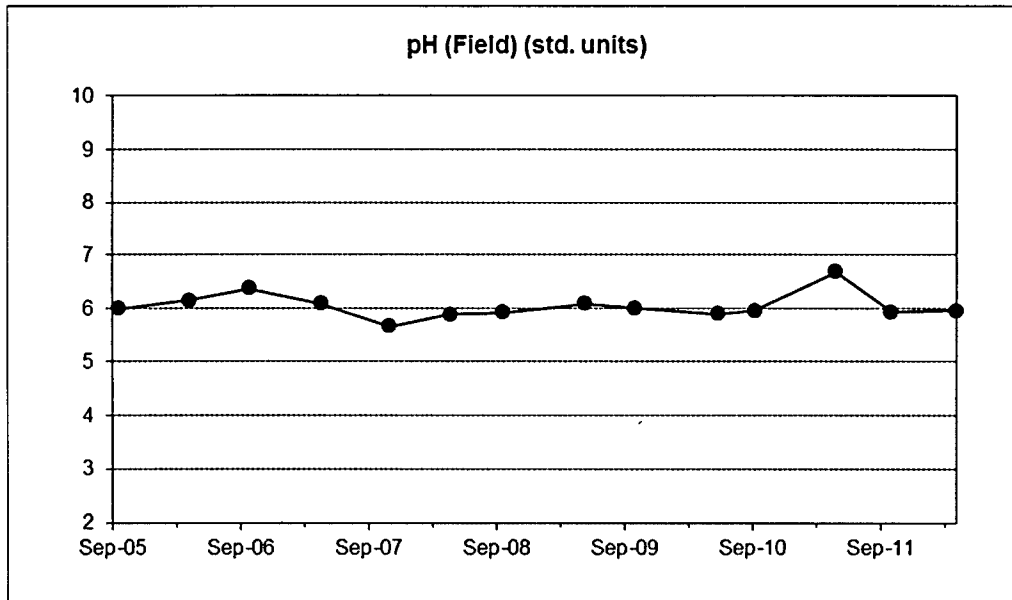
WN-1





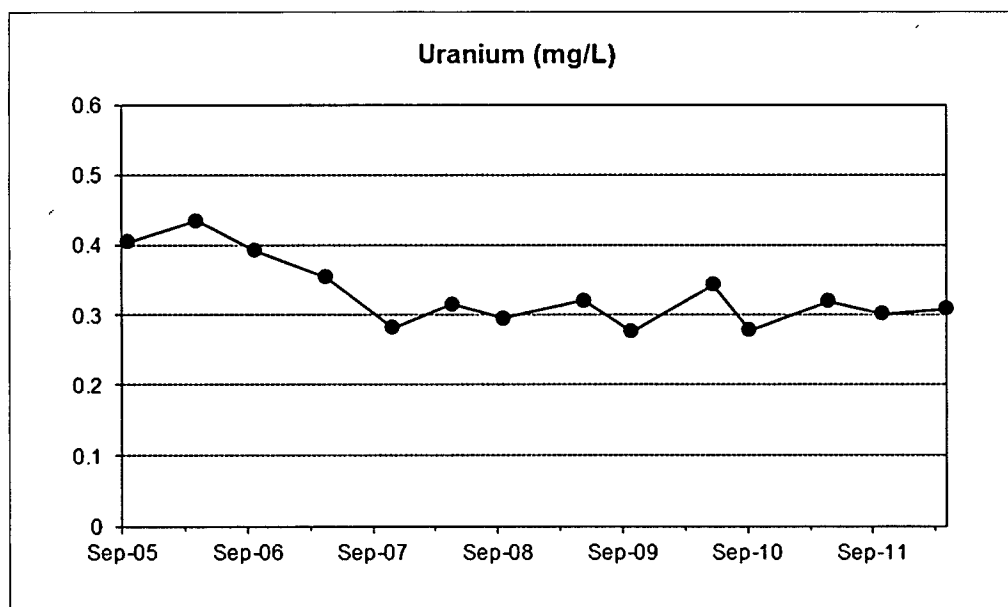
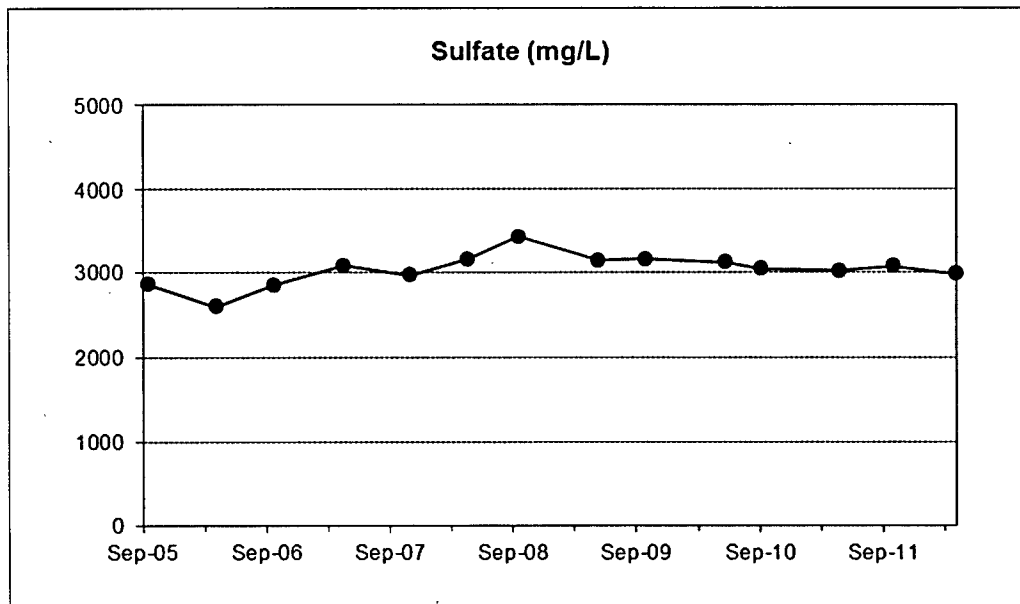
Split Rock

WN-4R



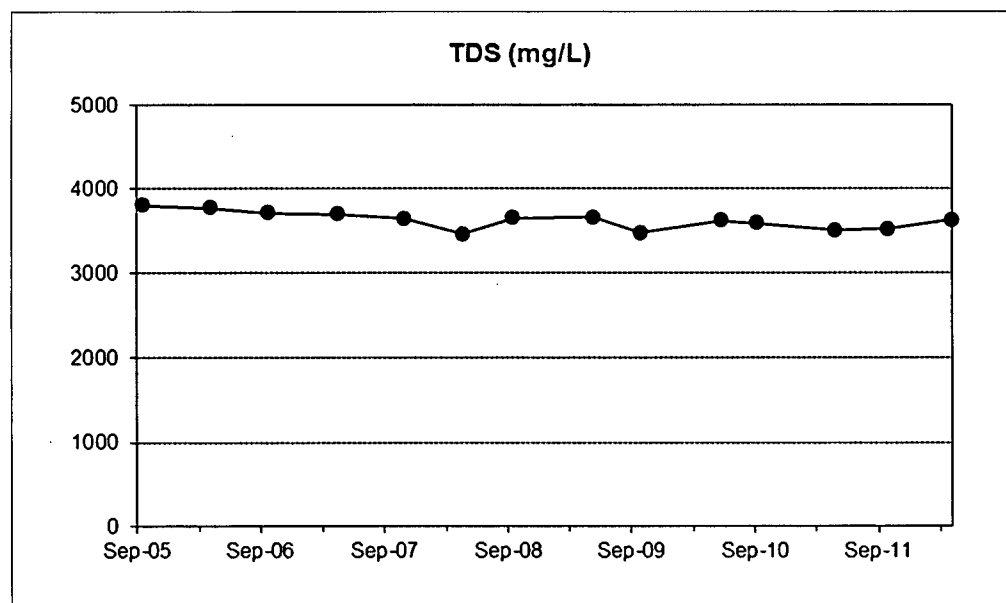
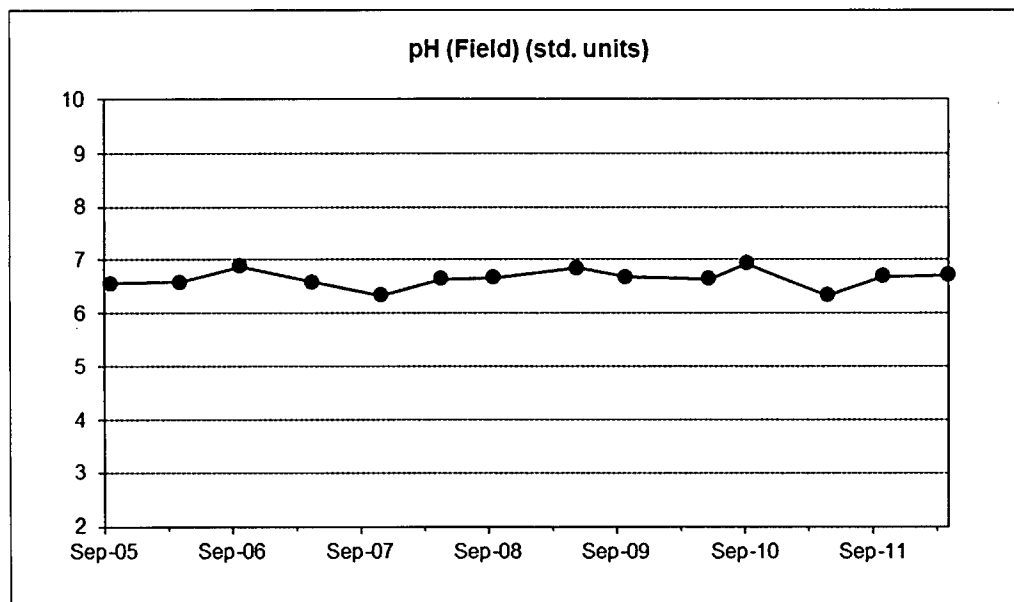
Split Rock

WN-4R



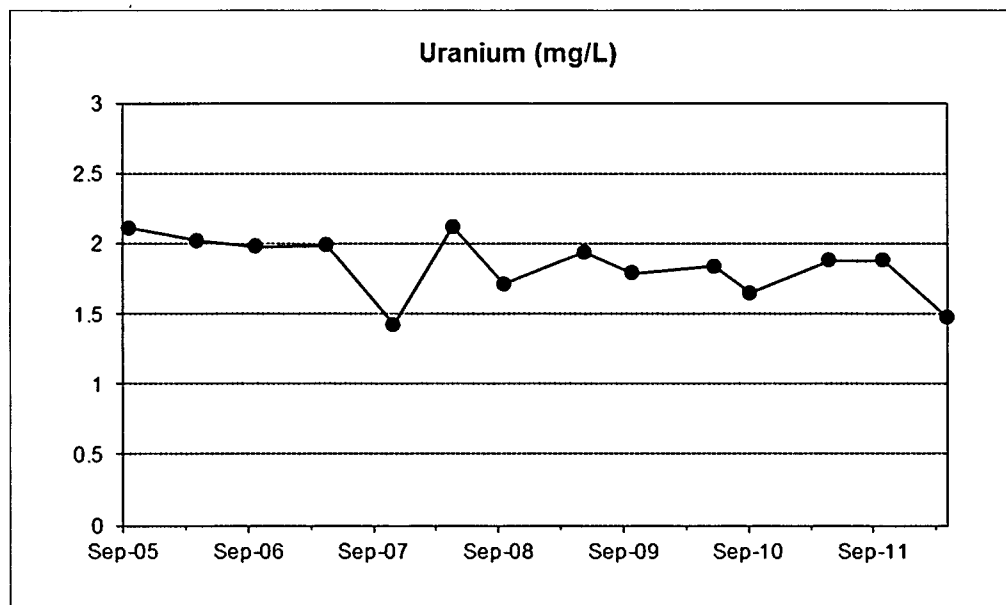
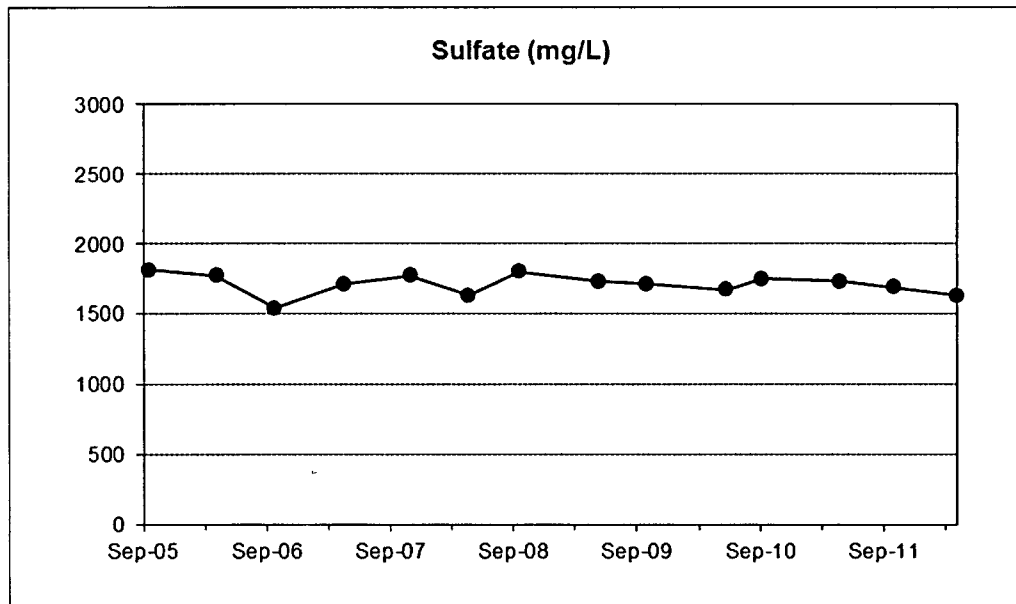
Split Rock

WN-5



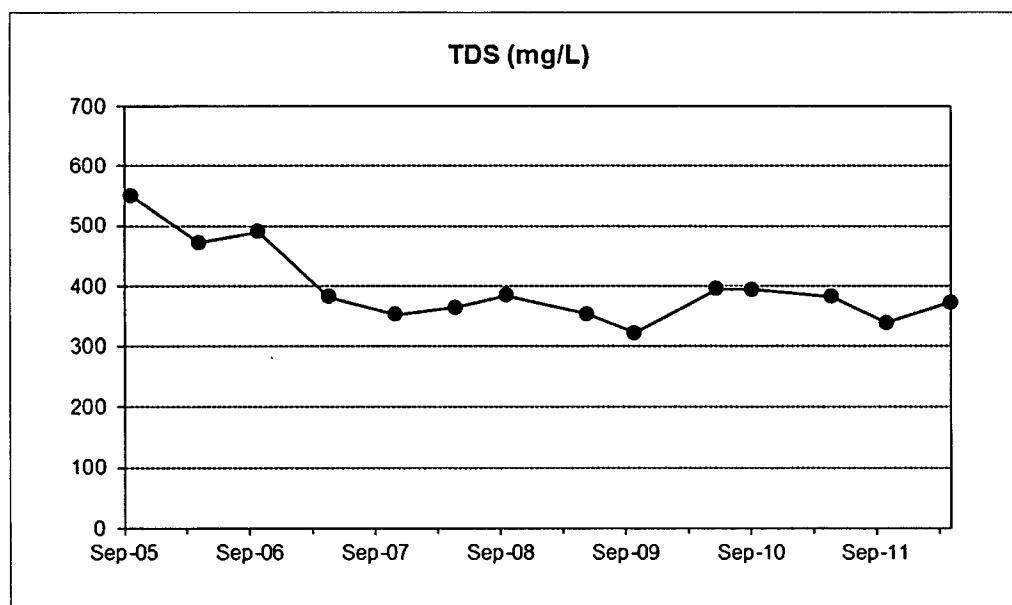
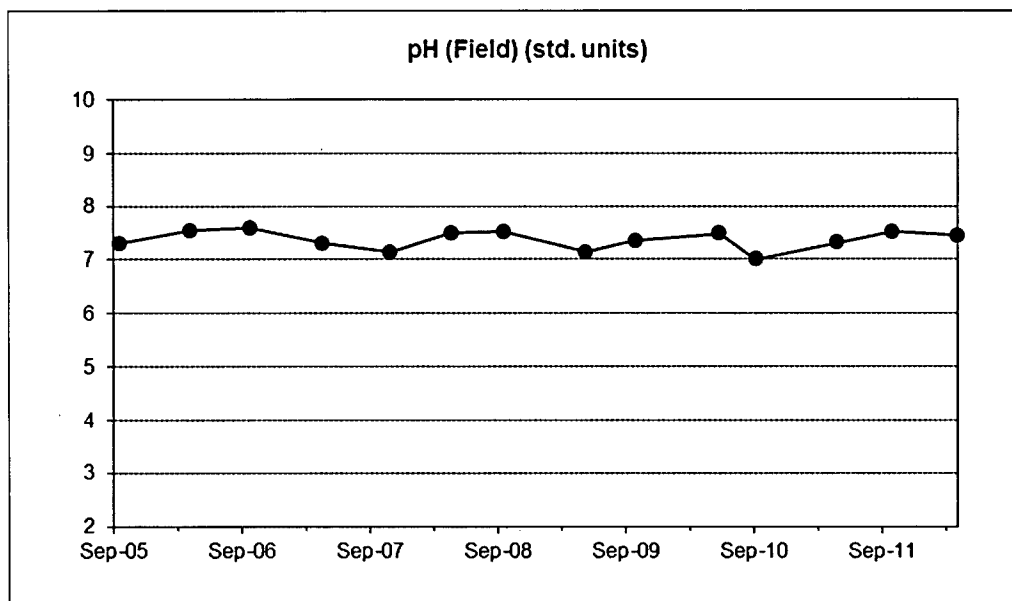
Split Rock

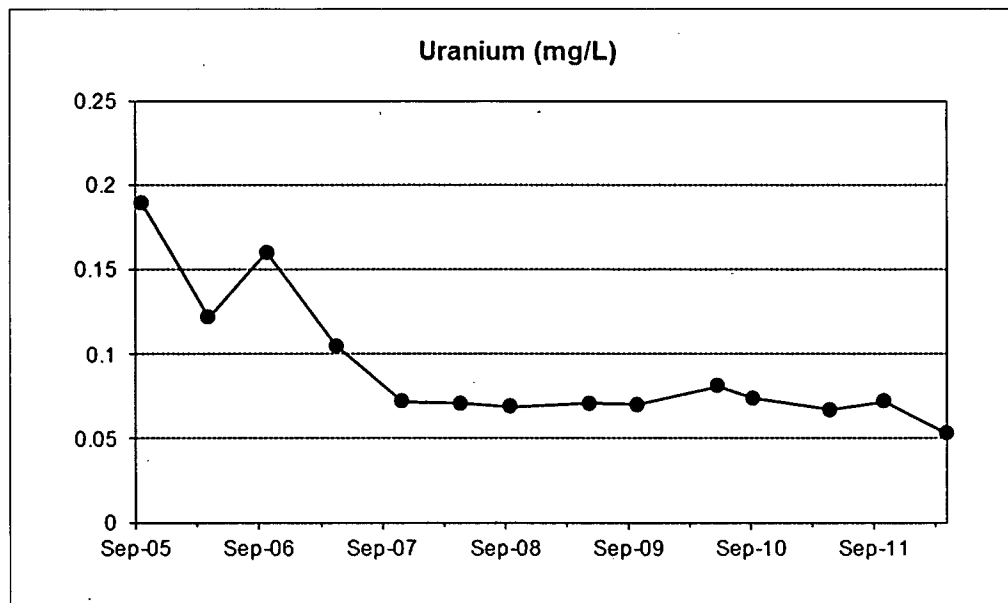
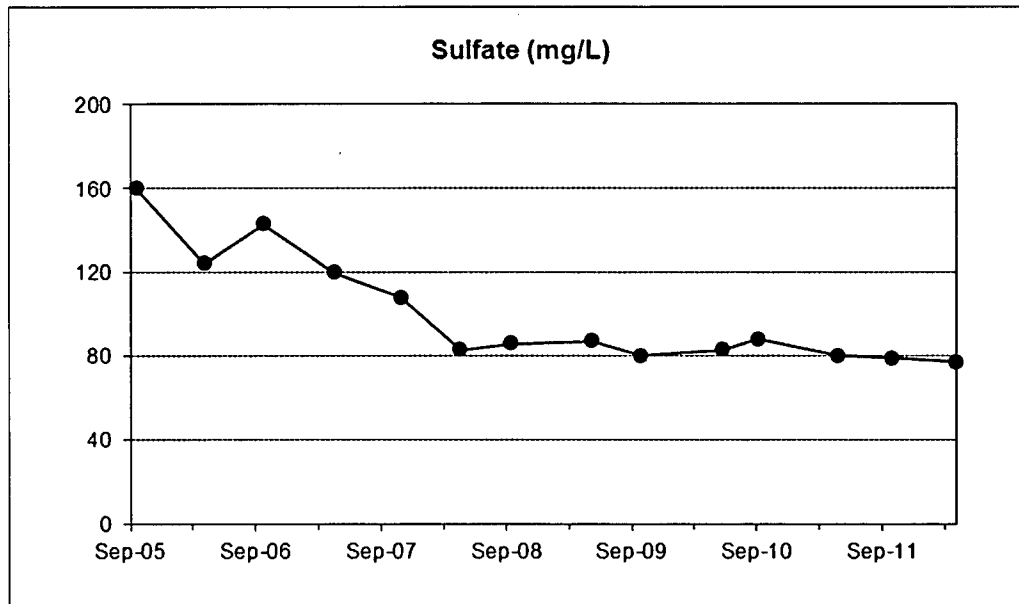
WN-5



Split Rock

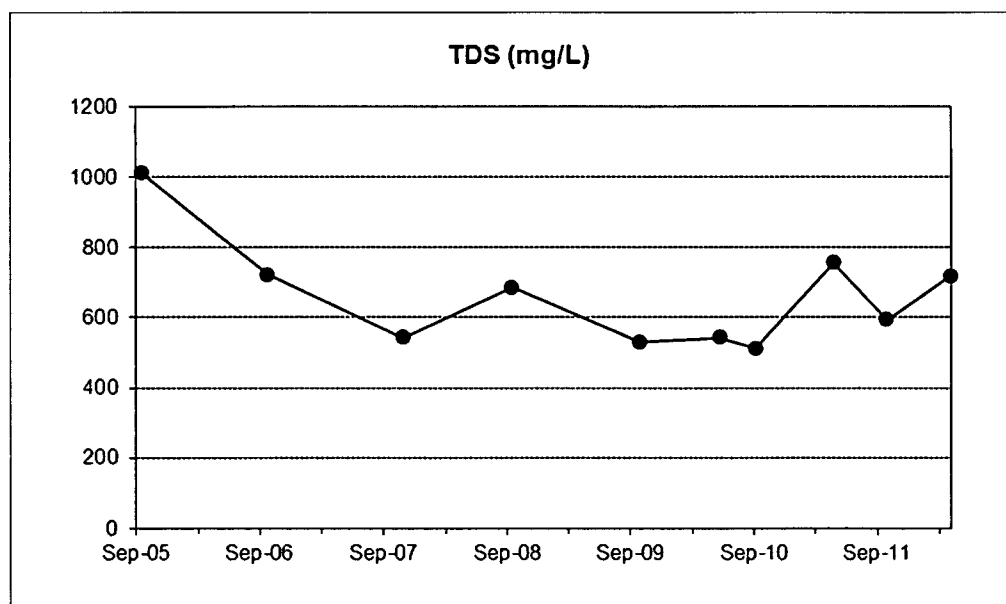
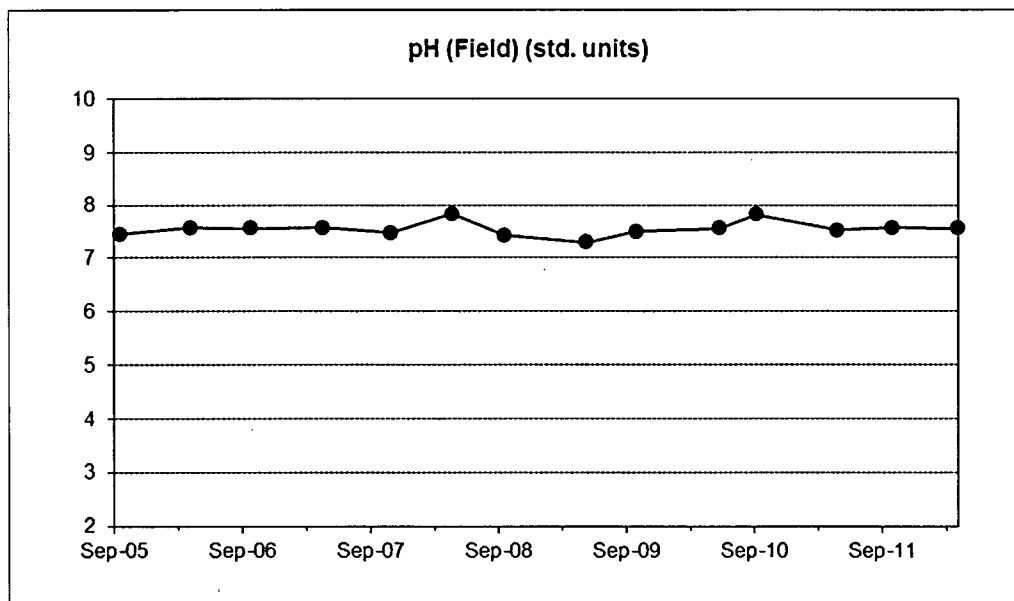
WN-21





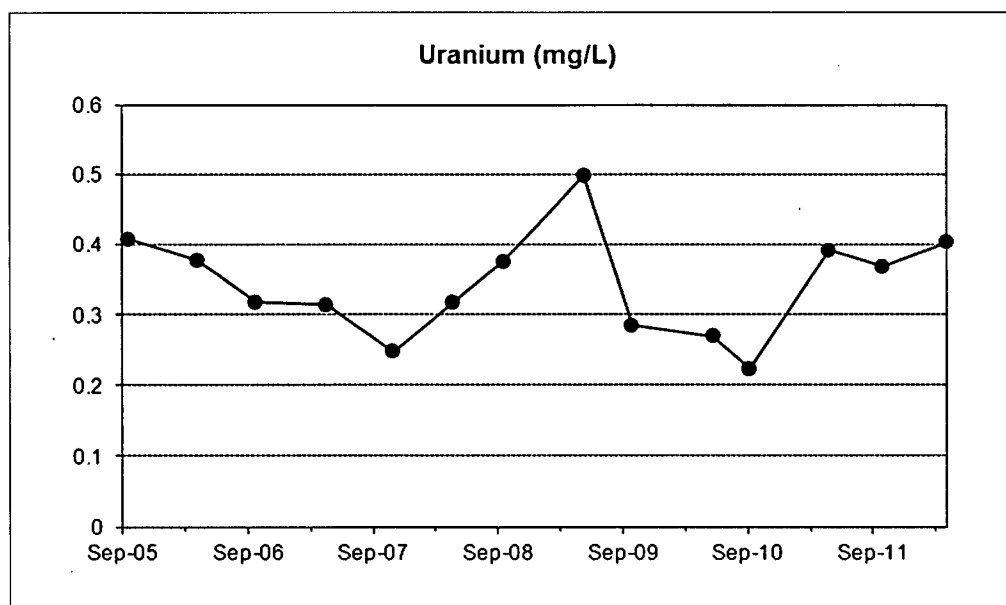
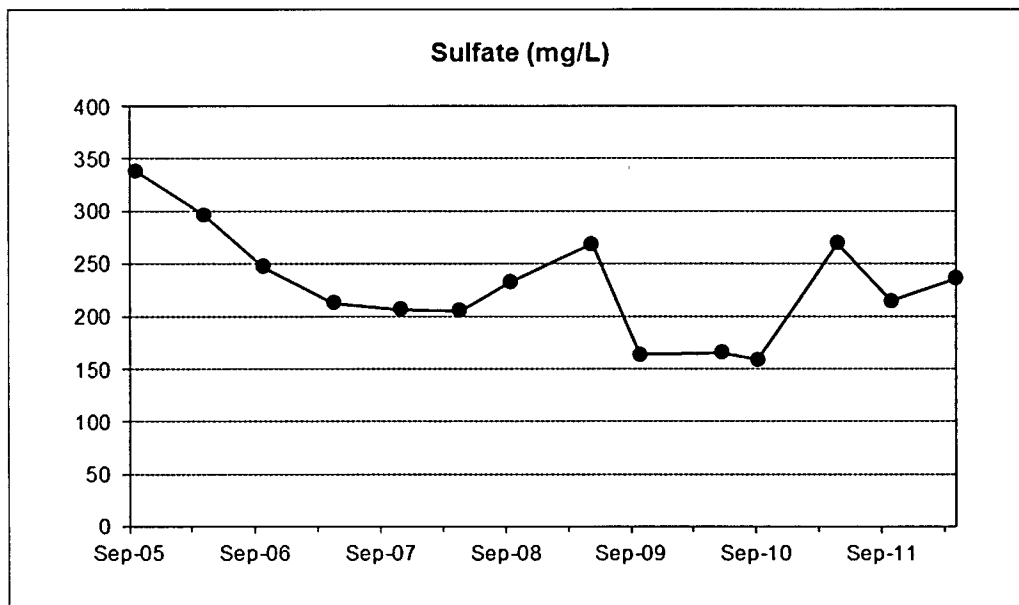
Split Rock

WN-39B



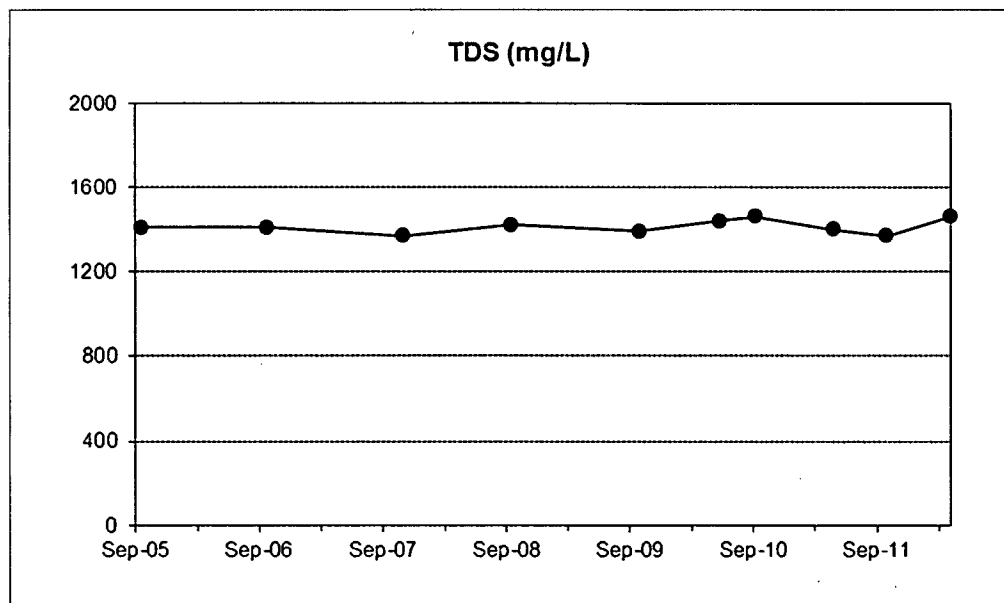
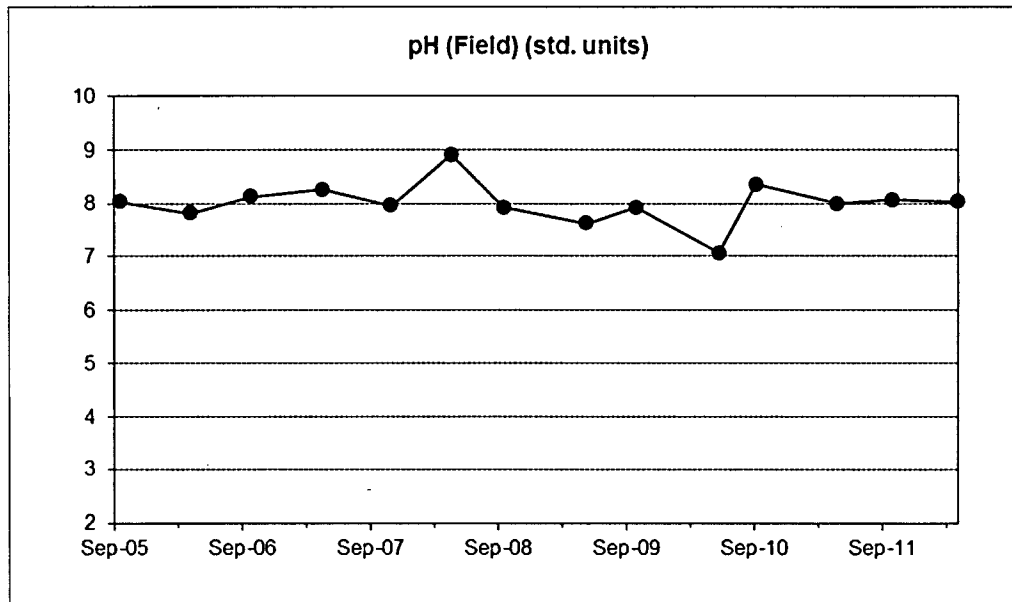
Split Rock

WN-39B



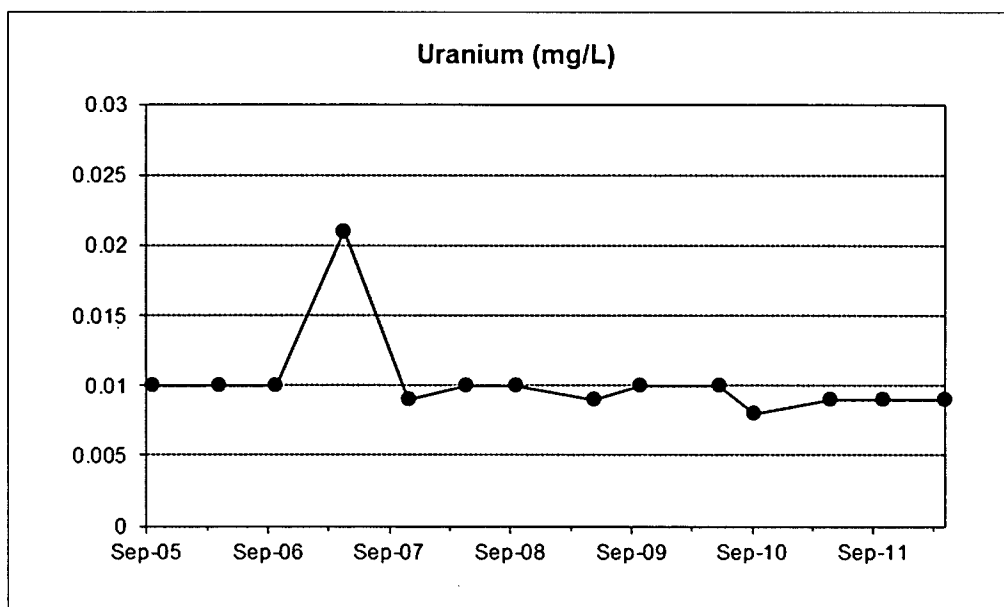
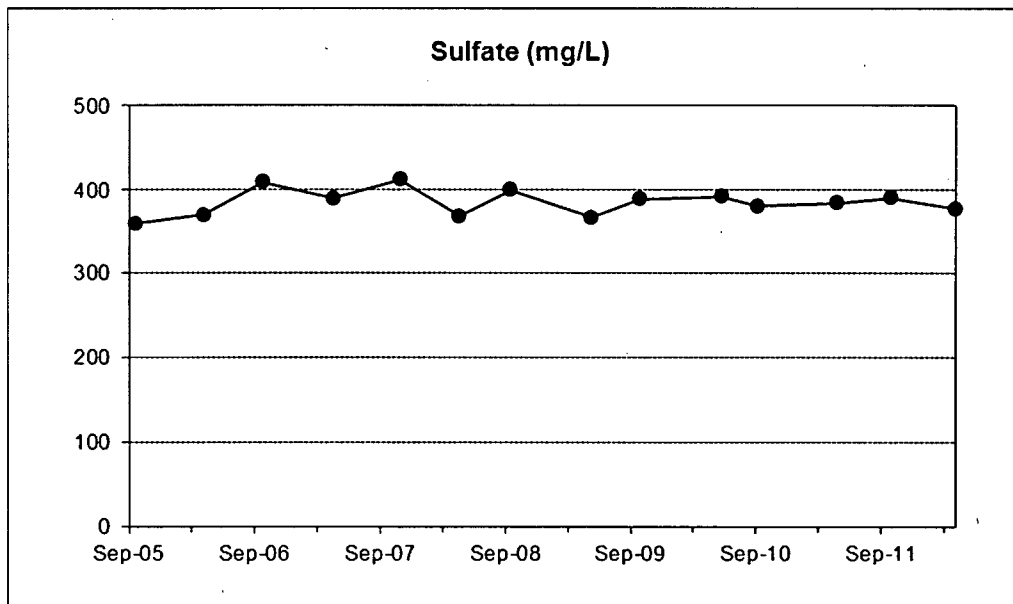
Split Rock

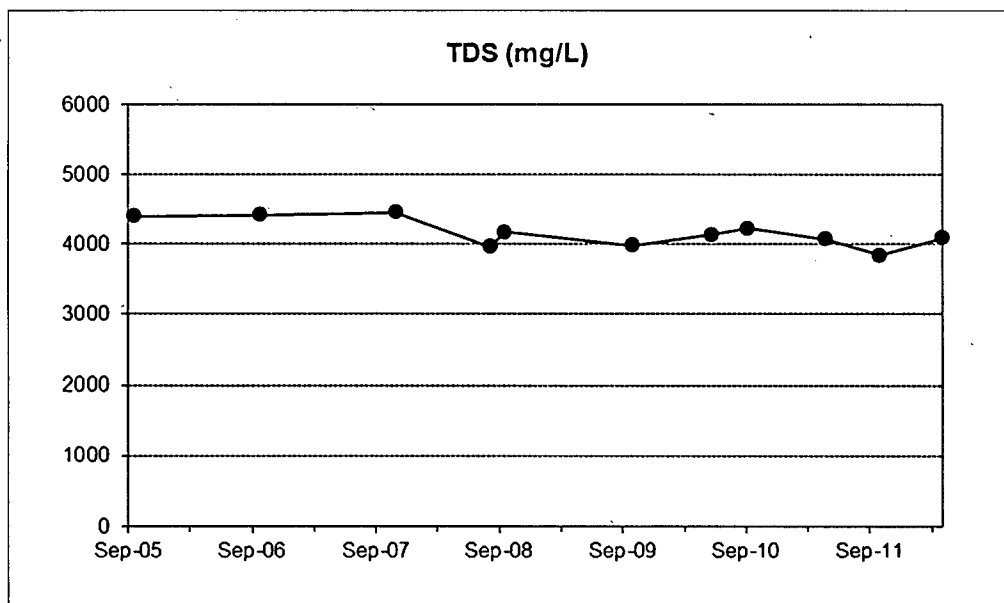
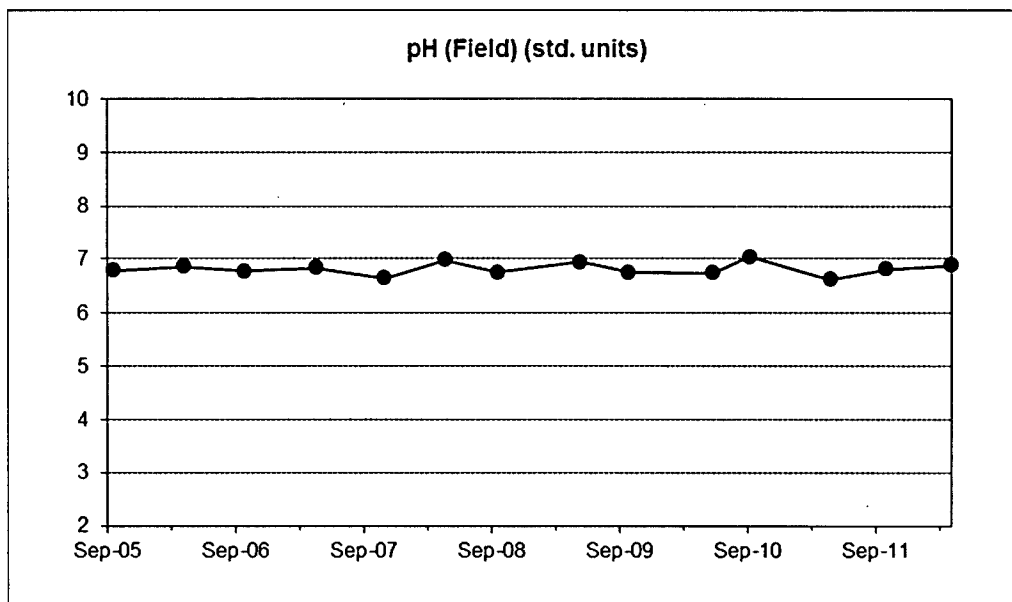
WN-41B



Split Rock

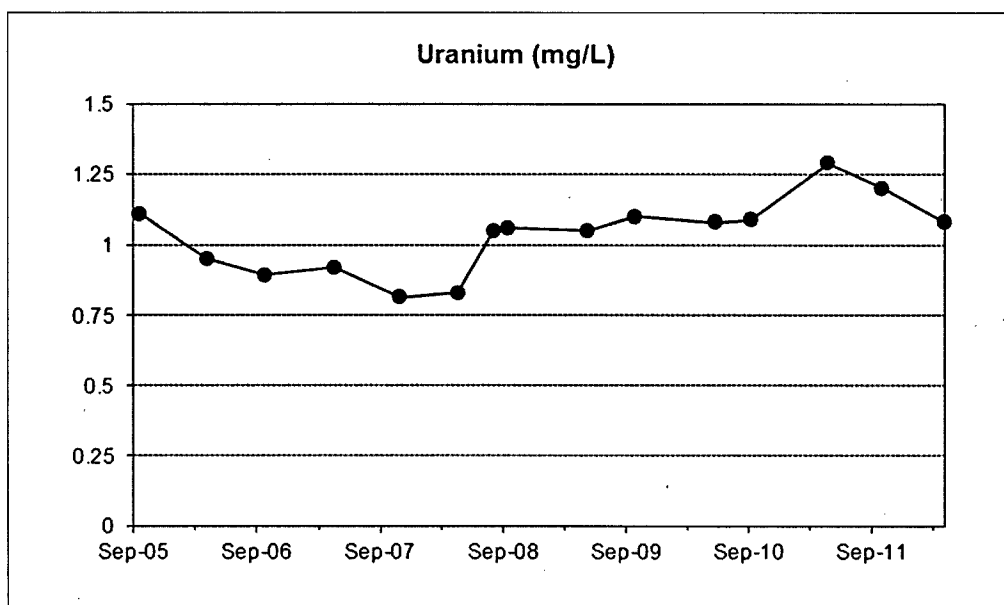
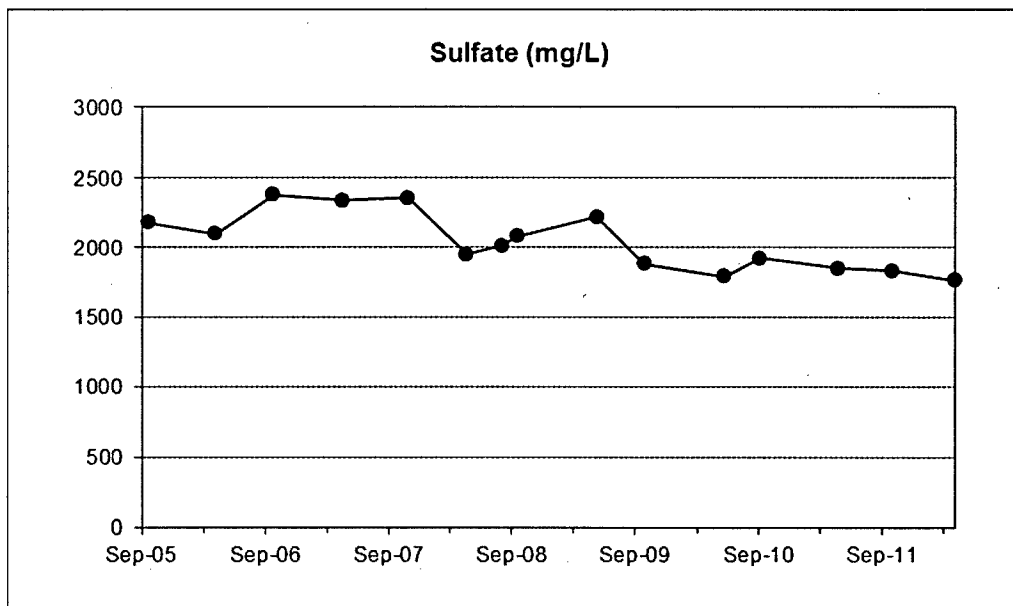
WN-41B





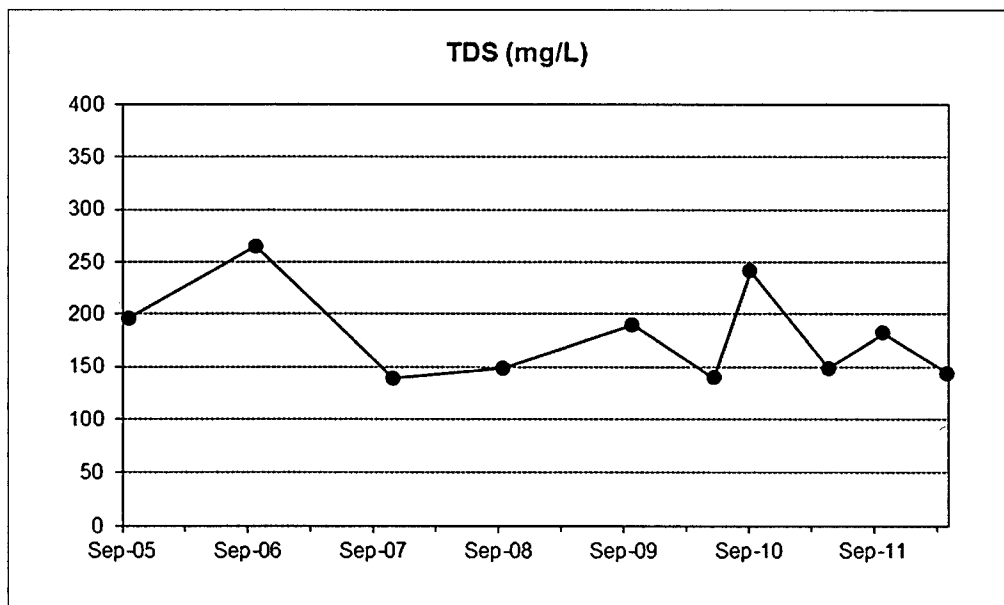
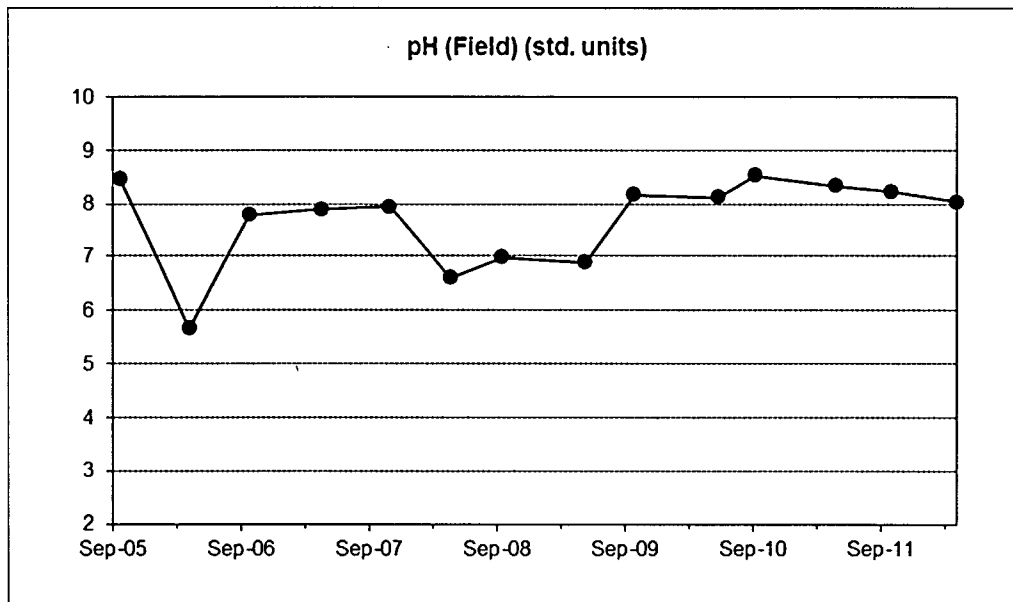
Split Rock

WN-42A



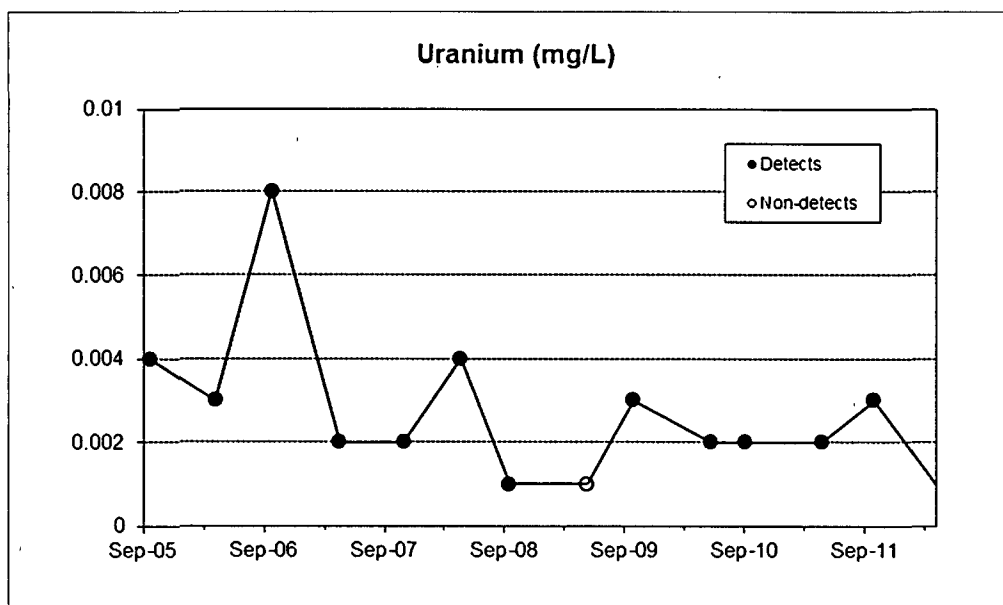
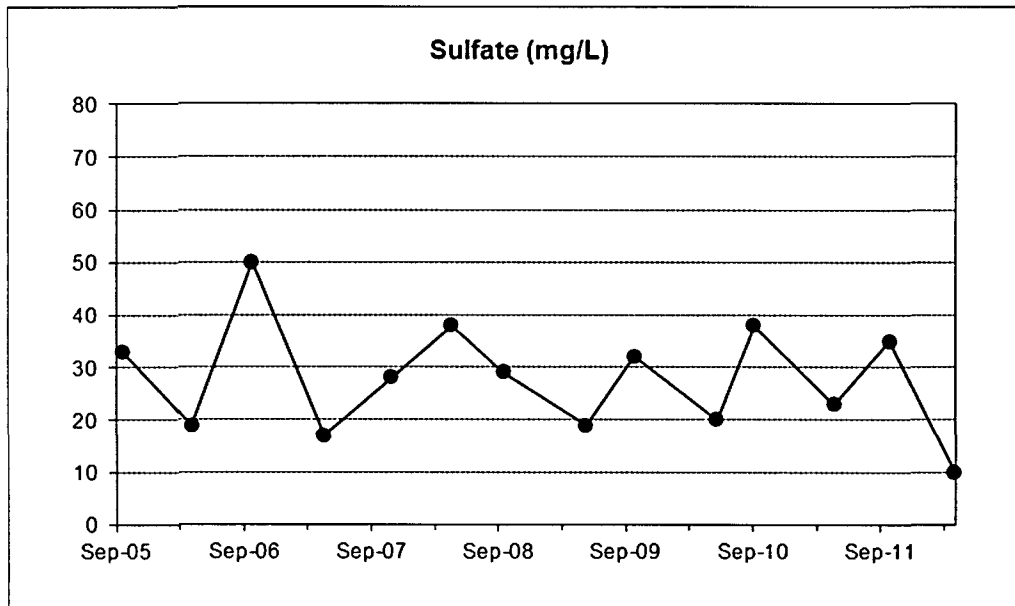
Split Rock

SW-1



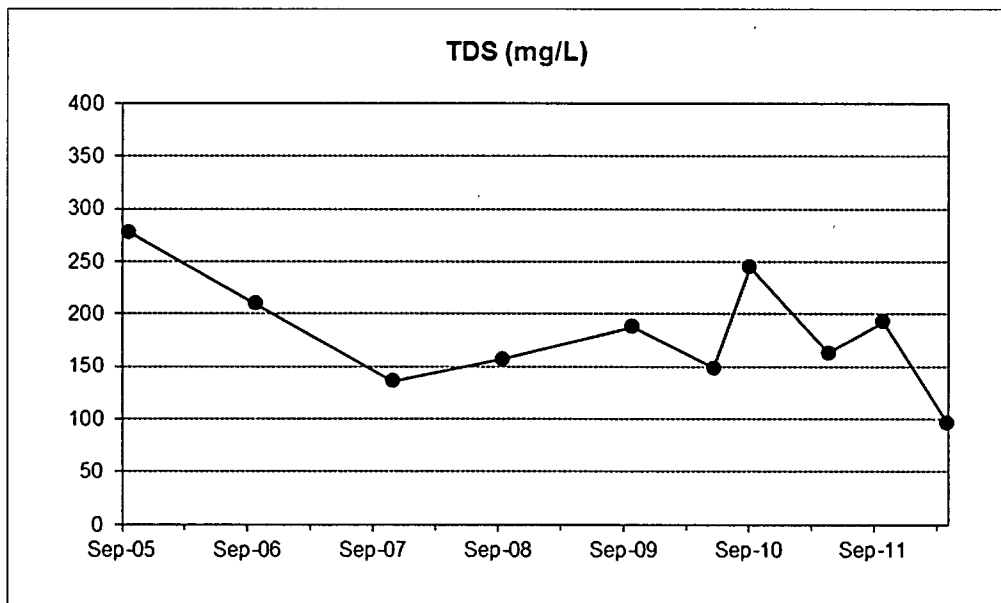
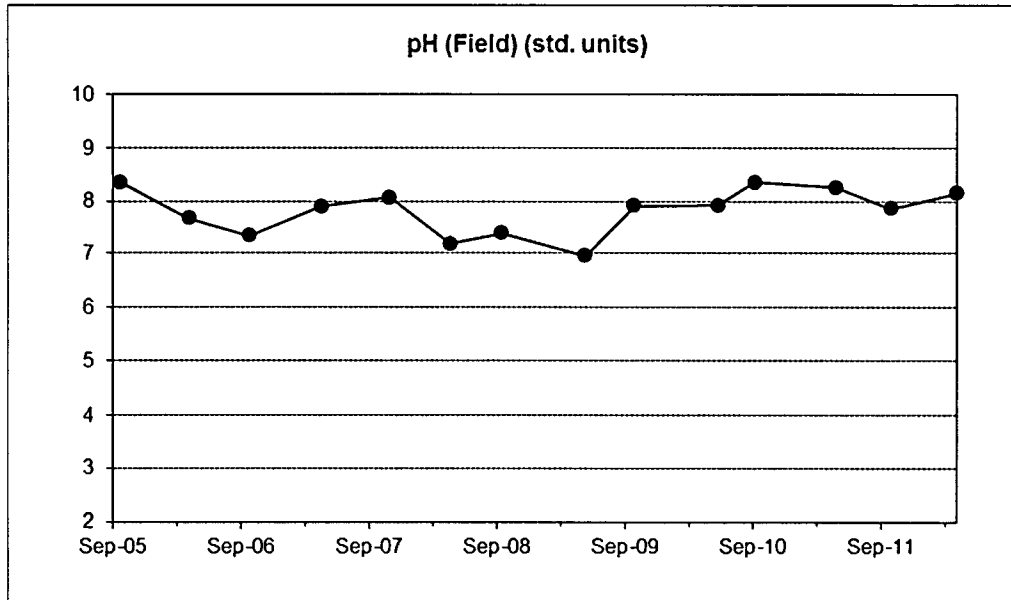
Split Rock

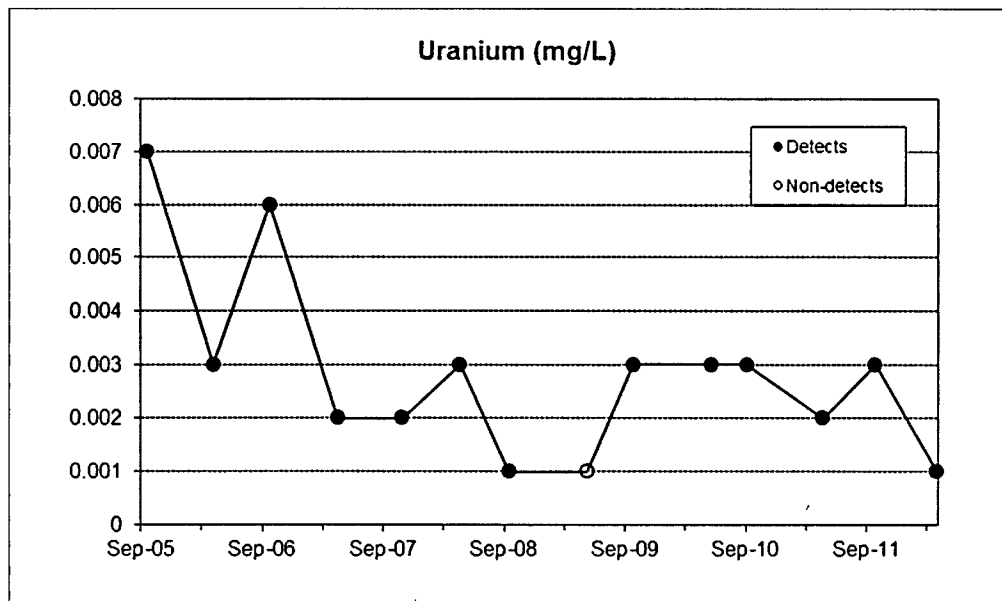
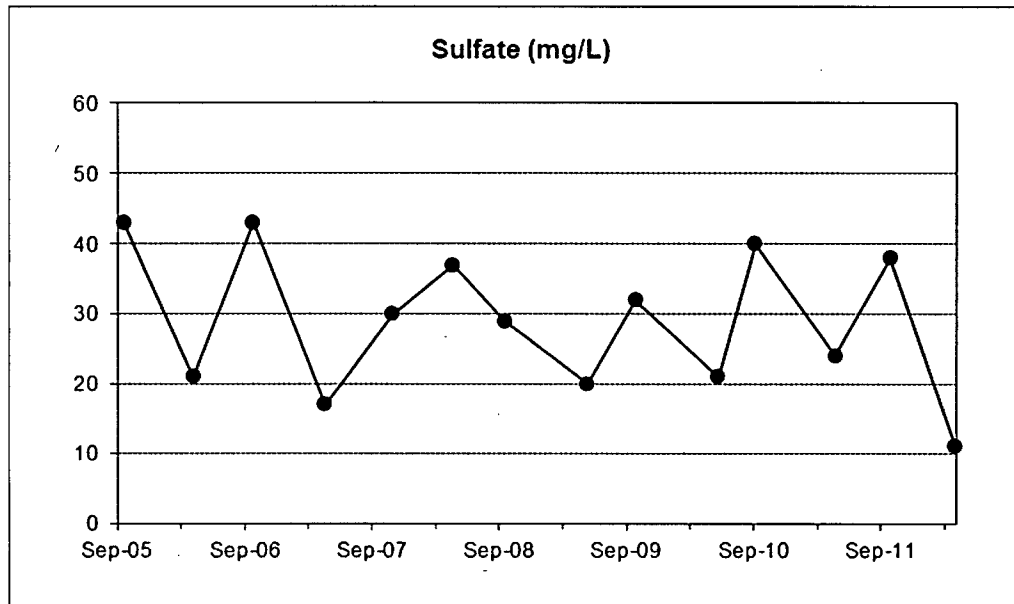
SW-1



Split Rock

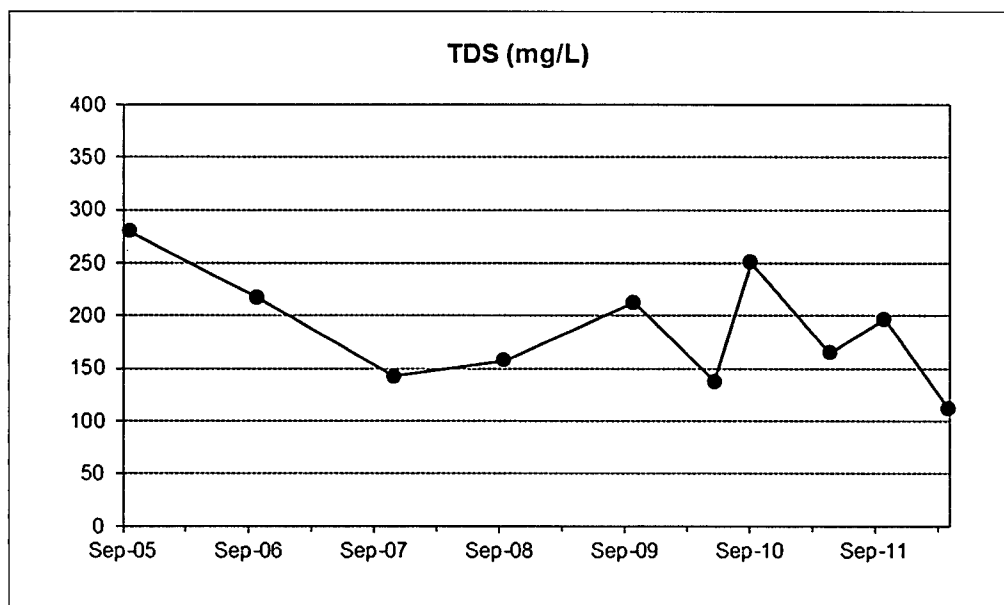
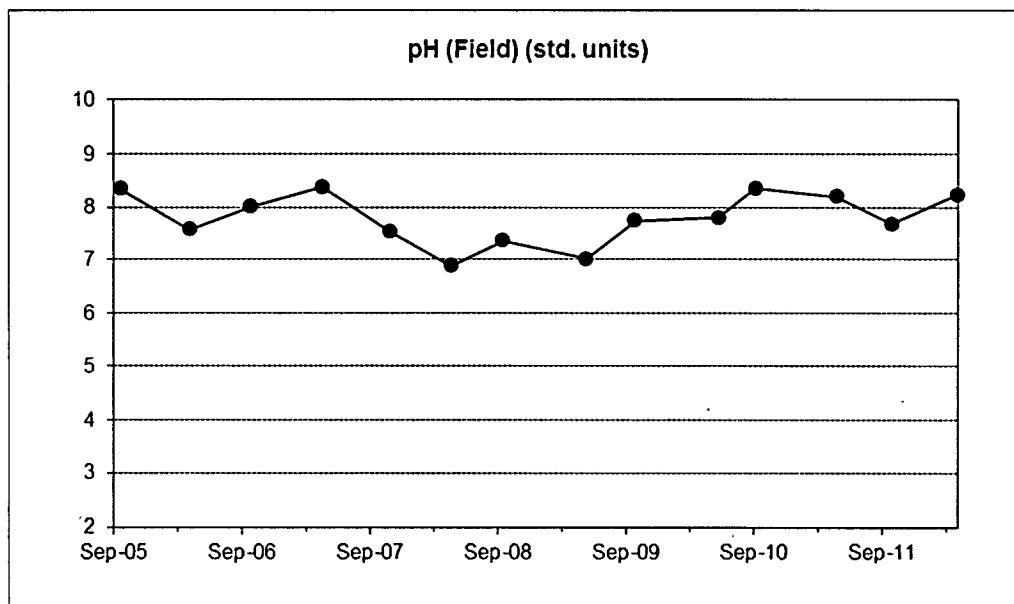
SW-2





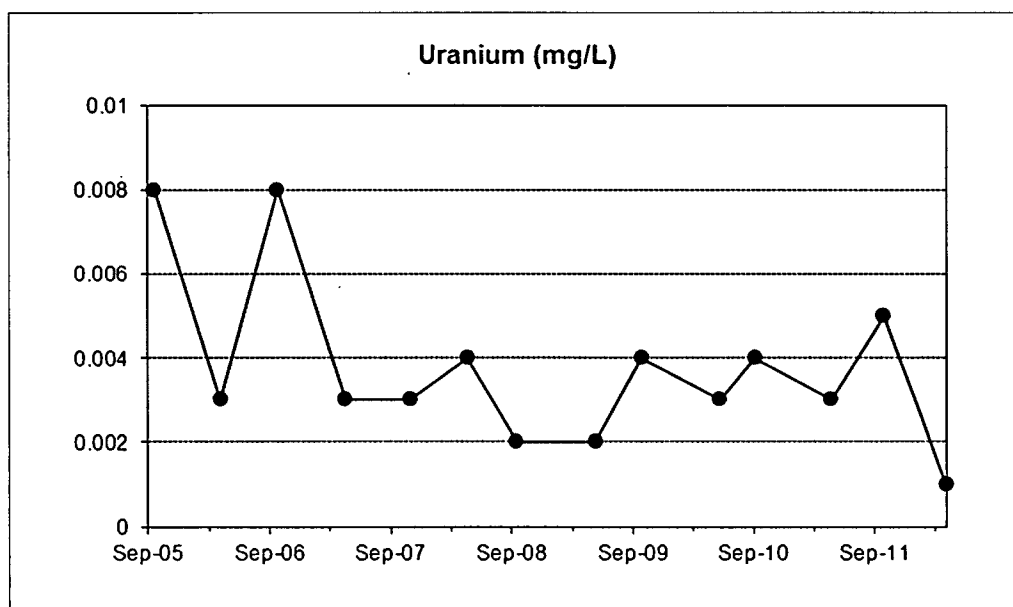
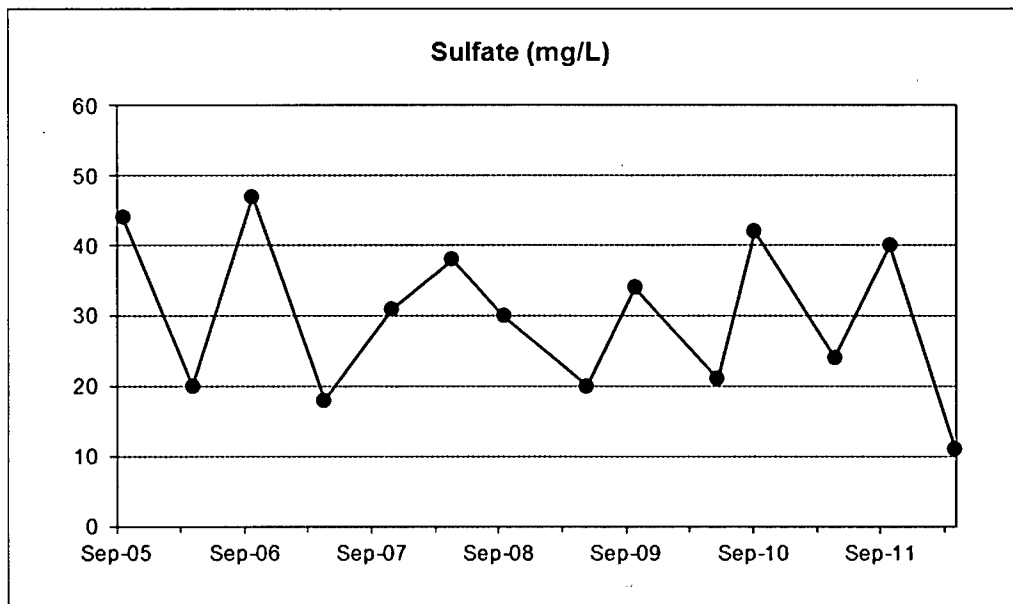
Split Rock

SW-3



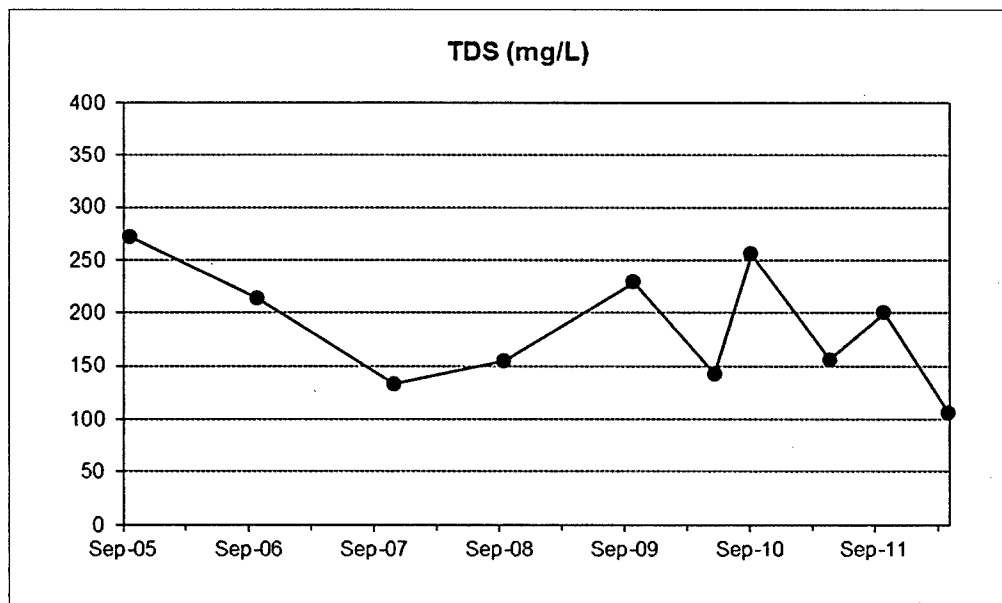
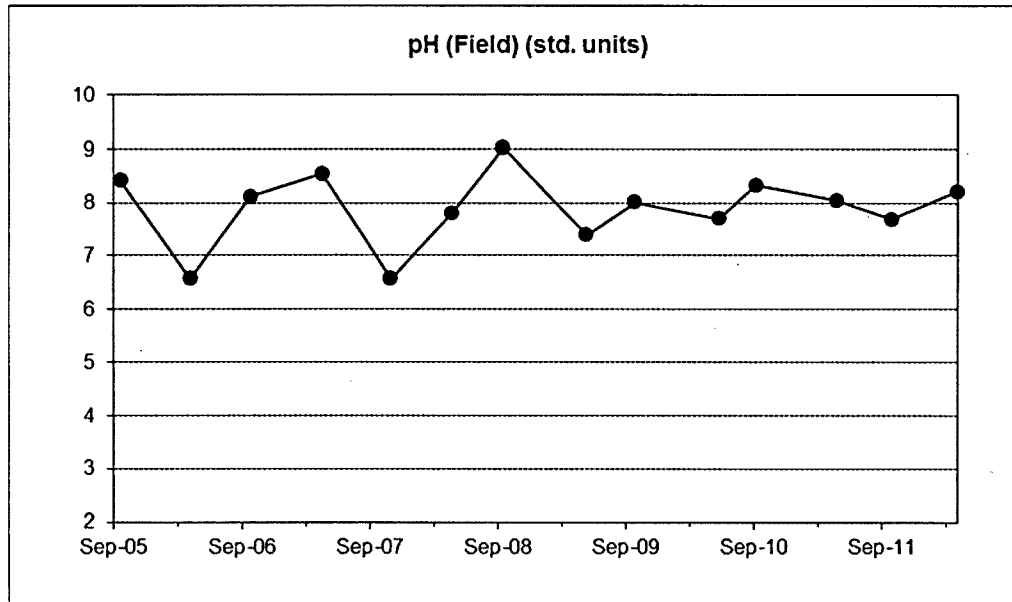
Split Rock

SW-3



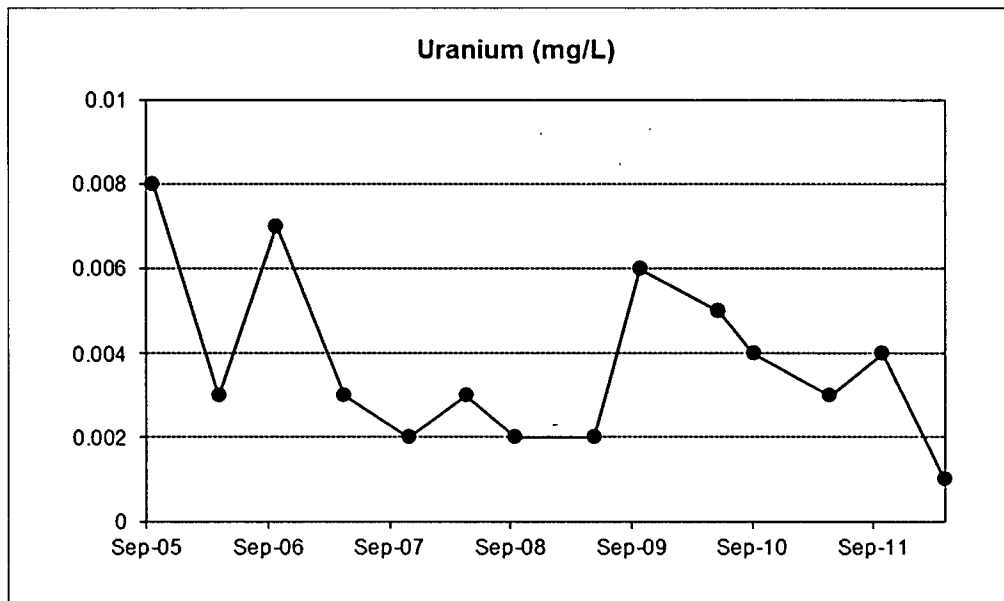
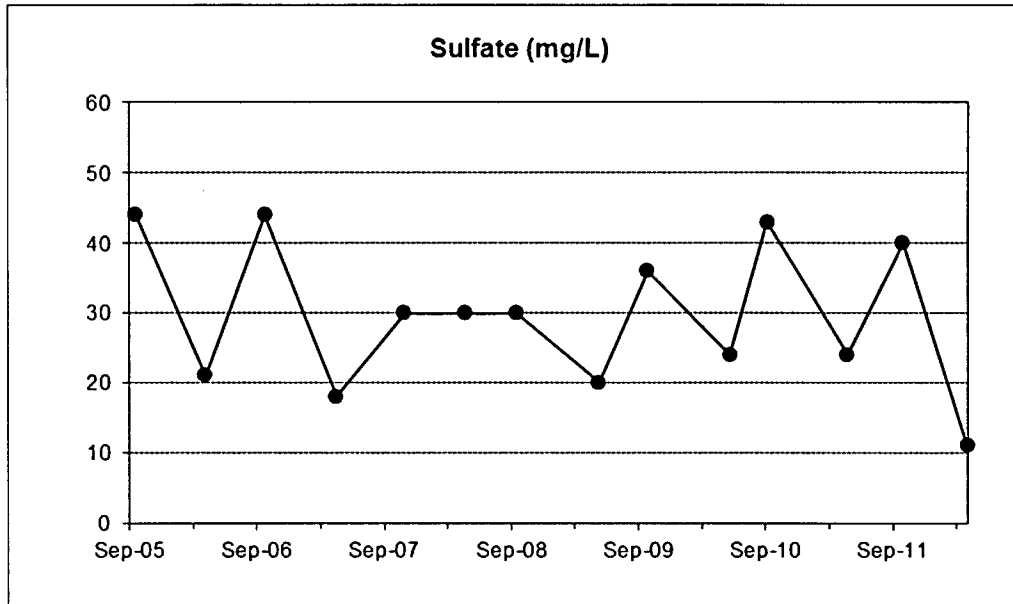
Split Rock

SW-4



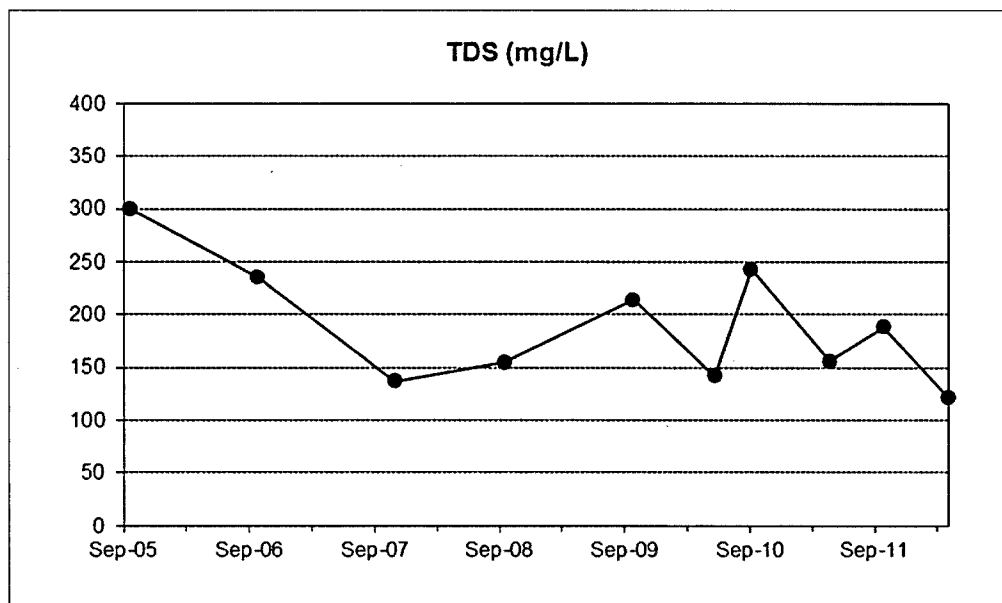
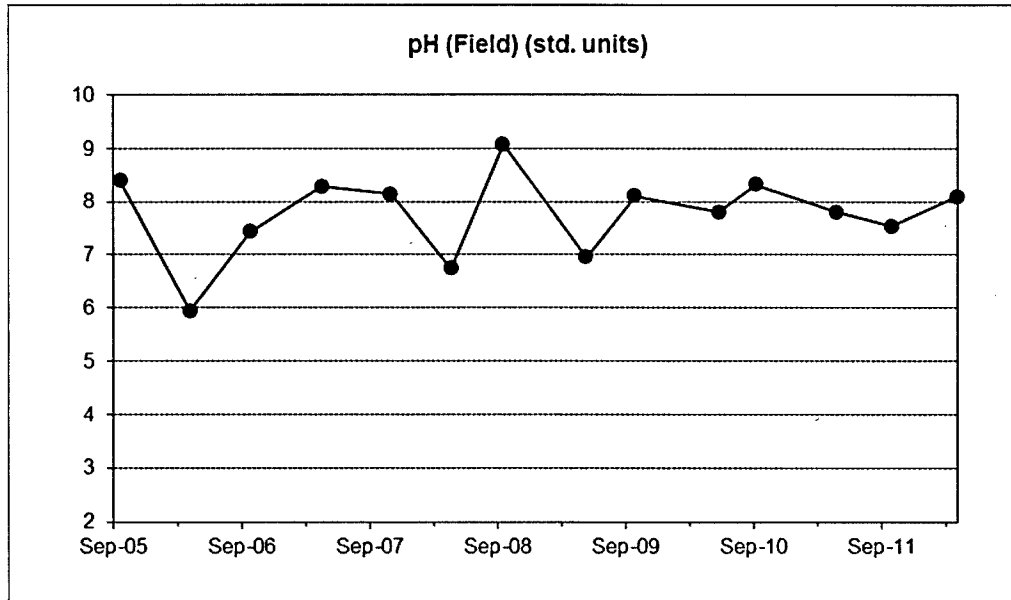
Split Rock

SW-4



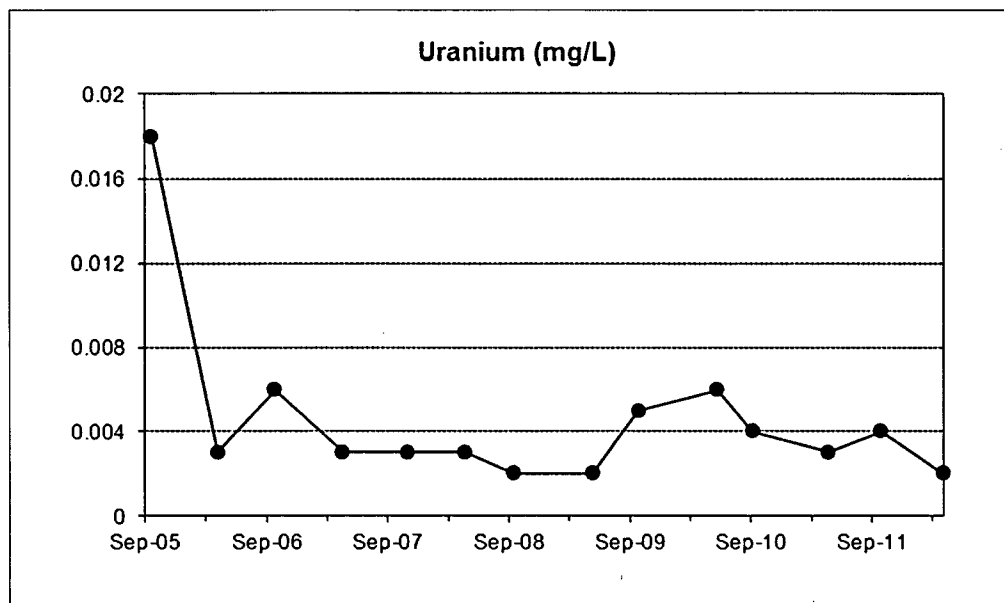
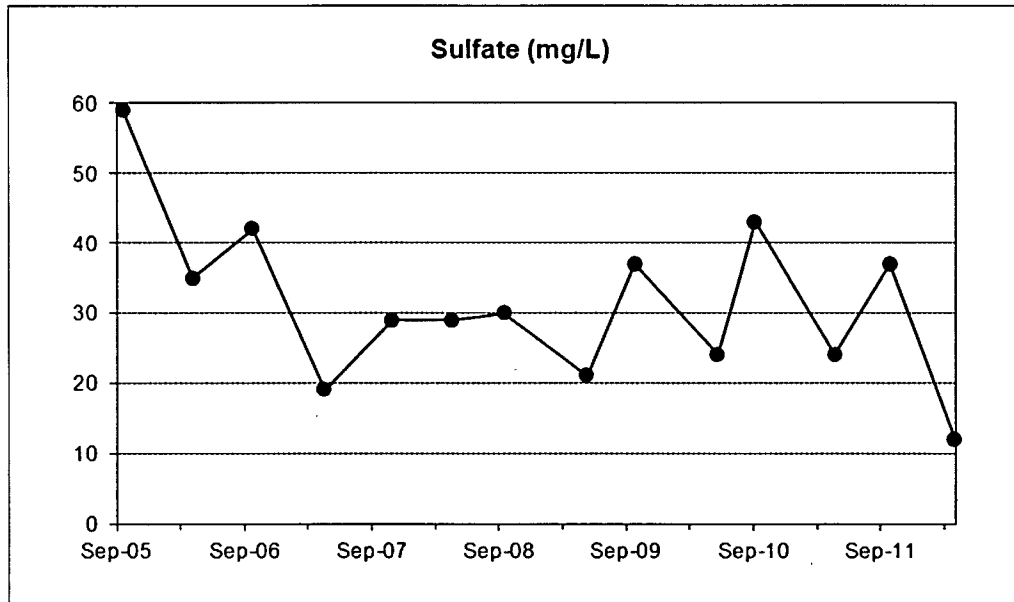
Split Rock

SW-5



Split Rock

SW-5



ANALYTICAL SUMMARY REPORT

June 29, 2012

Western Nuclear Inc
Split Rock Mill
Jeffrey City, WY 82310Workorder No.: C12040285 Quote ID: C119 - Annual
Project Name: Split Rock Mill Site GWPP

Energy Laboratories, Inc. Casper WY received the following 25 samples for Western Nuclear Inc on 4/6/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C12040285-001	WN-1	04/05/12 11:30	04/06/12	Aqueous	Metals by ICP/ICPMS, Dissolved Field Parameters Fluoride E300.0 Anions Nitrogen, Ammonia pH Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic Solids, Total Dissolved
C12040285-002	WN-4R	04/05/12 10:45	04/06/12	Aqueous	Same As Above
C12040285-003	WN-5	04/05/12 10:30	04/06/12	Aqueous	Metals by ICP/ICPMS, Dissolved Field Parameters Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic Solids, Total Dissolved
C12040285-004	WN-21	04/05/12 13:51	04/06/12	Aqueous	Same As Above
C12040285-005	SWAB-1R	04/05/12 14:19	04/06/12	Aqueous	Metals by ICP/ICPMS, Dissolved Field Parameters Fluoride E300.0 Anions pH Solids, Total Dissolved
C12040285-006	SWAB-12R	04/05/12 13:35	04/06/12	Aqueous	Same As Above
C12040285-007	WN-39B	04/05/12 10:55	04/06/12	Aqueous	Same As Above
C12040285-008	WN-41B	04/05/12 9:30	04/06/12	Aqueous	Same As Above
C12040285-009	WN-42A	04/05/12 10:10	04/06/12	Aqueous	Same As Above
C12040285-010	JJ-1R	04/05/12 9:10	04/06/12	Aqueous	Same As Above
C12040285-011	SWR-UG	04/04/12 7:30	04/06/12	Aqueous	Same As Above
C12040285-012	SWR-A	04/04/12 7:55	04/06/12	Aqueous	Same As Above
C12040285-013	SWR-B	04/04/12 8:10	04/06/12	Aqueous	Same As Above
C12040285-014	SWR-C	04/04/12 8:25	04/06/12	Aqueous	Same As Above
C12040285-015	SWR-DG	04/04/12 8:52	04/06/12	Aqueous	Same As Above

**ANALYTICAL SUMMARY REPORT**

C12040285-016	SWAB-2	04/05/12 14:04	04/06/12	Aqueous	Same As Above
C12040285-017	SWAB-4	04/05/12 11:45	04/06/12	Aqueous	Same As Above
C12040285-018	SWAB-22	04/05/12 11:05	04/06/12	Aqueous	Same As Above
C12040285-019	SWAB-29	04/05/12 15:20	04/06/12	Aqueous	Same As Above
C12040285-020	SWAB-31	04/06/12 9:20	04/06/12	Aqueous	Same As Above
C12040285-021	SWAB-32	04/05/12 15:10	04/06/12	Aqueous	Same As Above
C12040285-022	Field Blank	04/05/12 15:55	04/06/12	Aqueous	Metals by ICP/ICPMS, Dissolved Field Parameters Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic Solids, Total Dissolved
C12040285-023	WN-1R	04/05/12 0:00	04/06/12	Aqueous	Metals by ICP/ICPMS, Dissolved Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic Solids, Total Dissolved
C12040285-024	WN-5R	04/05/12 0:00	04/06/12	Aqueous	Same As Above
C12040285-025	WN-5S	04/05/12 0:00	04/06/12	Aqueous	Same As Above

The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing. Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. Data corrected for moisture content are typically noted as - dry on the report. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

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

Report Approved By:

Stephanie D. Waldrop
Reporting Supervisor

Digitally signed by
Stephanie Waldrop
Date: 2012.06.29 14:41:50 -06:00



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

CLIENT: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Sample Delivery Group: C12040285

Revised Date: 06/29/12

Report Date: 04/30/12

CASE NARRATIVE

REVISED/SUPPLEMENTAL REPORT

The attached analytical report has been revised from a previously submitted report due to the request by Jill Richards on June 29, 2012 to report Nitrate by Method 300.0 on samples -001 and -002. Nitrogen, Nitrate as N is how it appears on the report, there is no presence of Nitrite.

RA226 ANALYSIS

USNRC Regulatory Guide 4.14 provides guidance on Minimum Detectable Concentrations (MDC) that should be achieved in samples for this radionuclide. The sample-specific MDC for this sample could not be achieved due to lack of sufficient sample volume. Please consult with your local regulatory agency prior to using these results for compliance purposes.

TH230 ANALYSIS

USNRC Regulatory Guide 4.14 provides guidance on Minimum Detectable Concentrations (MDC) that should be achieved in samples for this radionuclide. The sample-specific MDC for this sample could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-001
Client Sample ID: WN-1

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 11:30
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	91	mg/L	D	4		E300.0	04/10/12 23:26 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 13:46 / jba
Nitrogen, Ammonia as N	111	mg/L	D	2		A4500-NH3 G	04/09/12 16:58 / dc
Nitrogen, Nitrate as N	13	mg/L	DH	2		E300.0	04/10/12 23:26 / ljl
Sulfate	2290	mg/L	D	20		E300.0	04/10/12 23:26 / ljl
PHYSICAL PROPERTIES							
pH	6.53	s.u.	H	0.01		A4500-H B	04/09/12 12:13 / ab
Solids, Total Dissolved TDS @ 180 C	3750	mg/L	D	12		A2540 C	04/10/12 09:37 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 16:15 / cp
Antimony	ND	mg/L		0.003		E200.8	04/09/12 17:55 / smm
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 17:55 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 16:15 / cp
Cadmium	0.002	mg/L		0.001		E200.8	04/09/12 17:55 / smm
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:15 / cp
Manganese	32.5	mg/L		0.05		E200.8	04/12/12 16:15 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 17:55 / smm
Nickel	0.07	mg/L		0.05		E200.8	04/12/12 16:15 / cp
Selenium	0.013	mg/L		0.005		E200.8	04/12/12 16:15 / cp
Thallium	0.008	mg/L		0.001		E200.8	04/12/12 16:15 / cp
Uranium	1.81	mg/L		0.001		E200.8	04/12/12 16:15 / cp
RADIONUCLIDES - DISSOLVED							
Radium 226	1.0	pCi/L				E903.0	04/23/12 10:08 / trs
Radium 226 precision (±)	0.31	pCi/L				E903.0	04/23/12 10:08 / trs
Radium 226 MDC	0.27	pCi/L				E903.0	04/23/12 10:08 / trs
Radium 228	2.9	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.6	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	2.5	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.02	pCi/L	U			E908.0	04/13/12 11:23 / dmf
Thorium 230 precision (±)	0.08	pCi/L				E908.0	04/13/12 11:23 / dmf
Thorium 230 MDC	0.2	pCi/L				E908.0	04/13/12 11:23 / dmf
FIELD PARAMETERS							
Field pH	6.18	s.u.				FIELD	04/05/12 11:30 / ***
*** Performed by Sampler							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
H - Analysis performed past recommended holding time.

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

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-002
Client Sample ID: WN-4R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 10:45
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	81	mg/L	D	10		E300.0	04/10/12 23:40 / ljl
Fluoride	7.2	mg/L		0.1		A4500-F C	04/09/12 13:53 / jba
Nitrogen, Ammonia as N	248	mg/L	D	2		A4500-NH3 G	04/09/12 17:06 / dc
Nitrogen, Nitrate as N	95	mg/L	DH	5		E300.0	04/10/12 23:40 / ljl
Sulfate	2980	mg/L	D	40		E300.0	04/10/12 23:40 / ljl
PHYSICAL PROPERTIES							
pH	6.44	s.u.	H	0.01		A4500-H B	04/09/12 12:17 / ab
Solids, Total Dissolved TDS @ 180 C	4880	mg/L	D	17		A2540 C	04/10/12 09:37 / ab
METALS - DISSOLVED							
Aluminum	2.4	mg/L		0.1		E200.8	04/12/12 16:18 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:18 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:18 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 16:18 / cp
Cadmium	0.021	mg/L		0.001		E200.8	04/12/12 16:18 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:18 / cp
Manganese	85.3	mg/L		0.05		E200.8	04/12/12 16:18 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:18 / cp
Nickel	0.51	mg/L		0.05		E200.8	04/12/12 16:18 / cp
Selenium	0.038	mg/L		0.005		E200.8	04/12/12 16:18 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:18 / cp
Uranium	0.309	mg/L		0.001		E200.8	04/12/12 16:18 / cp
RADIONUCLIDES - DISSOLVED							
Radium 226	0.15	pCi/L	U			E903.0	04/23/12 10:08 / trs
Radium 226 precision (±)	0.17	pCi/L				E903.0	04/23/12 10:08 / trs
Radium 226 MDC	0.26	pCi/L				E903.0	04/23/12 10:08 / trs
Radium 228	5.1	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.7	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	2.4	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.1	pCi/L	U			E908.0	04/13/12 11:23 / dmf
Thorium 230 precision (±)	0.2	pCi/L				E908.0	04/13/12 11:23 / dmf
Thorium 230 MDC	0.6	pCi/L				E908.0	04/13/12 11:23 / dmf

- See Case Narrative regarding Th230 analysis.

- See Case Narrative regarding Ra226 analysis.

FIELD PARAMETERS

Field pH 5.96 s.u. FIELD 04/05/12 10:45 / ***
*** Performed by Sampler

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
H - Analysis performed past recommended holding time.

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

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-003
Client Sample ID: WN-5

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 10:30
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	95	mg/L	D	4		E300.0	04/10/12 23:54 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:00 / jba
Nitrogen, Ammonia as N	ND	mg/L		0.05		A4500-NH3 G	04/09/12 17:12 / dc
Nitrogen, Nitrate+Nitrite as N	65	mg/L	D	2		E353.2	04/11/12 14:31 / dc
Sulfate	1630	mg/L	D	20		E300.0	04/10/12 23:54 / ljl
PHYSICAL PROPERTIES							
pH	7.02	s.u.	H	0.01		A4500-H B	04/09/12 12:20 / ab
Solids, Total Dissolved TDS @ 180 C	3630	mg/L		10		A2540 C	04/10/12 09:38 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 16:21 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:21 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:21 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 16:21 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 16:21 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:21 / cp
Manganese	0.45	mg/L		0.05		E200.8	04/12/12 16:21 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:21 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:21 / cp
Selenium	0.019	mg/L		0.005		E200.8	04/12/12 16:21 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:21 / cp
Uranium	1.47	mg/L		0.001		E200.8	04/12/12 16:21 / cp
RADIONUCLIDES - DISSOLVED							
Radium 226	0.03	pCi/L	U			E903.0	04/23/12 11:41 / trs
Radium 226 precision (±)	0.21	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 MDC	0.36	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 228	4.8	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	2.2	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	3.3	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.07	pCi/L	U			E908.0	04/13/12 11:23 / dmf
Thorium 230 precision (±)	0.1	pCi/L				E908.0	04/13/12 11:23 / dmf
Thorium 230 MDC	0.2	pCi/L				E908.0	04/13/12 11:23 / dmf

- See Case Narrative regarding Ra226 analysis.

FIELD PARAMETERS

Field pH 6.72 s.u. FIELD 04/05/12 10:30 / ***
*** Performed by Sampler

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
H - Analysis performed past recommended holding time.

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

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-004
Client Sample ID: WN-21

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 13:51
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	12	mg/L		1		E300.0	04/11/12 00:38 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:14 / jba
Nitrogen, Ammonia as N	1.50	mg/L		0.05		A4500-NH3 G	04/09/12 17:14 / dc
Nitrogen, Nitrate+Nitrite as N	2.7	mg/L		0.2		E353.2	04/11/12 14:39 / dc
Sulfate	77	mg/L	D	2		E300.0	04/11/12 00:38 / ljl
PHYSICAL PROPERTIES							
pH	7.80	s.u.	H	0.01		A4500-H B	04/09/12 12:24 / ab
Solids, Total Dissolved TDS @ 180 C	373	mg/L		10		A2540 C	04/10/12 09:38 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:05 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:45 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:45 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:05 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 16:45 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:45 / cp
Manganese	0.22	mg/L		0.05		E200.8	04/12/12 16:45 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:45 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:45 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 16:45 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:45 / cp
Uranium	0.053	mg/L		0.001		E200.8	04/12/12 16:45 / cp
RADIONUCLIDES - DISSOLVED							
Radium 226	-0.1	pCi/L	U			E903.0	04/23/12 11:41 / trs
Radium 226 precision (±)	0.14	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 MDC	0.30	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 228	4.7	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.9	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	2.8	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.0007	pCi/L	U			E908.0	04/13/12 11:23 / dmf
Thorium 230 precision (±)	0.07	pCi/L				E908.0	04/13/12 11:23 / dmf
Thorium 230 MDC	0.2	pCi/L				E908.0	04/13/12 11:23 / dmf

- See Case Narrative regarding Ra226 analysis.

FIELD PARAMETERS

Field pH 7.45 s.u. FIELD 04/05/12 13:51 / ***
 *** Performed by Sampler

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 MDC - Minimum detectable concentration
 H - Analysis performed past recommended holding time.

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

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-005
Client Sample ID: SWAB-1R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 14:19
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	26	mg/L	D	2		E300.0	04/11/12 00:52 / ljl
Fluoride	0.1	mg/L		0.1		A4500-F C	04/09/12 14:16 / jba
Sulfate	1010	mg/L	D	8		E300.0	04/11/12 00:52 / ljl
PHYSICAL PROPERTIES							
pH	7.45	s.u.	H	0.01		A4500-H B	04/09/12 12:28 / ab
Solids, Total Dissolved TDS @ 180 C	2350	mg/L		10		A2540 C	04/10/12 09:38 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:08 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:48 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:48 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:08 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 16:48 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:48 / cp
Manganese	ND	mg/L		0.05		E200.8	04/12/12 16:48 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:48 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:48 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 16:48 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:48 / cp
Uranium	1.88	mg/L		0.001		E200.8	04/12/12 16:48 / cp
FIELD PARAMETERS							
Field pH	6.93	s.u.				FIELD	04/05/12 14:19 / ***

*** Performed by Sampler

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-006
Client Sample ID: SWAB-12R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 13:35
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	14	mg/L		1		E300.0	04/11/12 01:35 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:21 / jba
Sulfate	76	mg/L		1		E300.0	04/11/12 01:35 / ljl
PHYSICAL PROPERTIES							
pH	7.83	s.u.	H	0.01		A4500-H B	04/09/12 12:31 / ab
Solids, Total Dissolved TDS @ 180 C	353	mg/L		10		A2540 C	04/10/12 09:39 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:11 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:50 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:50 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:11 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 16:50 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:50 / cp
Manganese	ND	mg/L		0.05		E200.8	04/12/12 16:50 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:50 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:50 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 16:50 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:50 / cp
Uranium	0.051	mg/L		0.001		E200.8	04/12/12 16:50 / cp
FIELD PARAMETERS							
Field pH	7.61	s.u.				FIELD	04/05/12 13:35 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-007
Client Sample ID: WN-39B

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 10:55
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	24	mg/L		1		E300.0	04/11/12 01:50 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:28 / jba
Sulfate	236	mg/L	D	2		E300.0	04/11/12 01:50 / ljl
PHYSICAL PROPERTIES							
pH	7.76	s.u.	H	0.01		A4500-H B	04/09/12 12:35 / ab
Solids, Total Dissolved TDS @ 180 C	718	mg/L		10		A2540 C	04/10/12 09:39 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/10/12 15:44 / smm
Antimony	ND	mg/L		0.003		E200.8	04/10/12 15:44 / smm
Arsenic	ND	mg/L		0.01		E200.8	04/10/12 15:44 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/10/12 15:44 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/10/12 15:44 / smm
Lead	ND	mg/L		0.005		E200.8	04/10/12 15:44 / smm
Manganese	ND	mg/L		0.05		E200.8	04/10/12 15:44 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/10/12 15:44 / smm
Nickel	ND	mg/L		0.05		E200.8	04/10/12 15:44 / smm
Selenium	ND	mg/L		0.005		E200.8	04/10/12 15:44 / smm
Thallium	ND	mg/L		0.001		E200.8	04/10/12 15:44 / smm
Uranium	0.403	mg/L		0.001		E200.8	04/10/12 15:44 / smm
FIELD PARAMETERS							
Field pH	7.55	s.u.				FIELD	04/05/12 10:55 / ***

*** Performed by Sampler

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-008
Client Sample ID: WN-41B

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 09:30
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	397	mg/L	D	2		E300.0	04/11/12 02:04 / ljl
Fluoride	1.1	mg/L		0.1		A4500-F C	04/09/12 14:35 / jba
Sulfate	378	mg/L	D	8		E300.0	04/11/12 02:04 / ljl
PHYSICAL PROPERTIES							
pH	8.09	s.u.	H	0.01		A4500-H B	04/09/12 12:39 / ab
Solids, Total Dissolved TDS @ 180 C	1460	mg/L		10		A2540 C	04/10/12 09:39 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:14 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:53 / cp
Arsenic	0.01	mg/L		0.01		E200.8	04/12/12 16:53 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:14 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 16:53 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 16:53 / cp
Manganese	ND	mg/L		0.05		E200.8	04/12/12 16:53 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 16:53 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:53 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 16:53 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 16:53 / cp
Uranium	0.009	mg/L		0.001		E200.8	04/12/12 16:53 / cp
FIELD PARAMETERS							
Field pH	8.03	s.u.				FIELD	04/05/12 09:30 / ***

*** Performed by Sampler

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.
 H - Analysis performed past recommended holding time.



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-009
Client Sample ID: WN-42A

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 10:10
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	49	mg/L	D	4		E300.0	04/11/12 02:19 / ljl
Fluoride	ND	mg/L		0.1		A4500-F C	04/09/12 14:38 / jba
Sulfate	1760	mg/L	D	20		E300.0	04/11/12 02:19 / ljl
PHYSICAL PROPERTIES							
pH	7.10	s.u.	H	0.01		A4500-H B	04/09/12 12:42 / ab
Solids, Total Dissolved TDS @ 180 C	4090	mg/L		10		A2540 C	04/12/12 16:10 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:17 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:56 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 16:56 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:17 / cp
Cadmium	ND	mg/L	D	0.003		E200.8	04/09/12 18:50 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 18:50 / smm
Manganese	0.17	mg/L		0.05		E200.8	04/12/12 16:56 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 18:50 / smm
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:56 / cp
Selenium	0.041	mg/L		0.005		E200.8	04/12/12 16:56 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 18:50 / smm
Uranium	1.08	mg/L	D	0.003		E200.8	04/09/12 18:50 / smm
FIELD PARAMETERS							
Field pH	6.89	s.u.				FIELD	04/05/12 10:10 / ***
*** Performed by Sampler							

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-010
Client Sample ID: JJ-1R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 09:10
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	14	mg/L		1		E300.0	04/11/12 02:33 / ljl
Fluoride	0.4	mg/L		0.1		A4500-F C	04/09/12 14:41 / jba
Sulfate	51	mg/L	D	2		E300.0	04/11/12 02:33 / ljl
PHYSICAL PROPERTIES							
pH	7.49	s.u.	H	0.01		A4500-H B	04/09/12 12:46 / ab
Solids, Total Dissolved TDS @ 180 C	351	mg/L		10		A2540 C	04/10/12 09:40 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:31 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 16:59 / cp
Arsenic	0.01	mg/L		0.01		E200.8	04/12/12 16:59 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:31 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 18:53 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 18:53 / smm
Manganese	0.12	mg/L		0.05		E200.8	04/12/12 16:59 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 18:53 / smm
Nickel	ND	mg/L		0.05		E200.8	04/12/12 16:59 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 16:59 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 18:53 / smm
Uranium	0.010	mg/L		0.001		E200.8	04/09/12 18:53 / smm
FIELD PARAMETERS							
Field pH	7.14	s.u.				FIELD	04/05/12 09:10 / ***

*** Performed by Sampler

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-011
Client Sample ID: SWR-UG

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/04/12 07:30
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	4	mg/L		1		E300.0	04/11/12 02:48 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:47 / jba
Sulfate	10	mg/L		1		E300.0	04/11/12 02:48 / ljl
PHYSICAL PROPERTIES							
pH	7.96	s.u.	H	0.01		A4500-H B	04/09/12 12:53 / ab
Solids, Total Dissolved TDS @ 180 C	144	mg/L		10		A2540 C	04/10/12 09:40 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:34 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 17:02 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 17:02 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:34 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 18:56 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 18:56 / smm
Manganese	ND	mg/L		0.05		E200.8	04/12/12 17:02 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 18:56 / smm
Nickel	ND	mg/L		0.05		E200.8	04/12/12 17:02 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 17:02 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 18:56 / smm
Uranium	0.001	mg/L		0.001		E200.8	04/09/12 18:56 / smm
FIELD PARAMETERS							
Field pH	8.05	s.u.				FIELD	04/04/12 07:30 / ***

*** Performed by Sampler

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 Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Collection Date: 04/04/12 07:55

Date Received: 04/06/12

Matrix: Aqueous

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-012
Client Sample ID: SWR-A

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	4	mg/L		1		E300.0	04/11/12 03:02 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 14:54 / jba
Sulfate	11	mg/L		1		E300.0	04/11/12 03:02 / ljl
PHYSICAL PROPERTIES							
pH	7.97	s.u.	H	0.01		A4500-H B	04/09/12 12:56 / ab
Solids, Total Dissolved TDS @ 180 C	96	mg/L		10		A2540 C	04/10/12 09:41 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:37 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 17:17 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 17:17 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:37 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 18:59 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 18:59 / smm
Manganese	ND	mg/L		0.05		E200.8	04/12/12 17:17 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 18:59 / smm
Nickel	ND	mg/L		0.05		E200.8	04/12/12 17:17 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 17:17 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 18:59 / smm
Uranium	0.001	mg/L		0.001		E200.8	04/09/12 18:59 / smm
FIELD PARAMETERS							
Field pH	8.15	s.u.				FIELD	04/04/12 07:55 / ***
*** Performed by Sampler							

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.



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-013
Client Sample ID: SWR-B

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/04/12 08:10
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	4	mg/L		1		E300.0	04/11/12 03:16 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 15:33 / jba
Sulfate	11	mg/L		1		E300.0	04/11/12 03:16 / ljl
PHYSICAL PROPERTIES							
pH	7.96	s.u.	H	0.01		A4500-H B	04/09/12 13:00 / ab
Solids, Total Dissolved TDS @ 180 C	112	mg/L		10		A2540 C	04/10/12 09:41 / ab
METALS - DISSOLVED							
Aluminum	0.3	mg/L		0.1		E200.8	04/13/12 19:40 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 17:20 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 17:20 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:40 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 17:20 / cp
Lead	ND	mg/L		0.005		E200.8	04/09/12 19:02 / smm
Manganese	ND	mg/L		0.05		E200.8	04/12/12 17:20 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 17:20 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 17:20 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 17:20 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 19:02 / smm
Uranium	0.001	mg/L		0.001		E200.8	04/09/12 19:02 / smm
FIELD PARAMETERS							
Field pH	8.23	s.u.				FIELD	04/04/12 08:10 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-014
Client Sample ID: SWR-C

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/04/12 08:25
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	4	mg/L		1		E300.0	04/11/12 04:00 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 15:36 / jba
Sulfate	11	mg/L		1		E300.0	04/11/12 04:00 / ljl
PHYSICAL PROPERTIES							
pH	7.96	s.u.	H	0.01		A4500-H B	04/09/12 13:03 / ab
Solids, Total Dissolved TDS @ 180 C	106	mg/L		10		A2540 C	04/10/12 09:41 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/13/12 19:43 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 17:23 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 17:23 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/13/12 19:43 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 17:23 / cp
Lead	ND	mg/L		0.005		E200.8	04/09/12 19:05 / smm
Manganese	ND	mg/L		0.05		E200.8	04/12/12 17:23 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 17:23 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 17:23 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 17:23 / cp
Thallium	ND	mg/L		0.001		E200.8	04/09/12 19:05 / smm
Uranium	0.001	mg/L		0.001		E200.8	04/09/12 19:05 / smm
FIELD PARAMETERS							
Field pH	8.21	s.u.				FIELD	04/04/12 08:25 / ***

*** Performed by Sampler

Report RL - Analyte reporting limit.
Definitions: 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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-015
Client Sample ID: SWR-DG

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/04/12 08:52
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	4	mg/L		1		E300.0	04/11/12 04:43 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 15:39 / jba
Sulfate	12	mg/L		1		E300.0	04/11/12 04:43 / ljl
PHYSICAL PROPERTIES							
pH	7.97	s.u.	H	0.01		A4500-H B	04/09/12 13:07 / ab
Solids, Total Dissolved TDS @ 180 C	122	mg/L		10		A2540 C	04/10/12 09:41 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 18:16 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:16 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 18:16 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 18:16 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:16 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:16 / cp
Manganese	ND	mg/L		0.05		E200.8	04/12/12 18:16 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:16 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 18:16 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 18:16 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:16 / cp
Uranium	0.002	mg/L		0.001		E200.8	04/12/12 18:16 / cp
FIELD PARAMETERS							
Field pH	8.09	s.u.				FIELD	04/04/12 08:52 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-016
Client Sample ID: SWAB-2

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 14:04
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	37	mg/L	D	4		E300.0	04/11/12 04:57 / ljl
Fluoride	0.4	mg/L		0.1		A4500-F C	04/09/12 15:46 / jba
Sulfate	1330	mg/L	D	20		E300.0	04/11/12 04:57 / ljl
PHYSICAL PROPERTIES							
pH	6.95	s.u.	H	0.01		A4500-H B	04/09/12 13:10 / ab
Solids, Total Dissolved TDS @ 180 C	3640	mg/L	D	11		A2540 C	04/10/12 09:41 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 18:19 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:19 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 18:19 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 18:19 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:19 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:19 / cp
Manganese	2.13	mg/L		0.05		E200.8	04/12/12 18:19 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:19 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 18:19 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 18:19 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:19 / cp
Uranium	1.15	mg/L		0.001		E200.8	04/12/12 18:19 / cp
FIELD PARAMETERS							
Field pH	6.59	s.u.				FIELD	04/05/12 14:04 / ***

*** Performed by Sampler

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-017
Client Sample ID: SWAB-4

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 11:45
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	37	mg/L		1		E300.0	04/11/12 05:12 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 15:48 / jba
Sulfate	591	mg/L	D	4		E300.0	04/11/12 05:12 / ljl
PHYSICAL PROPERTIES							
pH	7.33	s.u.	H	0.01		A4500-H B	04/09/12 13:13 / ab
Solids, Total Dissolved TDS @ 180 C	1420	mg/L		10		A2540 C	04/10/12 09:42 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 18:22 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:22 / cp
Arsenic	0.01	mg/L		0.01		E200.8	04/12/12 18:22 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 18:22 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:22 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:22 / cp
Manganese	0.40	mg/L		0.05		E200.8	04/12/12 18:22 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:22 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 18:22 / cp
Selenium	0.009	mg/L		0.005		E200.8	04/12/12 18:22 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:22 / cp
Uranium	1.08	mg/L		0.001		E200.8	04/12/12 18:22 / cp
FIELD PARAMETERS							
Field pH	7.09	s.u.				FIELD	04/05/12 11:45 / ***

*** Performed by Sampler

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.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-018
Client Sample ID: SWAB-22

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 11:05
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	10	mg/L		1		E300.0	04/11/12 05:26 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	04/09/12 15:55 / jba
Sulfate	39	mg/L		1		E300.0	04/11/12 05:26 / ljl
PHYSICAL PROPERTIES							
pH	7.56	s.u.	H	0.01		A4500-H B	04/09/12 13:17 / ab
Solids, Total Dissolved TDS @ 180 C	273	mg/L		10		A2540 C	04/10/12 09:42 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 18:25 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:25 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 18:25 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 18:25 / cp
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:25 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:25 / cp
Manganese	0.05	mg/L		0.05		E200.8	04/12/12 18:25 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:25 / cp
Nickel	ND	mg/L		0.05		E200.8	04/12/12 18:25 / cp
Selenium	ND	mg/L		0.005		E200.8	04/12/12 18:25 / cp
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:25 / cp
Uranium	0.023	mg/L		0.001		E200.8	04/12/12 18:25 / cp
FIELD PARAMETERS							
Field pH	7.39	s.u.				FIELD	04/05/12 11:05 / ***

*** Performed by Sampler

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.



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-019
Client Sample ID: SWAB-29

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 15:20
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	6	mg/L		1		E300.0	04/11/12 05:41 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 16:02 / jba
Sulfate	42	mg/L		1		E300.0	04/11/12 05:41 / ljl
PHYSICAL PROPERTIES							
pH	7.68	s.u.	H	0.01		A4500-H B	04/09/12 13:20 / ab
Solids, Total Dissolved TDS @ 180 C	286	mg/L		10		A2540 C	04/10/12 09:42 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/09/12 20:21 / smm
Antimony	ND	mg/L		0.003		E200.8	04/09/12 20:21 / smm
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 20:21 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/09/12 20:21 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 20:21 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 20:21 / smm
Manganese	ND	mg/L		0.05		E200.8	04/09/12 20:21 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 20:21 / smm
Nickel	ND	mg/L		0.05		E200.8	04/09/12 20:21 / smm
Selenium	ND	mg/L		0.005		E200.8	04/09/12 20:21 / smm
Thallium	ND	mg/L		0.001		E200.8	04/09/12 20:21 / smm
Uranium	0.040	mg/L		0.001		E200.8	04/09/12 20:21 / smm
FIELD PARAMETERS							
Field pH	7.31	s.u.				FIELD	04/05/12 15:20 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-020
Client Sample ID: SWAB-31

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/06/12 09:20
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	8	mg/L		1		E300.0	04/11/12 05:55 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 16:06 / jba
Sulfate	28	mg/L		1		E300.0	04/11/12 05:55 / ljl
PHYSICAL PROPERTIES							
pH	7.78	s.u.	H	0.01		A4500-H B	04/09/12 13:24 / ab
Solids, Total Dissolved TDS @ 180 C	283	mg/L		10		A2540 C	04/10/12 09:44 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/09/12 20:24 / smm
Antimony	ND	mg/L		0.003		E200.8	04/09/12 20:24 / smm
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 20:24 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/09/12 20:24 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 20:24 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 20:24 / smm
Manganese	ND	mg/L		0.05		E200.8	04/09/12 20:24 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 20:24 / smm
Nickel	ND	mg/L		0.05		E200.8	04/09/12 20:24 / smm
Selenium	0.010	mg/L		0.005		E200.8	04/09/12 20:24 / smm
Thallium	ND	mg/L		0.001		E200.8	04/09/12 20:24 / smm
Uranium	0.026	mg/L		0.001		E200.8	04/09/12 20:24 / smm
FIELD PARAMETERS							
Field pH	6.81	s.u.				FIELD	04/06/12 09:20 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-021
Client Sample ID: SWAB-32

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 15:10
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	11	mg/L		1		E300.0	04/11/12 06:09 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	04/09/12 16:12 / jba
Sulfate	47	mg/L		1		E300.0	04/11/12 06:09 / ljl
PHYSICAL PROPERTIES							
pH	7.90	s.u.	H	0.01		A4500-H B	04/09/12 13:39 / ab
Solids, Total Dissolved TDS @ 180 C	318	mg/L		10		A2540 C	04/10/12 09:45 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/09/12 20:27 / smm
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:28 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 20:27 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/09/12 20:27 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:28 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:28 / cp
Manganese	ND	mg/L		0.05		E200.8	04/09/12 20:27 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:28 / cp
Nickel	ND	mg/L		0.05		E200.8	04/09/12 20:27 / smm
Selenium	0.009	mg/L		0.005		E200.8	04/09/12 20:27 / smm
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:28 / cp
Uranium	0.113	mg/L		0.001		E200.8	04/12/12 18:28 / cp
FIELD PARAMETERS							
Field pH	7.70	s.u.				FIELD	04/05/12 15:10 / ***

*** Performed by Sampler

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 Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-022
Client Sample ID: Field Blank

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12 15:55
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	ND	mg/L		1		E300.0	04/11/12 06:24 / ljl
Fluoride	ND	mg/L		0.1		A4500-F C	04/09/12 16:45 / jba
Nitrogen, Ammonia as N	ND	mg/L		0.05		A4500-NH3 G	04/09/12 17:16 / dc
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.2		E353.2	04/11/12 14:41 / dc
Sulfate	ND	mg/L		1		E300.0	04/11/12 06:24 / ljl
PHYSICAL PROPERTIES							
pH	5.90	s.u.	H	0.01		A4500-H B	04/09/12 13:42 / ab
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		10		A2540 C	04/10/12 09:45 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/09/12 20:30 / smm
Antimony	ND	mg/L		0.003		E200.8	04/09/12 20:30 / smm
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 20:30 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/09/12 20:30 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/09/12 20:30 / smm
Lead	ND	mg/L		0.005		E200.8	04/09/12 20:30 / smm
Manganese	ND	mg/L		0.05		E200.8	04/09/12 20:30 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/09/12 20:30 / smm
Nickel	ND	mg/L		0.05		E200.8	04/09/12 20:30 / smm
Selenium	ND	mg/L		0.005		E200.8	04/09/12 20:30 / smm
Thallium	ND	mg/L		0.001		E200.8	04/09/12 20:30 / smm
Uranium	ND	mg/L		0.001		E200.8	04/09/12 20:30 / smm
RADIONUCLIDES - DISSOLVED							
Radium 226	-0.2	pCi/L	U			E903.0	04/23/12 11:41 / trs
Radium 226 precision (±)	0.13	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 MDC	0.30	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 228	1.8	pCi/L	U			RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.8	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	2.8	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.03	pCi/L	U			E908.0	04/13/12 11:24 / dmf
Thorium 230 precision (±)	0.09	pCi/L				E908.0	04/13/12 11:24 / dmf
Thorium 230 MDC	0.2	pCi/L				E908.0	04/13/12 11:24 / dmf

- See Case Narrative regarding Ra226 analysis.

FIELD PARAMETERS

Field pH 8.05 s.u. FIELD 04/05/12 15:55 / ***
*** Performed by Sampler

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-023
Client Sample ID: WN-1R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	75	mg/L	D	4		E300.0	04/11/12 06:38 / ljl
Fluoride	0.2	mg/L		0.1		A4500-F C	04/09/12 16:50 / jba
Nitrogen, Ammonia as N	150	mg/L	D	2		A4500-NH3 G	04/09/12 17:18 / dc
Nitrogen, Nitrate+Nitrite as N	15.7	mg/L	D	0.5		E353.2	04/11/12 14:44 / dc
Sulfate	2330	mg/L	D	20		E300.0	04/11/12 06:38 / ljl
PHYSICAL PROPERTIES							
pH	6.71	s.u.	H	0.01		A4500-H B	04/09/12 13:46 / ab
Solids, Total Dissolved TDS @ 180 C	3680	mg/L	D	12		A2540 C	04/10/12 09:45 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/12/12 18:30 / cp
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:30 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/12/12 18:30 / cp
Beryllium	ND	mg/L		0.004		E200.8	04/12/12 18:30 / cp
Cadmium	0.002	mg/L		0.001		E200.8	04/12/12 18:30 / cp
Lead	ND	mg/L		0.005		E200.8	04/09/12 20:33 / smm
Manganese	32.2	mg/L		0.05		E200.8	04/12/12 18:30 / cp
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:30 / cp
Nickel	0.07	mg/L		0.05		E200.8	04/12/12 18:30 / cp
Selenium	0.013	mg/L		0.005		E200.8	04/12/12 18:30 / cp
Thallium	0.009	mg/L		0.001		E200.8	04/09/12 20:33 / smm
Uranium	1.84	mg/L		0.001		E200.8	04/09/12 20:33 / smm
RADIONUCLIDES - DISSOLVED							
Radium 226	0.94	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 precision (±)	0.27	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 MDC	0.24	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 228	4.3	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.5	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	2.2	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	0.02	pCi/L	U			E908.0	04/13/12 11:24 / dmf
Thorium 230 precision (±)	0.1	pCi/L				E908.0	04/13/12 11:24 / dmf
Thorium 230 MDC	0.3	pCi/L				E908.0	04/13/12 11:24 / dmf

- See Case Narrative regarding Th230 analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
H - Analysis performed past recommended holding time.

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

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-024
Client Sample ID: WN-5R

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	94	mg/L	D	4	E300.0		04/11/12 07:36 / ljl
Fluoride	ND	mg/L		0.1	A4500-F C		04/09/12 16:54 / jba
Nitrogen, Ammonia as N	ND	mg/L		0.05	A4500-NH3 G		04/09/12 17:20 / dc
Nitrogen, Nitrate+Nitrite as N	67	mg/L	D	2	E353.2		04/11/12 14:46 / dc
Sulfate	1600	mg/L	D	20	E300.0		04/11/12 07:36 / ljl
PHYSICAL PROPERTIES							
pH	7.03	s.u.	H	0.01	A4500-H B		04/09/12 13:50 / ab
Solids, Total Dissolved TDS @ 180 C	3640	mg/L		10	A2540 C		04/10/12 09:45 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1	E200.8		04/09/12 20:36 / smm
Antimony	ND	mg/L		0.003	E200.8		04/09/12 20:36 / smm
Arsenic	ND	mg/L		0.01	E200.8		04/09/12 20:36 / smm
Beryllium	ND	mg/L		0.004	E200.8		04/09/12 20:36 / smm
Cadmium	ND	mg/L		0.001	E200.8		04/09/12 20:36 / smm
Lead	ND	mg/L		0.005	E200.8		04/09/12 20:36 / smm
Manganese	0.55	mg/L		0.05	E200.8		04/09/12 20:36 / smm
Molybdenum	ND	mg/L		0.1	E200.8		04/09/12 20:36 / smm
Nickel	ND	mg/L		0.05	E200.8		04/09/12 20:36 / smm
Selenium	0.018	mg/L		0.005	E200.8		04/09/12 20:36 / smm
Thallium	ND	mg/L		0.001	E200.8		04/09/12 20:36 / smm
Uranium	1.75	mg/L		0.001	E200.8		04/09/12 20:36 / smm
RADIONUCLIDES - DISSOLVED							
Radium 226	0.15	pCi/L	U		E903.0		04/23/12 11:41 / trs
Radium 226 precision (±)	0.21	pCi/L			E903.0		04/23/12 11:41 / trs
Radium 226 MDC	0.32	pCi/L			E903.0		04/23/12 11:41 / trs
Radium 228	3.0	pCi/L	U		RA-05		04/16/12 17:38 / plj
Radium 228 precision (±)	1.9	pCi/L			RA-05		04/16/12 17:38 / plj
Radium 228 MDC	3.0	pCi/L			RA-05		04/16/12 17:38 / plj
Thorium 230	0.01	pCi/L	U		E908.0		04/13/12 11:24 / dmf
Thorium 230 precision (±)	0.06	pCi/L			E908.0		04/13/12 11:24 / dmf
Thorium 230 MDC	0.2	pCi/L			E908.0		04/13/12 11:24 / dmf

- See Case Narrative regarding Ra226 analysis.

**Report
Definitions:**

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
H - Analysis performed past recommended holding time.

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



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Western Nuclear Inc
Project: Split Rock Mill Site GWPP
Lab ID: C12040285-025
Client Sample ID: WN-5S

Revised Date: 06/29/12
Report Date: 04/30/12
Collection Date: 04/05/12
Date Received: 04/06/12
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Chloride	93	mg/L	D	4		E300.0	04/11/12 08:19 / ljl
Fluoride	ND	mg/L		0.1		A4500-F C	04/09/12 16:58 / jba
Nitrogen, Ammonia as N	ND	mg/L		0.05		A4500-NH3 G	04/09/12 17:22 / dc
Nitrogen, Nitrate+Nitrite as N	68	mg/L	D	2		E353.2	04/11/12 14:49 / dc
Sulfate	1600	mg/L	D	20		E300.0	04/11/12 08:19 / ljl
PHYSICAL PROPERTIES							
pH	6.99	s.u.	H	0.01		A4500-H B	04/09/12 13:53 / ab
Solids, Total Dissolved TDS @ 180 C	3630	mg/L		10		A2540 C	04/10/12 09:46 / ab
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	04/09/12 20:39 / smm
Antimony	ND	mg/L		0.003		E200.8	04/12/12 18:33 / cp
Arsenic	ND	mg/L		0.01		E200.8	04/09/12 20:39 / smm
Beryllium	ND	mg/L		0.004		E200.8	04/09/12 20:39 / smm
Cadmium	ND	mg/L		0.001		E200.8	04/12/12 18:33 / cp
Lead	ND	mg/L		0.005		E200.8	04/12/12 18:33 / cp
Manganese	0.50	mg/L		0.05		E200.8	04/09/12 20:39 / smm
Molybdenum	ND	mg/L		0.1		E200.8	04/12/12 18:33 / cp
Nickel	ND	mg/L		0.05		E200.8	04/09/12 20:39 / smm
Selenium	0.020	mg/L		0.005		E200.8	04/09/12 20:39 / smm
Thallium	ND	mg/L		0.001		E200.8	04/12/12 18:33 / cp
Uranium	1.63	mg/L		0.001		E200.8	04/12/12 18:33 / cp
RADIONUCLIDES - DISSOLVED							
Radium 226	0.04	pCi/L	U			E903.0	04/23/12 11:41 / trs
Radium 226 precision (±)	0.19	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 226 MDC	0.33	pCi/L				E903.0	04/23/12 11:41 / trs
Radium 228	1.8	pCi/L	U			RA-05	04/16/12 17:38 / plj
Radium 228 precision (±)	1.9	pCi/L				RA-05	04/16/12 17:38 / plj
Radium 228 MDC	3.1	pCi/L				RA-05	04/16/12 17:38 / plj
Thorium 230	-0.009	pCi/L	U			E908.0	04/13/12 11:24 / dmf
Thorium 230 precision (±)	0.06	pCi/L				E908.0	04/13/12 11:24 / dmf
Thorium 230 MDC	0.2	pCi/L				E908.0	04/13/12 11:24 / dmf

- See Case Narrative regarding Ra226 analysis.

**Report
Definitions:**

RL - Analyte reporting limit.

QCL - Quality control limit.

MDC - Minimum detectable concentration.

H - Analysis performed past recommended holding time.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 120410_1_SLDS-TDS-W		
Sample ID: MBLK1_120410		Method Blank					Run: BAL-1_120410A			04/10/12 09:35
Solids, Total Dissolved TDS @ 180 C		6	mg/L	4						
Sample ID: LCS1_120410		Laboratory Control Sample					Run: BAL-1_120410A			04/10/12 09:36
Solids, Total Dissolved TDS @ 180 C		1640	mg/L	10	98	90	110			
Sample ID: C12040285-009AMS		Sample Matrix Spike					Run: BAL-1_120410A			04/10/12 09:40
Solids, Total Dissolved TDS @ 180 C		6120	mg/L	10	101	90	110			
Sample ID: C12040285-019ADUP		Sample Duplicate					Run: BAL-1_120410A			04/10/12 09:44
Solids, Total Dissolved TDS @ 180 C		288	mg/L	10				0.9	5	
Sample ID: C12040285-020ADUP		Sample Duplicate					Run: BAL-1_120410A			04/10/12 09:45
Solids, Total Dissolved TDS @ 180 C		270	mg/L	10				4.7	5	
Sample ID: C12040305-001AMS		Sample Matrix Spike					Run: BAL-1_120410A			04/10/12 09:48
Solids, Total Dissolved TDS @ 180 C		5450	mg/L	11	100	90	110			
Method: A2540 C								Batch: 120412_1_SLDS-TDS-W		
Sample ID: MBLK1_120412		Method Blank					Run: BAL-1_120412A			04/12/12 16:09
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	4						
Sample ID: LCS1_120412		Laboratory Control Sample					Run: BAL-1_120412A			04/12/12 16:09
Solids, Total Dissolved TDS @ 180 C		1500	mg/L	10	90	90	110			
Sample ID: C12040229-008ADUP		Sample Duplicate					Run: BAL-1_120412A			04/12/12 16:10
Solids, Total Dissolved TDS @ 180 C		333	mg/L	10				3.5	5	
Sample ID: C12040396-006AMS		Sample Matrix Spike					Run: BAL-1_120412A			04/12/12 16:12
Solids, Total Dissolved TDS @ 180 C		2810	mg/L	10	102	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-F C										Batch: R158244
Sample ID: MBLK		Method Blank					Run: MANTECH_120409A			04/09/12 07:44
Fluoride		ND	mg/L	0.01						
Sample ID: LCS-6622		Laboratory Control Sample					Run: MANTECH_120409A			04/09/12 07:48
Fluoride		2.04	mg/L	0.10	102	90	110			
Sample ID: C12040229-006AMSD		Sample Matrix Spike Duplicate					Run: MANTECH_120409A			04/09/12 13:14
Fluoride		2.25	mg/L	0.10	99	80	120	0.0	10	
Sample ID: C12040301-001AMS		Sample Matrix Spike					Run: MANTECH_120409A			04/09/12 17:06
Fluoride		2.04	mg/L	0.10	95	80	120			
Sample ID: C12040301-001AMSD		Sample Matrix Spike Duplicate					Run: MANTECH_120409A			04/09/12 17:12
Fluoride		2.04	mg/L	0.10	95	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Analytical Run: PHSC_101-C_120409A		
Sample ID: pH 6.86		Initial Calibration Verification Standard								04/09/12 09:23
pH		6.80	s.u.	0.010	99	98	102			
Method: A4500-H B								Batch: R158209		
Sample ID: C12040285-010ADUP		Sample Duplicate		Run: PHSC_101-C_120409A				04/09/12 12:49		
pH		7.48	s.u.	0.010				0.1	3	
Sample ID: C12040285-020ADUP		Sample Duplicate		Run: PHSC_101-C_120409A				04/09/12 13:27		
pH		7.78	s.u.	0.010				0.0	3	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G										Batch: R158245
Sample ID: MBLK-1		Method Blank								
Nitrogen, Ammonia as N		ND	mg/L	0.02						Run: TECHNICON_120409A 04/09/12 15:00
Sample ID: LCS-2		Laboratory Control Sample								
Nitrogen, Ammonia as N		2.03	mg/L	0.050	101	90	110			Run: TECHNICON_120409A 04/09/12 15:02
Sample ID: LFB-3		Laboratory Fortified Blank								
Nitrogen, Ammonia as N		1.99	mg/L	0.050	102	80	120			Run: TECHNICON_120409A 04/09/12 15:04
Sample ID: C12040285-002CMS		Sample Matrix Spike								
Nitrogen, Ammonia as N		340	mg/L	2.5	99	90	110			Run: TECHNICON_120409A 04/09/12 17:08
Sample ID: C12040285-002CMSD		Sample Matrix Spike Duplicate								
Nitrogen, Ammonia as N		343	mg/L	2.5	102	90	110	0.9	10	Run: TECHNICON_120409A 04/09/12 17:10

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS2-C_120409A		
Sample ID: ICV								12 Initial Calibration Verification Standard		
								04/09/12 15:14		
Aluminum		0.0508	mg/L	0.0010	102	90	110			
Antimony		0.0518	mg/L	0.0010	104	90	110			
Arsenic		0.0506	mg/L	0.0010	101	90	110			
Beryllium		0.0522	mg/L	0.0010	104	90	110			
Cadmium		0.0499	mg/L	0.0010	100	90	110			
Lead		0.0482	mg/L	0.0010	96	90	110			
Manganese		0.0469	mg/L	0.0010	94	90	110			
Molybdenum		0.0518	mg/L	0.0010	104	90	110			
Nickel		0.0497	mg/L	0.0010	99	90	110			
Selenium		0.0458	mg/L	0.0010	92	90	110			
Thallium		0.0478	mg/L	0.0010	96	90	110			
Uranium		0.0448	mg/L	0.00030	90	90	110			
Method: E200.8								Batch: R158258		
Sample ID: LRB								12 Method Blank		
								Run: ICPMS2-C_120409A		
								04/09/12 13:56		
Aluminum		ND	mg/L	0.001						
Antimony		ND	mg/L	6E-05						
Arsenic		ND	mg/L	0.00010						
Beryllium		ND	mg/L	5E-05						
Cadmium		ND	mg/L	2E-05						
Lead		ND	mg/L	3E-05						
Manganese		ND	mg/L	2E-05						
Molybdenum		ND	mg/L	4E-05						
Nickel		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Thallium		ND	mg/L	9E-06						
Uranium		ND	mg/L	1E-05						
Sample ID: LFB								12 Laboratory Fortified Blank		
								Run: ICPMS2-C_120409A		
								04/09/12 13:59		
Aluminum		0.0502	mg/L	0.0010	100	85	115			
Antimony		0.0485	mg/L	0.0010	97	85	115			
Arsenic		0.0503	mg/L	0.0010	101	85	115			
Beryllium		0.0511	mg/L	0.0010	102	85	115			
Cadmium		0.0507	mg/L	0.0010	101	85	115			
Lead		0.0509	mg/L	0.0010	102	85	115			
Manganese		0.0492	mg/L	0.0010	98	85	115			
Molybdenum		0.0474	mg/L	0.0010	95	85	115			
Nickel		0.0506	mg/L	0.0010	101	85	115			
Selenium		0.0514	mg/L	0.0010	103	85	115			
Thallium		0.0498	mg/L	0.0010	100	85	115			
Uranium		0.0488	mg/L	0.00030	98	85	115			
Sample ID: C12040285-008BMS4								12 Sample Matrix Spike		
								Run: ICPMS2-C_120409A		
								04/09/12 18:30		
Aluminum		0.0407	mg/L	0.030	81	70	130			
Antimony		0.0604	mg/L	0.0010	121	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R158258
Sample ID: C12040285-008BMS4 12 Sample Matrix Spike										
						Run: ICPMS2-C_120409A		04/09/12 18:30		
Arsenic		0.0656	mg/L	0.0010	110	70	130			
Beryllium		0.0336	mg/L	0.0010	67	70	130			S
Cadmium		0.0498	mg/L	0.0010	100	70	130			
Lead		0.0495	mg/L	0.0010	99	70	130			
Manganese		0.0572	mg/L	0.0010	111	70	130			
Molybdenum		0.0508	mg/L	0.0010	95	70	130			
Nickel		0.0426	mg/L	0.0050	84	70	130			
Selenium		0.0480	mg/L	0.0010	93	70	130			
Thallium		0.0495	mg/L	0.00050	99	70	130			
Uranium		0.0530	mg/L	0.00030	89	70	130			
Sample ID: C12040285-008BMSD 12 Sample Matrix Spike Duplicate										
						Run: ICPMS2-C_120409A		04/09/12 18:32		
Aluminum		0.0412	mg/L	0.030	82	70	130	1.2	20	
Antimony		0.0575	mg/L	0.0010	115	70	130	4.9	20	
Arsenic		0.0650	mg/L	0.0010	108	70	130	0.9	20	
Beryllium		0.0334	mg/L	0.0010	67	70	130	0.6	20	S
Cadmium		0.0483	mg/L	0.0010	97	70	130	3.1	20	
Lead		0.0498	mg/L	0.0010	100	70	130	0.7	20	
Manganese		0.0575	mg/L	0.0010	112	70	130	0.5	20	
Molybdenum		0.0485	mg/L	0.0010	90	70	130	4.5	20	
Nickel		0.0418	mg/L	0.0050	82	70	130	2.0	20	
Selenium		0.0480	mg/L	0.0010	93	70	130	0.0	20	
Thallium		0.0497	mg/L	0.00050	99	70	130	0.4	20	
Uranium		0.0535	mg/L	0.00030	90	70	130	1.0	20	
Sample ID: C12040285-018BMS4 12 Sample Matrix Spike										
						Run: ICPMS2-C_120409A		04/09/12 19:31		
Aluminum		0.0422	mg/L	0.030	76	70	130			
Antimony		0.0576	mg/L	0.0010	115	70	130			
Arsenic		0.0608	mg/L	0.0010	112	70	130			
Beryllium		0.0328	mg/L	0.0010	66	70	130			S
Cadmium		0.0507	mg/L	0.0010	101	70	130			
Lead		0.0482	mg/L	0.0010	96	70	130			
Manganese		0.117	mg/L	0.0010	107	70	130			
Molybdenum		0.0478	mg/L	0.0010	91	70	130			
Nickel		0.0437	mg/L	0.0050	84	70	130			
Selenium		0.0429	mg/L	0.0010	85	70	130			
Thallium		0.0484	mg/L	0.00050	97	70	130			
Uranium		0.0675	mg/L	0.00030	90	70	130			
Sample ID: C12040285-018BMSD 12 Sample Matrix Spike Duplicate										
						Run: ICPMS2-C_120409A		04/09/12 19:34		
Aluminum		0.0424	mg/L	0.030	77	70	130	0.4	20	
Antimony		0.0593	mg/L	0.0010	118	70	130	2.8	20	
Arsenic		0.0627	mg/L	0.0010	116	70	130	3.0	20	
Beryllium		0.0326	mg/L	0.0010	65	70	130	0.6	20	S
Cadmium		0.0489	mg/L	0.0010	98	70	130	3.7	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 Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc.

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R158258
Sample ID: C12040285-018BMSD 12 Sample Matrix Spike Duplicate										Run: ICPMS2-C_120409A 04/09/12 19:34
Lead		0.0481	mg/L	0.0010	96	70	130	0.2	20	
Manganese		0.120	mg/L	0.0010	112	70	130	2.0	20	
Molybdenum		0.0477	mg/L	0.0010	91	70	130	0.3	20	
Nickel		0.0444	mg/L	0.0050	86	70	130	1.5	20	
Selenium		0.0437	mg/L	0.0010	86	70	130	1.7	20	
Thallium		0.0488	mg/L	0.00050	97	70	130	0.9	20	
Uranium		0.0669	mg/L	0.00030	89	70	130	0.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Analytical Run: ICPMS2-C_120410A
Sample ID: ICV	12 Initial Calibration Verification Standard									04/10/12 12:19
Aluminum		0.0486	mg/L	0.0010	97	90	110			
Antimony		0.0488	mg/L	0.0010	98	90	110			
Arsenic		0.0489	mg/L	0.0010	98	90	110			
Beryllium		0.0481	mg/L	0.0010	96	90	110			
Cadmium		0.0498	mg/L	0.0010	100	90	110			
Lead		0.0482	mg/L	0.0010	96	90	110			
Manganese		0.0493	mg/L	0.0010	99	90	110			
Molybdenum		0.0497	mg/L	0.0010	99	90	110			
Nickel		0.0496	mg/L	0.0010	99	90	110			
Selenium		0.0502	mg/L	0.0010	100	90	110			
Thallium		0.0491	mg/L	0.0010	98	90	110			
Uranium		0.0494	mg/L	0.00030	99	90	110			
Method: E200.8										Batch: R158318
Sample ID: LRB	12 Method Blank									Run: ICPMS2-C_120410A 04/10/12 12:42
Aluminum		ND	mg/L	0.001						
Antimony		ND	mg/L	6E-05						
Arsenic		ND	mg/L	0.00010						
Beryllium		ND	mg/L	5E-05						
Cadmium		ND	mg/L	2E-05						
Lead		ND	mg/L	3E-05						
Manganese		ND	mg/L	2E-05						
Molybdenum		ND	mg/L	4E-05						
Nickel		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Thallium		ND	mg/L	9E-06						
Uranium		ND	mg/L	1E-05						
Sample ID: LFB	12 Laboratory Fortified Blank									Run: ICPMS2-C_120410A 04/10/12 12:45
Aluminum		0.0501	mg/L	0.0010	100	85	115			
Antimony		0.0495	mg/L	0.0010	99	85	115			
Arsenic		0.0502	mg/L	0.0010	100	85	115			
Beryllium		0.0482	mg/L	0.0010	96	85	115			
Cadmium		0.0507	mg/L	0.0010	101	85	115			
Lead		0.0492	mg/L	0.0010	98	85	115			
Manganese		0.0506	mg/L	0.0010	101	85	115			
Molybdenum		0.0500	mg/L	0.0010	100	85	115			
Nickel		0.0511	mg/L	0.0010	102	85	115			
Selenium		0.0505	mg/L	0.0010	101	85	115			
Thallium		0.0493	mg/L	0.0010	99	85	115			
Uranium		0.0491	mg/L	0.00030	98	85	115			
Sample ID: C12040285-009BMS4	12 Sample Matrix Spike									Run: ICPMS2-C_120410A 04/10/12 16:27
Aluminum		0.304	mg/L	0.030	122	70	130			
Antimony		0.267	mg/L	0.0010	107	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R158318
Sample ID: C12040285-009BMS4 12 Sample Matrix Spike										Run: ICPMS2-C_120410A 04/10/12 16:27
Arsenic		0.277	mg/L	0.0010	110	70	130			
Beryllium		0.243	mg/L	0.0010	97	70	130			
Cadmium		0.247	mg/L	0.0010	99	70	130			
Lead		0.258	mg/L	0.0010	103	70	130			
Manganese		0.454	mg/L	0.0010	110	70	130			
Molybdenum		0.262	mg/L	0.0010	105	70	130			
Nickel		0.244	mg/L	0.0050	95	70	130			
Selenium		0.277	mg/L	0.0013	96	70	130			
Thallium		0.257	mg/L	0.00050	103	70	130			
Uranium		1.62	mg/L	0.00050		70	130			A
Sample ID: C12040285-009BMSD 12 Sample Matrix Spike Duplicate										Run: ICPMS2-C_120410A 04/10/12 16:30
Aluminum		0.286	mg/L	0.030	114	70	130	6.0	20	
Antimony		0.279	mg/L	0.0010	111	70	130	4.2	20	
Arsenic		0.289	mg/L	0.0010	115	70	130	4.3	20	
Beryllium		0.236	mg/L	0.0010	94	70	130	2.9	20	
Cadmium		0.250	mg/L	0.0010	100	70	130	1.3	20	
Lead		0.255	mg/L	0.0010	102	70	130	1.2	20	
Manganese		0.453	mg/L	0.0010	110	70	130	0.1	20	
Molybdenum		0.257	mg/L	0.0010	103	70	130	1.8	20	
Nickel		0.258	mg/L	0.0050	101	70	130	5.8	20	
Selenium		0.285	mg/L	0.0013	99	70	130	2.7	20	
Thallium		0.245	mg/L	0.00050	98	70	130	4.8	20	
Uranium		1.63	mg/L	0.00050		70	130	0.3	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.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS2-C_120412A				
Sample ID: ICV						12 Initial Calibration Verification Standard				
						04/12/12 13:00				
Aluminum		0.0491	mg/L	0.0010	98	90	110			
Antimony		0.0489	mg/L	0.0010	98	90	110			
Arsenic		0.0497	mg/L	0.0010	99	90	110			
Beryllium		0.0505	mg/L	0.0010	101	90	110			
Cadmium		0.0496	mg/L	0.0010	99	90	110			
Lead		0.0495	mg/L	0.0010	99	90	110			
Manganese		0.0501	mg/L	0.0010	100	90	110			
Molybdenum		0.0498	mg/L	0.0010	100	90	110			
Nickel		0.0503	mg/L	0.0010	101	90	110			
Selenium		0.0514	mg/L	0.0010	103	90	110			
Thallium		0.0494	mg/L	0.0010	99	90	110			
Uranium		0.0493	mg/L	0.00030	99	90	110			
Method: E200.8						Batch: R158408				
Sample ID: LRB						12 Method Blank				
						Run: ICPMS2-C_120412A				
						04/12/12 13:24				
Aluminum		ND	mg/L	0.001						
Antimony		ND	mg/L	6E-05						
Arsenic		ND	mg/L	0.00010						
Beryllium		ND	mg/L	5E-05						
Cadmium		ND	mg/L	2E-05						
Lead		ND	mg/L	3E-05						
Manganese		ND	mg/L	2E-05						
Molybdenum		6E-05	mg/L	4E-05						
Nickel		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Thallium		ND	mg/L	9E-06						
Uranium		ND	mg/L	1E-05						
Sample ID: LFB						12 Laboratory Fortified Blank				
						Run: ICPMS2-C_120412A				
						04/12/12 13:27				
Aluminum		0.0495	mg/L	0.0010	99	85	115			
Antimony		0.0491	mg/L	0.0010	98	85	115			
Arsenic		0.0500	mg/L	0.0010	100	85	115			
Beryllium		0.0502	mg/L	0.0010	100	85	115			
Cadmium		0.0498	mg/L	0.0010	100	85	115			
Lead		0.0495	mg/L	0.0010	99	85	115			
Manganese		0.0504	mg/L	0.0010	101	85	115			
Molybdenum		0.0492	mg/L	0.0010	98	85	115			
Nickel		0.0508	mg/L	0.0010	102	85	115			
Selenium		0.0506	mg/L	0.0010	101	85	115			
Thallium		0.0493	mg/L	0.0010	99	85	115			
Uranium		0.0486	mg/L	0.00030	97	85	115			
Sample ID: C12040285-003BMS4						12 Sample Matrix Spike				
						Run: ICPMS2-C_120412A				
						04/12/12 16:24				
Aluminum		0.0495	mg/L	0.030	99	70	130			
Antimony		0.0510	mg/L	0.0010	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R158408
Sample ID: C12040285-003BMS4 12 Sample Matrix Spike										Run: ICPMS2-C_120412A 04/12/12 16:24
Arsenic		0.0552	mg/L	0.0010	106	70	130			
Beryllium		0.0428	mg/L	0.0010	86	70	130			
Cadmium		0.0468	mg/L	0.0010	93	70	130			
Lead		0.0509	mg/L	0.0010	102	70	130			
Manganese		0.504	mg/L	0.0010		70	130			A
Molybdenum		0.116	mg/L	0.0010	103	70	130			
Nickel		0.0563	mg/L	0.0050	90	70	130			
Selenium		0.0712	mg/L	0.0010	105	70	130			
Thallium		0.0522	mg/L	0.00050	104	70	130			
Uranium		1.70	mg/L	0.00030		70	130			A
Sample ID: C12040285-003BMSD 12 Sample Matrix Spike Duplicate										Run: ICPMS2-C_120412A 04/12/12 16:39
Aluminum		0.0480	mg/L	0.030	96	70	130	2.9	20	
Antimony		0.0519	mg/L	0.0010	104	70	130	1.8	20	
Arsenic		0.0565	mg/L	0.0010	109	70	130	2.3	20	
Beryllium		0.0432	mg/L	0.0010	86	70	130	0.9	20	
Cadmium		0.0474	mg/L	0.0010	95	70	130	1.2	20	
Lead		0.0523	mg/L	0.0010	105	70	130	2.7	20	
Manganese		0.515	mg/L	0.0010		70	130	2.2	20	A
Molybdenum		0.117	mg/L	0.0010	104	70	130	0.2	20	
Nickel		0.0598	mg/L	0.0050	97	70	130	5.9	20	
Selenium		0.0734	mg/L	0.0010	109	70	130	3.1	20	
Thallium		0.0537	mg/L	0.00050	107	70	130	2.9	20	
Uranium		1.76	mg/L	0.00030		70	130	3.6	20	A
Sample ID: C12040285-014BMS4 12 Sample Matrix Spike										Run: ICPMS2-C_120412A 04/12/12 17:26
Aluminum		0.127	mg/L	0.030	83	70	130			
Antimony		0.0478	mg/L	0.0010	96	70	130			
Arsenic		0.0523	mg/L	0.0010	100	70	130			
Beryllium		0.0442	mg/L	0.0010	88	70	130			
Cadmium		0.0484	mg/L	0.0010	97	70	130			
Lead		0.0487	mg/L	0.0010	97	70	130			
Manganese		0.0568	mg/L	0.0010	97	70	130			
Molybdenum		0.0432	mg/L	0.0010	85	70	130			
Nickel		0.0491	mg/L	0.0050	96	70	130			
Selenium		0.0567	mg/L	0.0010	113	70	130			
Thallium		0.0490	mg/L	0.00050	98	70	130			
Uranium		0.0490	mg/L	0.00030	95	70	130			
Sample ID: C12040285-014BMSD 12 Sample Matrix Spike Duplicate										Run: ICPMS2-C_120412A 04/12/12 17:29
Aluminum		0.126	mg/L	0.030	81	70	130	0.9	20	
Antimony		0.0467	mg/L	0.0010	93	70	130	2.3	20	
Arsenic		0.0517	mg/L	0.0010	98	70	130	1.1	20	
Beryllium		0.0434	mg/L	0.0010	87	70	130	2.0	20	
Cadmium		0.0474	mg/L	0.0010	95	70	130	2.0	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.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R158408
Sample ID: C12040285-014BMSD 12 Sample Matrix Spike Duplicate										
					Run: ICPMS2-C_120412A					04/12/12 17:29
Lead		0.0474	mg/L	0.0010	94	70	130	2.7	20	
Manganese		0.0561	mg/L	0.0010	96	70	130	1.3	20	
Molybdenum		0.0432	mg/L	0.0010	86	70	130	0.1	20	
Nickel		0.0483	mg/L	0.0050	94	70	130	1.6	20	
Selenium		0.0569	mg/L	0.0010	114	70	130	0.3	20	
Thallium		0.0478	mg/L	0.00050	96	70	130	2.4	20	
Uranium		0.0481	mg/L	0.00030	93	70	130	1.8	20	
Method: E200.8										Analytical Run: ICPMS2-C_120413B
Sample ID: ICV 2 Initial Calibration Verification Standard										
										04/13/12 16:56
Aluminum		0.0487	mg/L	0.0010	97	90	110			
Beryllium		0.0506	mg/L	0.0010	101	90	110			
Method: E200.8										Batch: R158464
Sample ID: LRB 2 Method Blank										
					Run: ICPMS2-C_120413B					04/13/12 18:17
Aluminum		ND	mg/L	0.001						
Beryllium		ND	mg/L	5E-05						
Sample ID: LFB 2 Laboratory Fortified Blank										
					Run: ICPMS2-C_120413B					04/13/12 18:20
Aluminum		0.0486	mg/L	0.0010	97	85	115			
Beryllium		0.0470	mg/L	0.0010	94	85	115			
Sample ID: C12040285-014BMS4 2 Sample Matrix Spike										
					Run: ICPMS2-C_120413B					04/13/12 19:46
Aluminum		0.139	mg/L	0.030	92	70	130			
Beryllium		0.0498	mg/L	0.0010	100	70	130			
Sample ID: C12040285-014BMSD 2 Sample Matrix Spike Duplicate										
					Run: ICPMS2-C_120413B					04/13/12 19:49
Aluminum		0.140	mg/L	0.030	94	70	130	0.7	20	
Beryllium		0.0500	mg/L	0.0010	100	70	130	0.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0								Analytical Run: IC2-C_120409A		
Sample ID: ICV-120409-10	3	Initial Calibration Verification Standard								04/09/12 15:46
Chloride		9.98	mg/L	1.0	100	90	110			
Nitrogen, Nitrate as N		4.83	mg/L	0.10	97	90	110			
Sulfate		39.2	mg/L	1.0	98	90	110			
Method: E300.0								Batch: R158346		
Sample ID: ICB-120409-11	3	Method Blank								04/09/12 16:00
Chloride		0.0410	mg/L	1.0						
Nitrogen, Nitrate as N		0.0190	mg/L	2.0						
Sulfate		0.169	mg/L	1.0						
Sample ID: LFB-120409-12	3	Laboratory Fortified Blank								04/09/12 16:15
Chloride		10.2	mg/L	1.0	102	90	110			
Nitrogen, Nitrate as N		4.86	mg/L	0.10	97	90	110			
Sulfate		40.0	mg/L	1.0	100	90	110			
Sample ID: C12040285-005AMS	3	Sample Matrix Spike								04/11/12 01:07
Chloride		122	mg/L	2.0	100	90	110			
Nitrogen, Nitrate as N		150	mg/L	1.0	87	90	110			S
Sulfate		1340	mg/L	8.0	87	90	110			S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.										
Sample ID: C12040285-005AMSD	3	Sample Matrix Spike Duplicate								04/11/12 01:21
Chloride		123	mg/L	2.0	101	90	110	0.8	10	
Nitrogen, Nitrate as N		149	mg/L	1.0	87	90	110	0.1	10	S
Sulfate		1340	mg/L	8.0	87	90	110	0.0	10	S
- Matrix spike recoveries outside the acceptance range are considered matrix-related.										
Sample ID: C12040285-014AMS	3	Sample Matrix Spike								04/11/12 04:14
Chloride		13.6	mg/L	1.0	101	90	110			
Nitrogen, Nitrate as N		4.61	mg/L	0.10	95	90	110			
Sulfate		49.3	mg/L	1.0	99	90	110			
Sample ID: C12040285-014AMSD	3	Sample Matrix Spike Duplicate								04/11/12 04:28
Chloride		13.6	mg/L	1.0	101	90	110	0.1	10	
Nitrogen, Nitrate as N		4.61	mg/L	0.10	95	90	110	0.1	10	
Sulfate		49.2	mg/L	1.0	99	90	110	0.2	10	
Sample ID: C12040285-024AMS	3	Sample Matrix Spike								04/11/12 07:50
Chloride		285	mg/L	4.0	100	90	110			
Nitrogen, Nitrate as N		150	mg/L	2.0	94	90	110			
Sulfate		2300	mg/L	16	90	90	110			
Sample ID: C12040285-024AMSD	3	Sample Matrix Spike Duplicate								04/11/12 08:05
Chloride		287	mg/L	4.0	100	90	110	0.4	10	
Nitrogen, Nitrate as N		151	mg/L	2.0	95	90	110	0.4	10	
Sulfate		2310	mg/L	16	91	90	110	0.4	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



www.energylab.com
Analytical Excellence Since 1852

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2										Batch: R158356
Sample ID: MBLK-1	Method Blank						Run: TECHNICON_120411A			04/11/12 11:49
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.06						
Sample ID: LCS-2	Laboratory Control Sample						Run: TECHNICON_120411A			04/11/12 11:51
Nitrogen, Nitrate+Nitrite as N		2.42	mg/L	0.10	97	90	110			
Sample ID: LFB-3	Laboratory Fortified Blank						Run: TECHNICON_120411A			04/11/12 11:54
Nitrogen, Nitrate+Nitrite as N		2.02	mg/L	0.10	103	90	110			
Sample ID: C12040285-003CMS	Sample Matrix Spike						Run: TECHNICON_120411A			04/11/12 14:54
Nitrogen, Nitrate+Nitrite as N		110	mg/L	2.5	95	90	110			
Sample ID: C12040285-003CMSD	Sample Matrix Spike Duplicate						Run: TECHNICON_120411A			04/11/12 14:56
Nitrogen, Nitrate+Nitrite as N		115	mg/L	2.5	105	90	110	4.4	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-5928
Sample ID: C12040277-001GMS	Sample Matrix Spike			Run: BERTHOLD 770-1_120409A			04/23/12 08:33			
Radium 226	24	pCi/L		114	70	130				
Sample ID: C12040277-001GMSD	Sample Matrix Spike Duplicate			Run: BERTHOLD 770-1_120409A			04/23/12 08:33			
Radium 226	23	pCi/L		110	70	130	1.7	22.3		
Sample ID: MB-RA226-5928	3 Method Blank			Run: BERTHOLD 770-1_120409A			04/23/12 11:41			
Radium 226	-0.007	pCi/L								U
Radium 226 precision (±)	0.09	pCi/L								
Radium 226 MDC	0.2	pCi/L								
Sample ID: LCS-RA226-5928	Laboratory Control Sample			Run: BERTHOLD 770-1_120409A			04/23/12 11:41			
Radium 226	6.7	pCi/L		106	80	120				

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 Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: RA-TH-ISO-1597
Sample ID: LCS-RA-TH-ISO-1597	Laboratory Control Sample			Run: ALPHANALYST_120409A			04/13/12 11:23			
Thorium 230		4.7	pCi/L	92		80	120			
Sample ID: C12031079-002FMS	Sample Matrix Spike			Run: ALPHANALYST_120409A			04/13/12 11:23			
Thorium 230		12	pCi/L	98		70	130			
Sample ID: C12031079-002FMSD	Sample Matrix Spike Duplicate			Run: ALPHANALYST_120409A			04/13/12 11:23			
Thorium 230		12	pCi/L	100		70	130	2.4	40:9	
Sample ID: MB-RA-TH-ISO-1597	3	Method Blank		Run: ALPHANALYST_120409A			04/13/12 11:24			
Thorium 230		-0.01	pCi/L							U
Thorium 230 precision (\pm)		0.05	pCi/L							
Thorium 230 MDC		0.2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



www.energylab.com
Analytical Excellence Since 1952

Helena, MT 877-472-0711 • Billings, MT 800-735-4489 • Casper, WY 888-235-0515
Gillette, WY 866-686-7175 • Rapid City, SD 888-672-1225 • College Station, TX 888-690-2218

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 06/29/12

Report Date: 04/30/12

Work Order: C12040285

Client: Western Nuclear Inc

Project: Split Rock Mill Site GWPP

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-4063
Sample ID: LCS-228-RA226-5928	Laboratory Control Sample			Run: TENNELEC-3_120409D			04/16/12 15:49			
Radium 228		5.7	pCi/L	90		80	120			
Sample ID: MB-RA226-5928	3	Method Blank			Run: TENNELEC-3_120409D			04/16/12 15:49		
Radium 228		0.2	pCi/L							U
Radium 228 precision (\pm)		0.8	pCi/L							
Radium 228 MDC		1	pCi/L							
Sample ID: C12040278-005GMS	Sample Matrix Spike			Run: TENNELEC-3_120409D			04/16/12 15:49			
Radium 228		15	pCi/L	117		70	130			
Sample ID: C12040278-005GMSD	Sample Matrix Spike Duplicate			Run: TENNELEC-3_120409D			04/16/12 15:49			
Radium 228		14	pCi/L	107		70	130	8.1	41.8	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Workorder Receipt Checklist



C12040285

Login completed by: Debra Williams

Date Received: 4/6/2012

Reviewed by: BL2000\kschroeder

Received by: dw

Reviewed Date: 4/17/2012

 Carrier Hand Del
 name:

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Container/Temp Blank temperature: 3.8°C On Ice

 Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

 Water - pH acceptable upon receipt? Yes ☒ No ☐ Not Applicable ☐

Contact and Corrective Action Comments:

None

PLEASE PRINT (Provide as much Information as possible.)

Company Name: Western Nuclear, Inc.	Project Name, PWS, Permit, Etc. Split Rock Mill Site GWPP	Sample Origin State: WY	EPA/State Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Report Mail Address: P.O. Box 630	Contact Name: Brad K. DeWaard	Phone/Fax: 307-349-1217	Email: bradkd@wbaaccess.net
Invoice Address: Je F Frey City, WY 82310	Invoice Contact & Phone: As Above	Purchase Order:	Sampler: (Please Print) Brad DeWaard Arnold Raymond
Special Report/Formats:	Quote/Bottle Order:		

- ☐ DW
☐ POTW/WWTP
☐ State:
☒ Other: **WRC**
- ☐ EDD/EDT (Electronic Data)
 Format: _____
☐ LEVEL IV
☐ NELAC

Number of Containers
 Sample Type: A W S V B O D W
 Air Water Soils/Solids
 Vegetation Bioassay Other
 DW - Drinking Water

ANALYSIS REQUESTED

SEE ATTACHED

Standard Turnaround (TAT)

R
U
S
H

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

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp

On Ice: ☒ Y ☐ N

Custody Seal

On Bottle

On Cooler

Intact

Signature

Match

LABORATORY USE ONLY

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX
1 WN-1	4-5-11	1130	W
2 WN-4R		1045	
3 WN-5		1030	
4 WN-21		1351	
5 SWAB-1R		1419	
6 SWAB-12R		1335	
7 WN-39B		1055	
8 WN-41B		0930	
9 WN-42A		1010	
10 JS-1R		0910	

pH, field =
~~6.18~~ 6.18
 5.96
 6.72
 7.45
 6.93
 7.61
 7.55
 8.03
 6.89
 7.14

Custody Record MUST be Signed	Relinquished by (print): ARNOLD RAYMOND	Date/Time: 4/6/12 11:30	Signature: <i>Arnold Raymond</i>	Received by (print):	Date/Time:	Signature:
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	Sample Disposal:	Return to Client:	Lab Disposal:	Received by Laboratory:	Date/Time:	Signature:
				WY 00	4-6-12 1130	

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.



Chain of Custody and Analytical Request Record

Page 2 of 3

PLEASE PRINT, provide as much information as possible.

Refer to corresponding notes on reverse side.

Company Name: Western Nuclear, Inc.		Project Name, PWS #, Permit #, Etc.: Split Rock Mill Site GWPP	
Report Address: P.O. Box 636		Contact Name, Phone, Fax, E-mail: Brad K. DeWaard bradk@wbaccess.net 307-349-1217	
Invoice Address: Jeffrey City, WY 82310		Invoice Contact & Phone #: As Above	
Report Required For: <input type="checkbox"/> POTW/WWT <input type="checkbox"/> DW <input type="checkbox"/> Other _____		Sampler Name if other than Contact: B.K. DeWaard A.G. Raymond	
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 NRC EDD/EDT <input type="checkbox"/> Format _____		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: pH, field =	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	
Collection Time		MATRIX	
1 SWR-UG		4/4/12 0730 W	
2 SWR-A		0755	
3 SWR-B		0810	
4 SWR-C		0825	
5 SWR-DG		0852	
6 SWAB-2		4/5/12 1404	
7 SWAB-4		1145	
8 SWAB-22		1105	
9 SWAB-29		1520	
10 SWAB-31		4-6-12 0920	
Custody Record MUST be Signed		Relinquished by: ARNOLD RAYMOND 4/6/12 11:20 Relinquished by: _____ Date/Time: _____ Shipped by: Arnold Raymond Shipped by: _____ Date/Time: _____	
Sample Disposal: _____		Return to client: _____ Lab Disposal: _____	
LABORATORY USE ONLY		Sample Type: _____ # of fractions: _____	



Chain of Custody and Analytical Request Record

Page 3 of 3

PLEASE PRINT (Provide as much information as possible.)

Company Name: <u>Western Nuclear, Inc.</u>		Project Name, PWS, Permit, Etc. <u>Split Rock Mill Site GWPP</u>		Sample Origin: State: <u>WY</u>		EPA/State Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Report Mail Address: <u>P.O. Box 630</u>		Contact Name: <u>Brad R. DeWard</u>		Phone/Fax: <u>307-349-1217</u>		Email: <u>brad@elgutoaccess.net</u>	
Invoice Address: <u>Jeffrey City, WY 82310</u>		Invoice Contact & Phone:		Purchase Order:		Sample (Please Print): <u>B.R. DeWard</u> <u>A.G. Raymond</u>	
Special Report/Formats: <input type="checkbox"/> DW <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		Number of Containers: Sample Type: <u>AWSVBODW</u> <u>Air Water Soils/Solids</u> <u>Vegetation Bioassay Other</u> <u>DW - Drinking Water</u>		ANALYSIS REQUESTED <u>See attached</u>		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments: <u>pH, field =</u> <u>7.70</u> <u>8.05</u>	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	Collection Time	MATRIX	SEE ATTACHED	Standard Turnaround (TAT) <u>R</u> <u>U</u> <u>S</u> <u>H</u>	Shipped by: <u>ELI</u> Cooler ID(s): <u>Client</u> Receipt Temp: <u>3.8 °C</u> On Ice: <input checked="" type="radio"/> Y <input type="radio"/> N Custody Seal: On Bottle: <input checked="" type="radio"/> Y <input type="radio"/> N On Cooler: <input checked="" type="radio"/> Y <input type="radio"/> N Intact: <input checked="" type="radio"/> Y <input type="radio"/> N Signature Match: <input checked="" type="radio"/> Y <input type="radio"/> N
1	<u>SWAB-32</u>	<u>4/5/12</u>	<u>1510</u>	<u>W</u>	<u>X</u>	<u>X</u>	LABORATORY USE ONLY <u>2040285</u>
2	<u>Field Blank</u>	<u>4/5/12</u>	<u>1555</u>	<u>W</u>	<u>X</u>	<u>X</u>	
3	<u>WN-1R</u>						
4	<u>WN-5B</u>						
5	<u>WN-5S</u>						
6							
7							
8							
9							
10							
Custody Record MUST be Signed	Relinquished by (print): <u>ARNOLD RAYMOND</u>	Date/Time: <u>4/6/12 11:30</u>	Signature: <u>Arnold Raymond</u>	Received by (print):	Date/Time:	Signature:	
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:	
	Sample Disposal: <u>Return to Client:</u>	Lab Disposal:	Received by Laboratory: <u>Ag. DeWard</u>	Date/Time: <u>4-6-12 1130</u>	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 for additional information: downloadable fee schedule, forms, and links.