



Umetco Minerals Corporation

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September 26, 2014

Mr. Dominic Orlando, Senior Project Manager
Decommissioning and Uranium Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike
Rockville, Maryland 20852

**Subject: Nuclear Regulatory Commission Annual Report
Umetco Minerals Corporation Gas Hills, Wyoming Site
For the report period July 2013 through June 2014**

Reference: License SUA-648, Docket No. 40-0299

Dear Mr. Orlando,

Umetco Minerals Corporation hereby submits two copies of the Gas Hills, Wyoming, Site Annual Report prepared in accordance with License SUA-648. This document is submitted in accordance with License Conditions 10B, 16, 32, 35, and 39 for the above report period.

If you, or your staff, have any questions, please call me at (970) 256-8889.

Sincerely,

Thomas E. Gieck
Reclamation Leader

Enclosures

cc: NRC Region IV (Arlington, TX)
Wyoming Department of Environmental Quality (Lander)
Bureau of Land Management (Casper Field Office)
Bureau of Land Management (Lander Field Office)

FSME20

U. S. Nuclear Regulatory Commission

**Annual Report
for
Gas Hills, Wyoming**

July 2013 through June 2014

**License SUA-648
Docket Number 40-0299**

Umetco Minerals Corporation
2754 Compass Drive, Suite 280
Grand Junction, Colorado 81506

September 2014

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1.0 INTRODUCTION

This document is submitted in accordance with U.S. Nuclear Regulatory Commission (NRC) License No. SUA-648 Amendment Number 70 (dated March 11, 2014), Conditions 10B, 16, 32, 35 and 39, Docket Number 40-0299, for the former uranium mill site at Gas Hills, Wyoming. The report includes the Umetco Minerals Corporation (Umetco) organizational structure, environmental monitoring report, land use survey and groundwater monitoring review for the period between July 1, 2013 and June 30, 2014. A copy of this annual report is retained at the Umetco office in Grand Junction, Colorado, and is available for NRC review.

2.0 ORGANIZATIONAL CHART

In accordance with License Condition 10B, the authority and responsibilities of each management level for Umetco are presented in Table 2.1 and are described below. Because reclamation of the site has been completed, Umetco has no on-site employees.

Umetco is a wholly owned subsidiary of Union Carbide Corporation which is a wholly owned subsidiary of The Dow Chemical Company (Dow).

The President of Umetco is responsible for all practices and decisions made by the personnel reporting to her and reports to the Vice President of Environmental, Health and Safety at Dow.

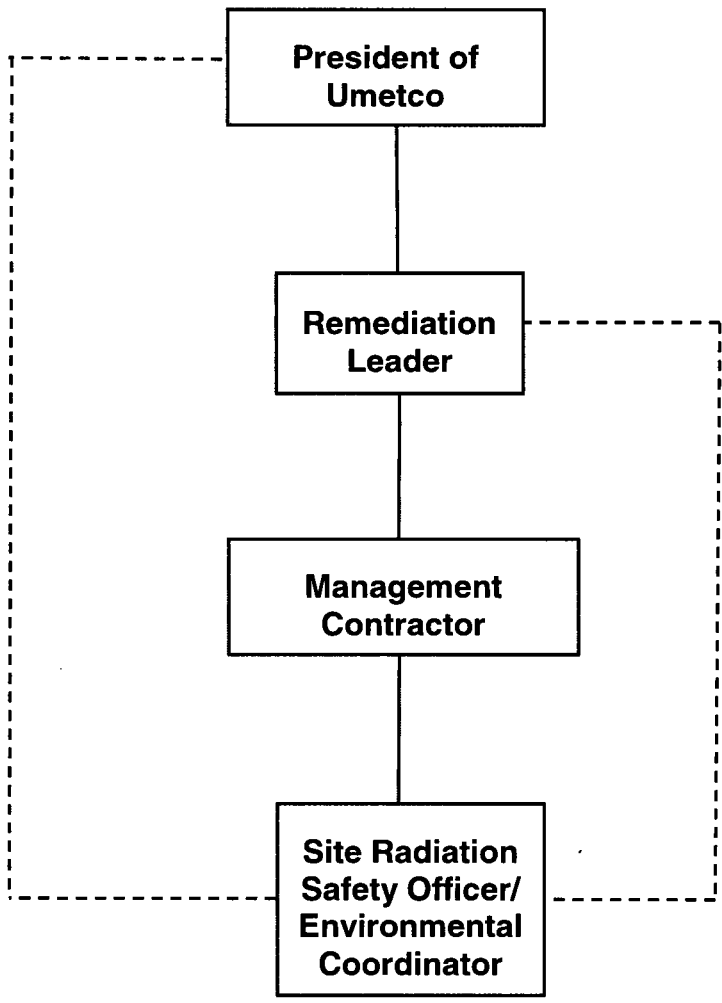
The Remediation Leader reports to the President of Umetco and provides site management.

Umetco has retained the services of a management contractor who is responsible for compliance with the operational, health, radiation, safety and environmental practices and standards, and conducts site maintenance and environmental monitoring. The management contractor is responsible for the day-to-day operating decisions at the site. The contractor reports to the Remediation Leader.

The Radiation Safety Officer/Environmental Coordinator is responsible for conducting activities that ensure the site radiation safety program meets applicable standards. This involves monitoring, evaluating personnel exposure and area surveys, overseeing the radiation protection program, providing appropriate training, maintaining monitoring equipment and reporting. The Radiation Safety Officer/Environmental Coordinator develops and coordinates procedure modifications for radiological protection and As Low As Reasonably Achievable (ALARA) policy adherence. The Radiation Safety Officer/Environmental Coordinator is authorized to address concerns to the President of Umetco and the Remediation Leader.

Umetco submitted a request for approval of a new Radiation Safety Officer on August 13, 2014. This correspondence is attached in Appendix A. NRC approval has not been received to date.

Table 2.1 2014 Organizational Chart for Umetco Minerals Corporation



3.0 ALARA AUDIT

As required by License Condition 16, an ALARA audit was performed in December 2013. The 2014 audit is scheduled for December 2014. A copy of the annual ALARA audit report is retained at the Umetco office in Grand Junction, Colorado, and is available for NRC review.

Reclamation of the site has reduced radiation exposures to essentially background levels. The dose to a member of the general public is based on historical data which indicate that radon-222 levels are below background levels. Gamma dose to the public historically has been approximately 58 millirems, which is below the 100 millirem standard.

4.0 ANNUAL LAND USE SURVEY

The annual land use survey was prepared in accordance with License Condition 32. Mining, mine reclamation, mineral exploration (for oil and gas and uranium), recreational use and seasonal grazing are the primary land uses within the five-mile Land Use Survey radius of the Gas Hills site. No changes in land use have occurred within the survey area since the 2013 annual report was submitted.

The following sections document current land uses.

4.1 Private Residences

The East Gas Hills site is located in a sparsely populated area within Natrona and Fremont counties in central Wyoming. The majority of the land within five miles of the site is public domain under Bureau of Land Management (BLM) jurisdiction.

The nearest residence, the JE Ranch, is approximately five miles northeast of the site. A metal building with small living quarters is occupied for one to two weeks per year as a base camp for hunters and ranch personnel. The nearest full-time residents are located approximately eight miles to the west-southwest at the Puddle Spring Ranch.

4.2 Grazing

Cattle are the primary livestock in the area and normally graze between April and October. Sheep have been observed grazing to the south of the site. Native grazing species include antelope, deer and elk.

4.3 Water Rights

The results of a search of the Wyoming State Engineer's Office e-Permit database for groundwater and surface water rights within the five-mile survey radius of the East Gas Hills site is given in Appendix B. The table in Appendix B does not include any cancelled or abandoned water rights. No new water rights have been granted since 2012.

4.4 Other Operations

Umetco has one permitted mine (Rattlesnake Quarry) within the five-mile survey radius of the Gas Hills site. The Rattlesnake Quarry has been active in the past and produced rock for the reclamation activities at the East Gas Hills site. Umetco last operated the quarry in October 2011.

Cameco Resources is in the final permitting stage of its Gas Hills *In Situ* Recovery Uranium Project, located approximately 2.5 miles south of the East Gas Hills site. The BLM Lander Field Office has reviewed the Record of Decision (ROD) and approved the Plan of Operations.

Energy Fuels Resources (USA) Inc., formerly Strathmore Minerals Corporation, terminated its Lower Gas Hills open pit/heap leach uranium mine project and request for an NRC materials license in the spring of 2014.

The SourceGas compressor station, located approximately 2.5 miles north of the East Gas Hills site, is still in use.

Table 5.2 Point of Compliance Well Sampling Results for the Southwestern Flow Regime, Collected on June 18, 2014

Analyte	Units	ACL	GW7	GW8
Arsenic	mg/L	1.36	0.0211	0.0421
Beryllium	mg/L	1.70	0.03352	0.1111
Lead-210	pCi/L	189	12 ± 0.78	40 ± 1.5
Nickel	mg/L	9.34	0.750	1.300
Radium-226 + -228	pCi/L	353	299.8 ± 2.6	86 ± 1.3
Selenium	mg/L	0.53	0.0009	0.0005
Thorium-230	pCi/L	44.8	0.67 ± 0.15	0.8 ± 0.16
Natural Uranium	mg/L	34.1	13.10	7.110

mg/L – milligrams per liter

pCi/L – picocuries per liter

5.2 Model Validation Sampling

As required by Table M-1 of Appendix M, the non-POC wells and POC wells MW21A and GW7 were sampled for chloride, sulfate and natural uranium in June 2014. The analytical results are shown in Tables 5.3 and 5.4.

Table 5.3 Model Validation Sampling Results for the Western Flow Regime Wells

Monitor Location	Sampling Date	Analyte (milligrams per liter)		
		Chloride	Sulfate	Natural Uranium ⁽¹⁾
MW1 ⁽²⁾	6-18-14	37.5	1530	4.260
MW21A	6-4-14	135	2380	0.0029
MW25	6-18-14	69	2570	0.0102
MW28 ⁽³⁾	6-17-14	115	1940	0.0014
MWI64	6-3-14	12.5	354	0.2396
MW70A	6-4-14	164	2600	2.840
MW71B ⁽³⁾	6-17-14	62.3	966	0.0042
MW77	6-17-14	9.9	852	0.0008
Iron Springs	6-2-14	15	715	0.1963

⁽¹⁾ There are no action levels for natural uranium at the non-POC wells.

⁽²⁾ Although not required by Appendix M, MW1 was sampled for model validation constituents.

⁽³⁾ MW28 and MW71B are model validation wells for the Western Flow Regime.

Table 5.4 Model Validation Sampling Results for the Southwestern Flow Regime Wells

Monitor Location	Sampling Date	Analyte (milligrams per liter)		
		Chloride	Sulfate	Natural Uranium ⁽¹⁾
GW7	6-18-14	281	1120	13.10
GW8 ⁽²⁾	6-18-14	283	1860	7.110
MW72 ⁽³⁾	6-17-14	211	1090	0.4211
MW82 ⁽³⁾	6-17-14	65.9	763	0.0912

⁽¹⁾ There are no action levels for natural uranium in non-POC wells.

⁽²⁾ Although not required by Appendix M, GW8 was sampled for model validation constituents.

⁽³⁾ MW72 and MW82 are model validation wells for the Southwestern Flow Regime.

Concentration trend plots of chloride, sulfate and natural uranium for wells in the Western Flow Regime are shown on Figures 21 through 23. Concentration trend plots of chloride, sulfate and natural uranium for wells in the Southwestern Flow Regime are shown on Figures 24 through 26. Isoconcentration maps for chloride, sulfate and natural uranium are given on Figures 27 through 30.

Table 5.5 compares the chloride and sulfate results of the four groundwater model validation wells (MW28, MW71B, MW72 and MW82) to the target level concentrations derived from the figures in the December 2011 revision of *Attachment M-1, Target Level Derivation and Model Validation Approach for Chloride and Sulfate* in Appendix M, *Groundwater Monitoring Plan*. As allowed by Section 4.1 of Appendix M, the target levels have also been shown at their appropriate significant figures.

Table 5.5 Comparison of June 2014 Chloride and Sulfate Target Level Concentrations at the Model Validation Wells versus Actual Concentrations

Model Validation Well	Chloride Concentration (mg/L)		Sulfate Concentration (mg/L)	
	Target Value at 2 Significant Figures ^(1,2)	Actual	Target Value at 3 Significant Figures ^(1,2)	Actual
MW28	110	115	2070	1940
MW71B	94	62.3	1620	966
MW72	150	211	1690	1090
MW82	110	65.9	1620	763

mg/L – milligrams per liter

Bold indicates exceedance

⁽¹⁾ Target concentrations were derived from the simulation figures in the December 2011 revision of *Attachment M-1, Target Level Derivation and Model Validation Approach for Chloride and Sulfate* in Appendix M, *Groundwater Monitoring Plan*. The target values are given in Tables 2 to 5 of Attachment M-1.

⁽²⁾ Target value presented with appropriate number of significant figures as provided for in Section 4.1 of Appendix M.

As seen in Table 5.5, the chloride concentrations in MW28 and MW72 are 115 mg/L and 211 mg/L, respectively, which exceed the June 2014 target values at two significant figures for those wells. These wells will not be resampled, as required by Appendix M, since ACL sampling is being performed at the model validation wells as detailed in Section 5.3. Sampling the ACL constituents at the model validation wells represents a more rigorous approach than using chloride and sulfate as a proxy for the ACL constituents.

The target levels and actual results for the 2002 to 2014 timeframe are shown in Figures 30 through 37.

5.3 Alternate Concentration Limit Constituent Sampling in All Monitor Wells

As recommended by the NRC in the letters dated September 24, 2012, and March 11, 2014, Umetco continued to sample all the monitor wells for the ACL constituents. Sampling was performed in June 2014 in conjunction with the license-required annual sampling event. Table 5.6 gives brief description of the correspondences, between Umetco and NRC, and activities relating to the evaluation of the groundwater model and the recommendations for the supplemental sampling.

Table 5.6 Chronology of Additional Sampling Correspondences and Sampling Events

Date	Author	Activity
January 24, 2012	Umetco	In light of the exceedances of the target level constituents at the model validation wells and in accordance with Table M-3 in Appendix M of the ACL Application, Umetco committed to performing a detailed evaluation of the groundwater model predictions using analytical data collected since the model's submittal.
June 2012	Umetco	Performed annual groundwater monitoring in accordance with license requirements.
June 25, 2012	Umetco	Submitted technical memorandum, <i>Gas Hills Groundwater Model and Data Review</i> , which provided an evaluation of the target levels for groundwater model validation constituents to ensure that the model predictions of ACL constituents accurately represented current site conditions.
September 24, 2012	NRC	Review of the June 25, 2012, memorandum. NRC recommended sampling of all ACL constituents at the model validation wells until transfer of site to DOE.
October 2012	Umetco	Performed ACL constituent sampling at the four model validation wells.
March 7, 2013	Umetco	Submitted the results and evaluation of the additional ACL sampling completed at the model validation wells in October 2012.
April 24, 2013	NRC	Review of the March 7, 2013, evaluation and concurrence to include ACL constituent monitoring at monitor well MWI64.

Table 5.6 Chronology of Additional Sampling Correspondences and Sampling Events, continued

Date	Author	Activity
June 2013	Umetco	Performed ACL constituent sampling at the four model validation wells and monitor well MWI64 in conjunction with license-required annual groundwater monitoring.
September 18, 2013	Umetco	Submitted the results and evaluation of the additional ACL sampling performed in the model validation wells and monitor well MWI64 in June 2013.
March 11, 2014	NRC	Review of the September 18, 2013, evaluation and provided recommendations to further evaluate the groundwater model and sample ACL constituents at all of the monitoring wells.
April 15, 2014	Umetco	Submitted a list of proposed activities for additional modeling and data collection, including sampling all monitor wells for ACL constituents.
May 8, 2014	NRC	Review and concurrence with the proposed activities.
June 2014	Umetco	Performed ACL constituent sampling at all the monitor wells in conjunction with license required annual groundwater monitoring.

An evaluation of the June 2014 sampling will be submitted under a separate cover letter; however, trend plots of radium-226 plus -228 concentrations in all the wells in the Western and Southwestern flow regimes are shown on Figures 38 and 39, respectively. Radium isoconcentrations are given on Figure 40.

As noted in the 2013 Annual Report, although target levels have been exceeded in some of the model validation wells between 2012 and 2014, the supplemental sampling showed that no ACL constituents were exceeded in any of these wells. Umetco will continue to sample the Western and Southwestern Flow Regime monitor wells for the ACL constituents as recommended by NRC; however, any model validation wells that exceed the model-predicted target levels will not be resampled as they are now being sampled for the ACL constituents. This approach provides a more definitive picture of plume migration, whereas chloride and sulfate are sampled mainly as indicators of overall groundwater movement.

A summary of the results of the additional ACL sampling performed in October 2012, June 2013 and June 2014 is given in Tables 5.7 and 5.8.

Table 5.7 Summary of ACL Sampling Results in Non-Point of Compliance Wells in the Western Flow Regime

Analyte	Units	ACL	Sample Date	MW25 ⁽¹⁾	MW28	MW70A ⁽¹⁾	MW71B	MW77 ⁽¹⁾	MWI64 ⁽²⁾	Iron Spring ⁽¹⁾
Arsenic	mg/L	1.8	October 2012	---	0.0096	---	0.0084	---	---	---
			June 2013	---	0.0090	---	0.0067	---	0.0123	---
			June 2014	0.2150	0.0096	0.0408	0.0064	0.0067	0.0098	0.0027
Beryllium	mg/L	1.64	October 2012	---	0.01036	---	0.00016	---	---	---
			June 2013	---	0.00965	---	0.00015	---	0.00297	---
			June 2014	0.0071	0.0106	0.035	0.00021	0.01132	0.00484	0.00515
Lead-210	pCi/L	35.4	October 2012	---	2.9 ± 1.6	---	8.3 ± 1.8	---	---	---
			June 2013	---	4.5 ± 1.9	---	-7.3 ± 2	---	-4.3 ± 2.4	---
			June 2014	-5.3 ± 1.4	3.3 ± 0.66	3.5 ± 1.4	-2.2 ± 0.65	-1.6 ± 0.56	-0.77 ± 0.66	-2 ± 0.81
Nickel	mg/L	13.0	October 2012	---	0.56	---	< 0.01	---	---	---
			June 2013	---	0.55	---	< 0.01	---	0.09	---
			June 2014	2.140	0.552	1.75	< 0.01	0.531	0.078	0.146
Radium-226 + -228	pCi/L	250	October 2012	---	156 ± 1.9	---	14.6 ± 0.8	---	---	---
			June 2013	---	199 ± 2.3	---	14.9 ± 1.1	---	15.6 ± 0.92	---
			June 2014	36 ± 1.5	163 ± 2.1	67 ± 1.9	14.5 ± 1.0	18.2 ± 1.3	16.7 ± 0.9	8.9 ± 0.7
Selenium	mg/L	0.161	October 2012	---	0.0004	---	< 0.0001	---	---	---
			June 2013	---	0.0002	---	< 0.0001	---	< 0.0001	---
			June 2014	0.0002	0.0002	0.0726	0.0001	< 0.0001	< 0.0001	0.0002
Thorium-230	pCi/L	57.4	October 2012	---	-0.15 ± 0.62	---	0.06 ± 0.43	---	---	---
			June 2013	---	-0.45 ± 0.4	---	-0.17 ± 0.46	---	6.5 ± 0.92	---
			June 2014	0.11 ± 0.09	0.09 ± 0.08	0.7 ± 0.16	0.05 ± 0.08	0.05 ± 0.07	0.13 ± 0.08	0.05 ± 0.07

Table 5.7 Summary of ACL Sampling Results in Non-Point of Compliance Wells in the Western Flow Regime, continued

Analyte	Units	ACL	Sample Date	MW25 ⁽¹⁾	MW28	MW70A ⁽¹⁾	MW71B	MW77 ⁽¹⁾	MWI64 ⁽²⁾	Iron Spring ⁽¹⁾
Natural Uranium	mg/L	11.9	October 2012	---	0.0008	---	0.0014	---	---	---
			June 2013	0.0045	0.0004	2.980	0.0012	0.0007	0.5255	0.0149
			June 2014	0.0102	0.0014	2.840	0.0042	0.0008	0.2396	0.1963

mg/L – milligrams per liter

pCi/L – picocuries per liter

1 MW25, MW70A, MW77 and Iron Spring were not sampled for ACL constituents in 2012 and 2013.

2 Monitor well MWI64 was not sampled for ACL constituents in 2012.

Table 5.8 Summary of ACL Sampling Results in Non-Point of Compliance Wells in the Southwestern Flow Regime

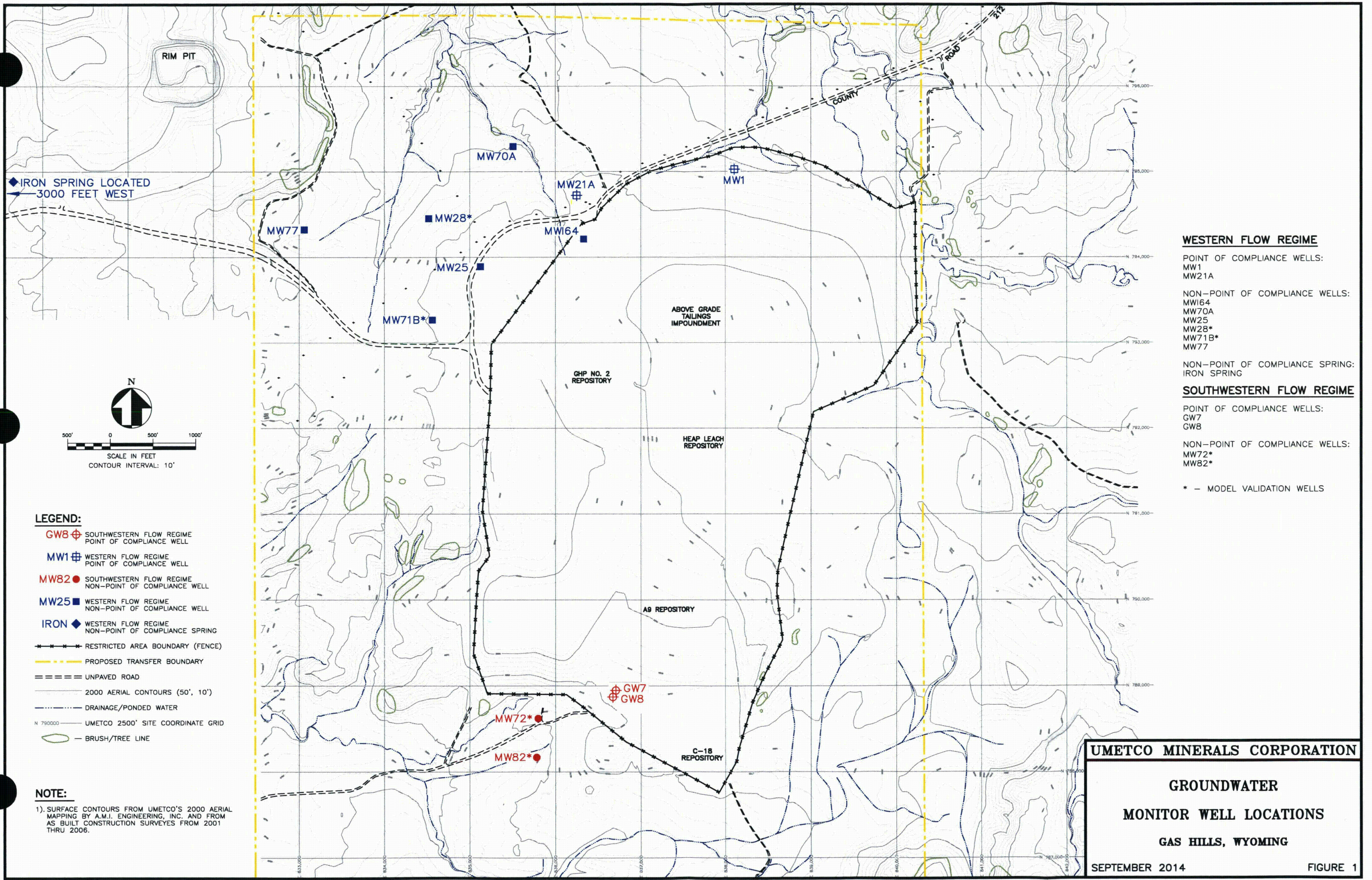
Analyte	Units	ACL	Sample Date	MW72	MW82
Arsenic	mg/L	1.36	October 2012	0.0105	0.0040
			June 2013	0.0072	0.0042
			June 2014	0.0153	0.0041
Beryllium	mg/L	1.70	October 2012	0.00028	0.00042
			June 2013	0.00020	0.00041
			June 2014	0.00020	0.00052
Lead-210	pCi/L	189	October 2012	2.1 ± 1.6	9.2 ± 1.7
			June 2013	7.2 ± 1.9	5.2 ± 2.2
			June 2014	3.3 ± 0.65	0.12 ± 0.48
Nickel	mg/L	9.34	October 2012	0.02	0.02
			June 2013	0.01	0.02
			June 2014	< 0.008	0.027
Radium-226 + -228	pCi/L	353	October 2012	13.9 ± 0.68	22.1 ± 0.7
			June 2013	14.7 ± 0.89	19.7 ± 1.3
			June 2014	17.2 ± 0.9	27.1 ± 0.9
Selenium	mg/L	0.53	October 2012	0.0048	0.0004
			June 2013	0.0032	0.0003
			June 2014	0.0026	0.0003
Thorium-230	pCi/L	44.8	October 2012	-0.57 ± 0.54	0.01 ± 0.48
			June 2013	-0.44 ± 0.51	0.01 ± 0.31
			June 2014	0.03 ± 0.06	-0.02 ± 0.07
Natural Uranium	mg/L	34.1	October 2012	0.3066	0.0657
			June 2013	0.3938	0.0773
			June 2014	0.4211	0.0912

mg/L – milligrams per liter

pCi/L – picocuries per liter

6.0 REFERENCES

- Nuclear Regulatory Commission. November 22, 2011. *License Amendment – Umetco Minerals Corporation’s Request to Revise Appendix M, Groundwater Monitoring Plan for the Gas Hill Uranium Mill Tailings Site, to Modify License Condition 35D and to Eliminate License Condition 35E of License (SUA-648)*. License Amendment No. 66.
- Nuclear Regulatory Commission. March 11, 2014. *U.S. Nuclear Regulatory Commission Staff Review of Umetco’s June 2013 Groundwater Sampling Results and Evaluation and Amendment to License SUA-648 to Reflect Umetco’s New Address and to Correct a Typographical Error*. License Amendment No. 70.
- Nuclear Regulatory Commission. September 10, 2014. *Request for Approval of Ratiation Safety Officer for Umetco’s Gas Hills, Wyoming Site*.
- Umetco Minerals Corporation. October 31, 2011. *Request for License Amendment to License Condition 35A – Appendix M. With attachment - Application for Alternate Concentration Limits for Gas Hills, Wyoming, Appendix M - Groundwater Monitoring Plan, March 2002, Revised October 2011*.
- Umetco Minerals Corporation. August 13, 2014. *Administrative Amendment Request to Change RSO Designation*.



WESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
MW1
MW21A

NON-POINT OF COMPLIANCE WELLS:
MW164
MW70A
MW25
MW28*
MW71B*
MW77

NON-POINT OF COMPLIANCE SPRING:
IRON SPRING

SOUTHWESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
GW7
GW8

NON-POINT OF COMPLIANCE WELLS:
MW72*
MW82*

* - MODEL VALIDATION WELLS

- LEGEND:**
- GW8 ⊕ SOUTHWESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW1 ⊕ WESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW82 ● SOUTHWESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - MW25 ■ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - IRON ◆ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE SPRING
 - RESTRICTED AREA BOUNDARY (FENCE)
 - - - PROPOSED TRANSFER BOUNDARY
 - ==== UNPAVED ROAD
 - 2000 AERIAL CONTOURS (50', 10')
 - DRAINAGE/PONDED WATER
 - N 790000 UMETCO 2500' SITE COORDINATE GRID
 - BRUSH/TREE LINE

NOTE:
1). SURFACE CONTOURS FROM UMETCO'S 2000 AERIAL MAPPING BY A.M.I. ENGINEERING, INC. AND FROM AS BUILT CONSTRUCTION SURVEYS FROM 2001 THRU 2006.

UMETCO MINERALS CORPORATION

GROUNDWATER

MONITOR WELL LOCATIONS

GAS HILLS, WYOMING

SEPTEMBER 2014

FIGURE 1

Figure 2 Arsenic Trends in Western Flow Regime POC Wells

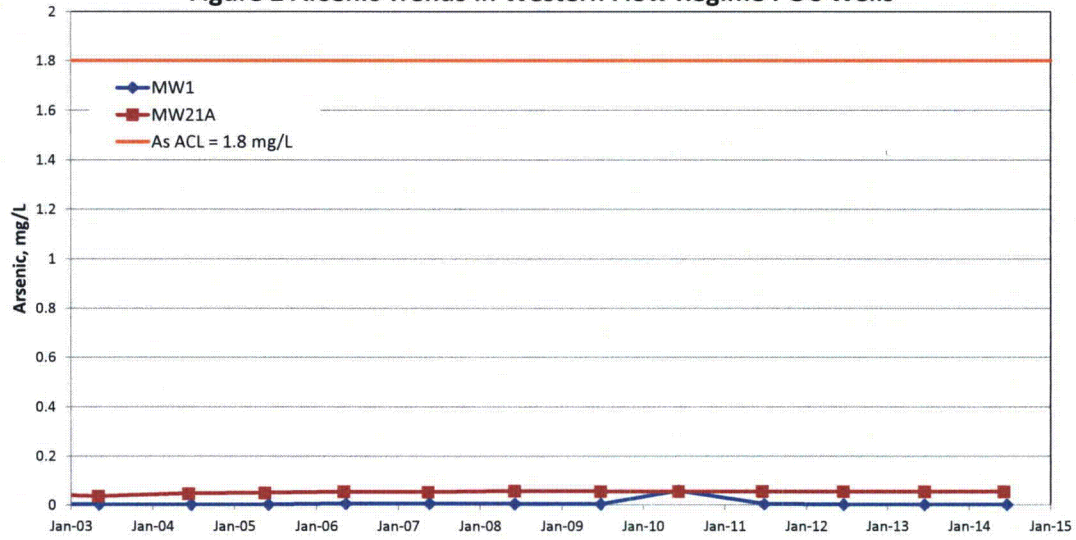


Figure 3 Beryllium Trends in Western Flow Regime POC Wells

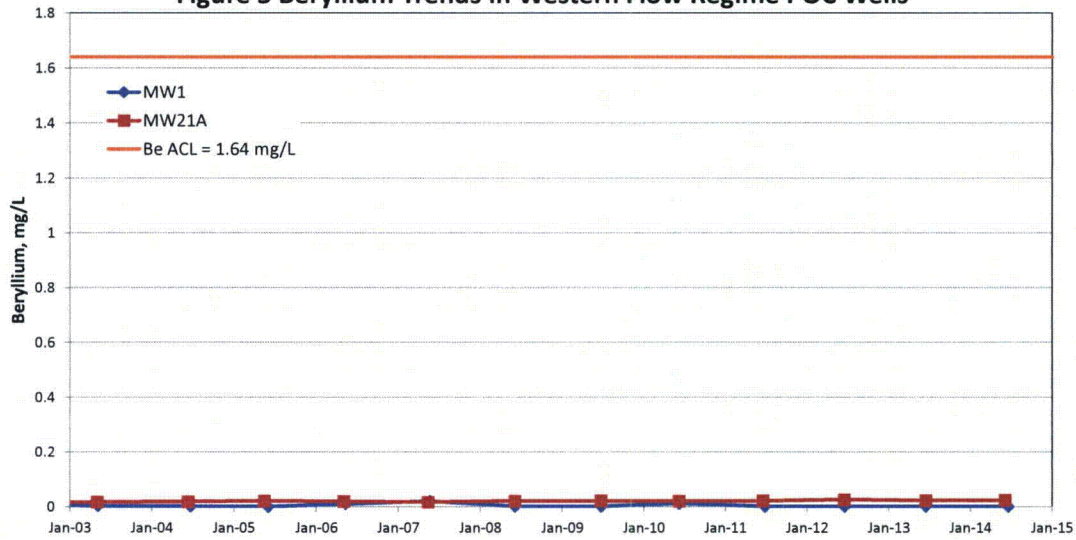


Figure 4 Lead-210 Trends in Western Flow Regime POC Wells

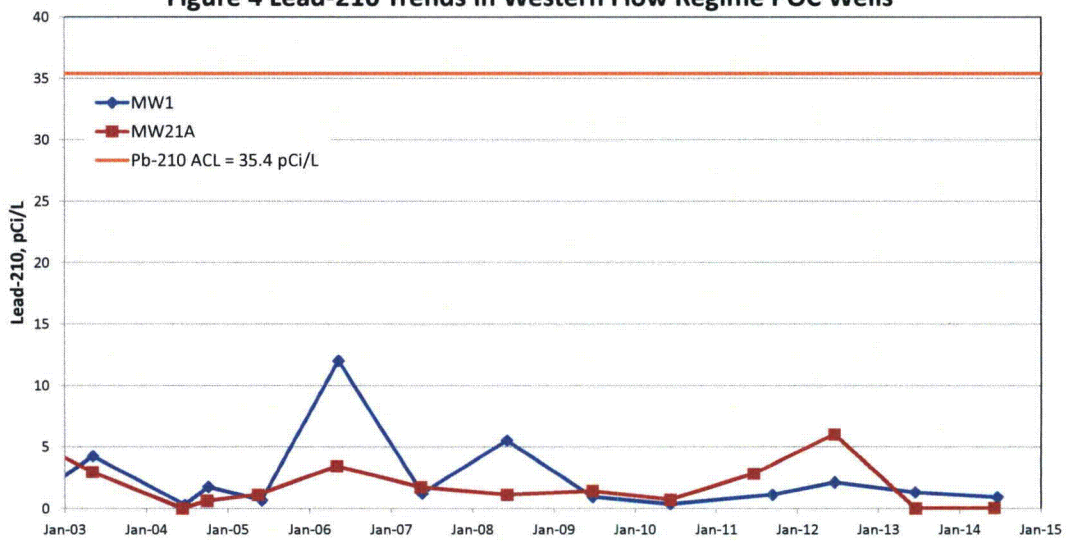


Figure 5 Nickel Trends in Western Flow Regime POC Wells

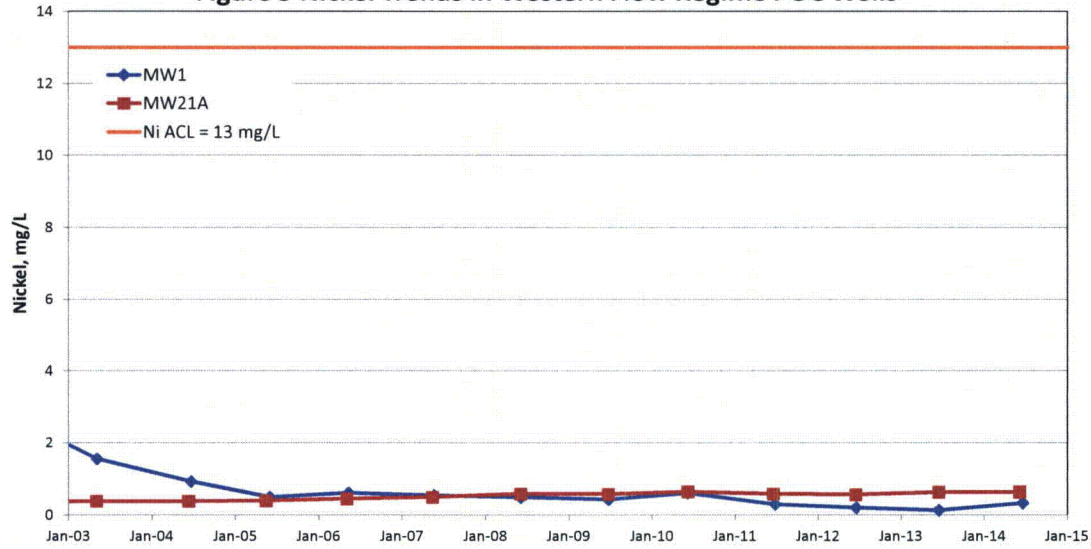


Figure 6 Radium-226 plus -228 Trends in Western Flow Regime POC Wells

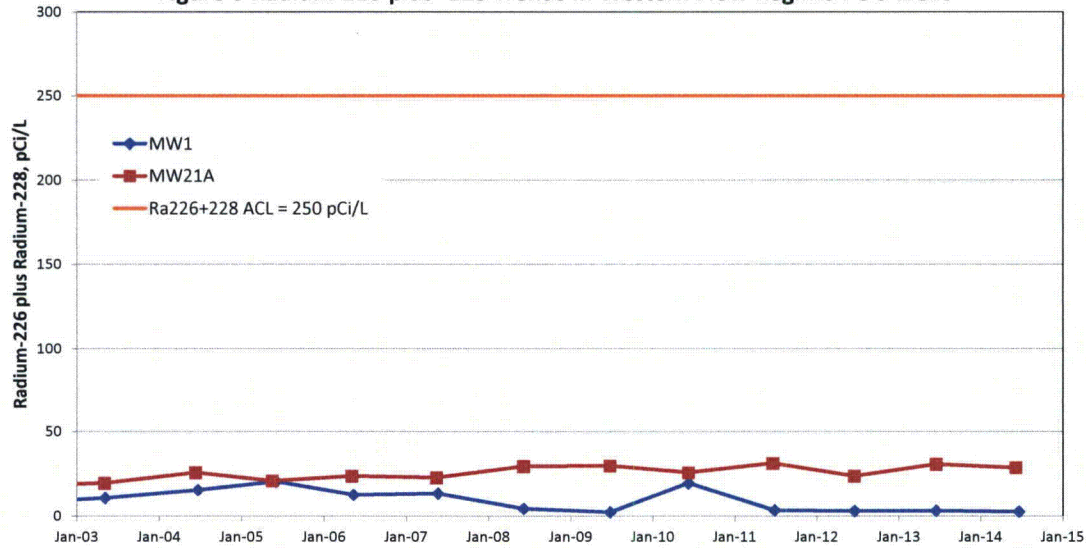


Figure 7 Selenium Trends in Western Flow Regime POC Wells

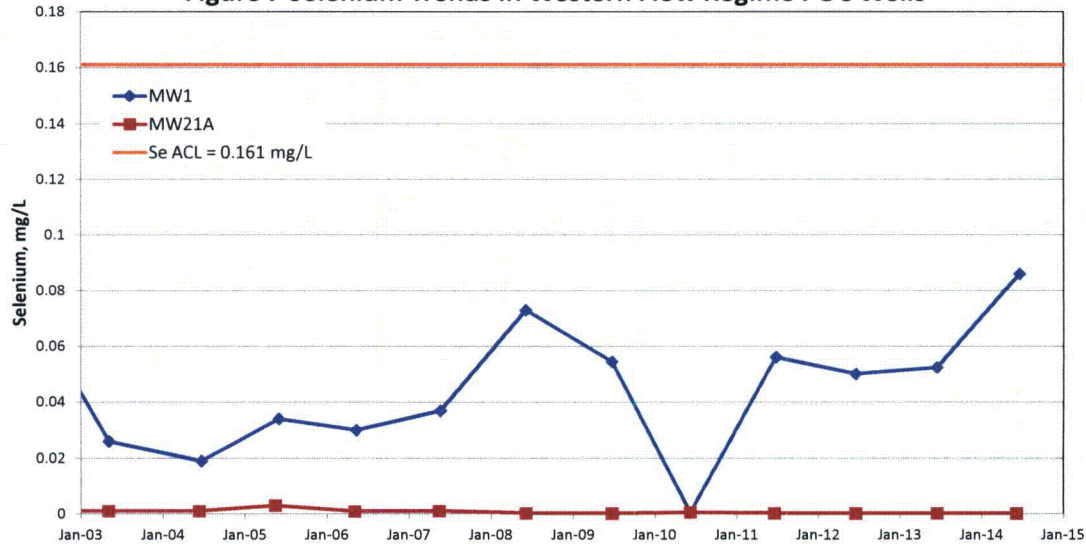


Figure 8 Thorium-230 Trends in Western Flow Regime POC Wells

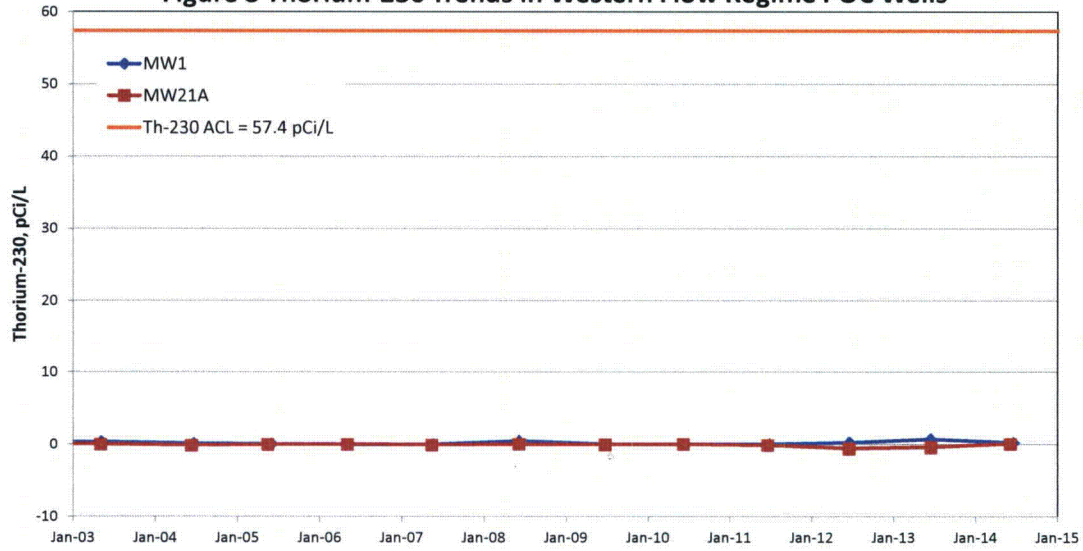


Figure 9 Natural Uranium Trends in Western Flow Regime POC Wells

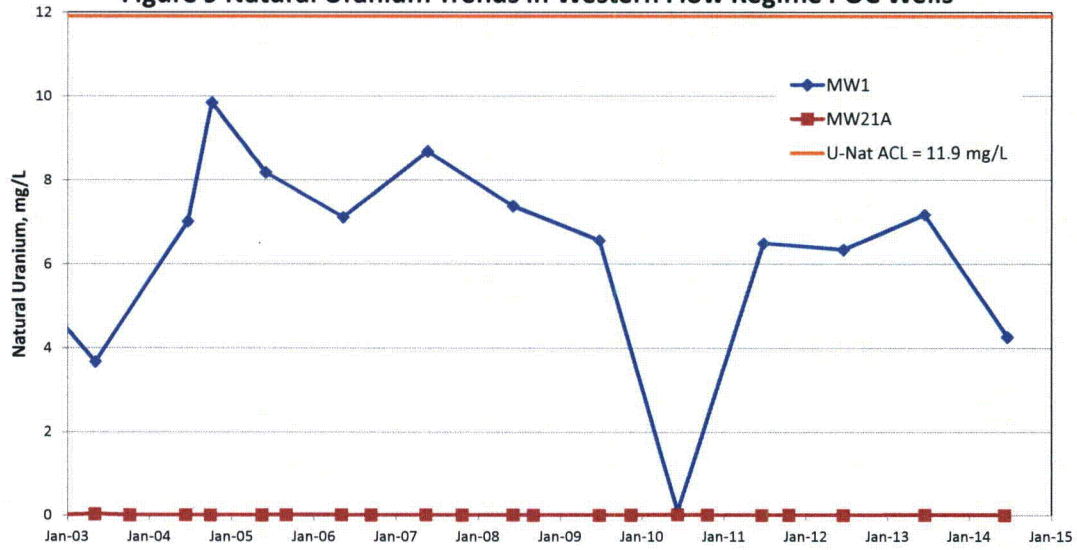


Figure 10 Arsenic Trends in Southwestern Flow Regime POC Wells

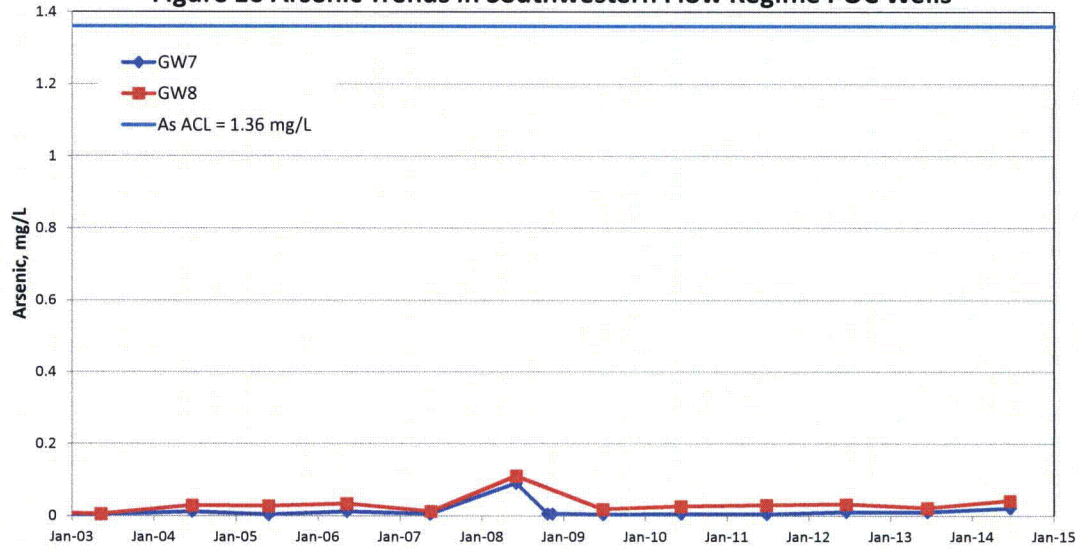


Figure 11 Beryllium Trends in Southwestern Flow Regime POC Wells

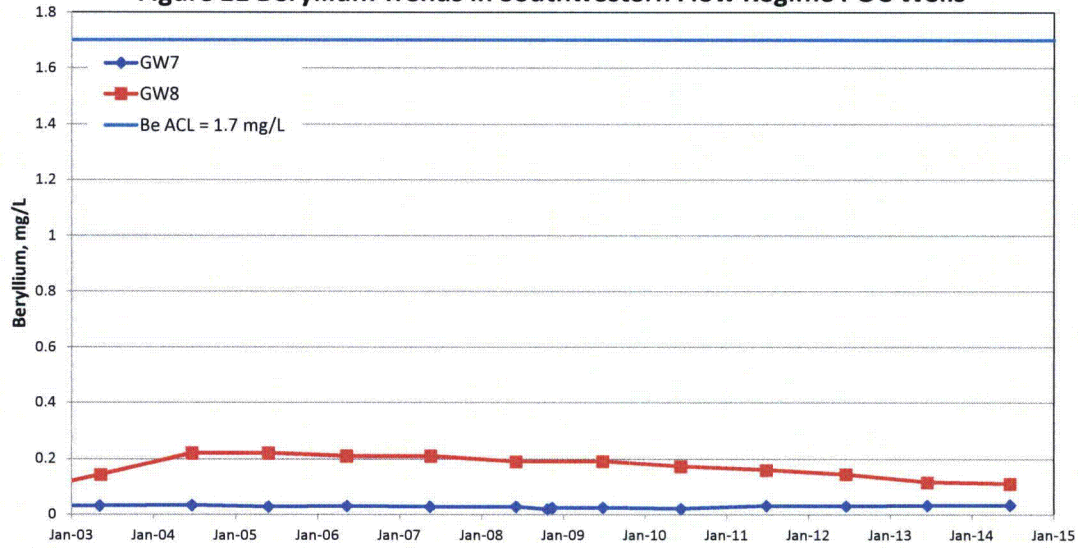


Figure 12 Lead-210 Trends in Southwestern Flow Regime POC Wells

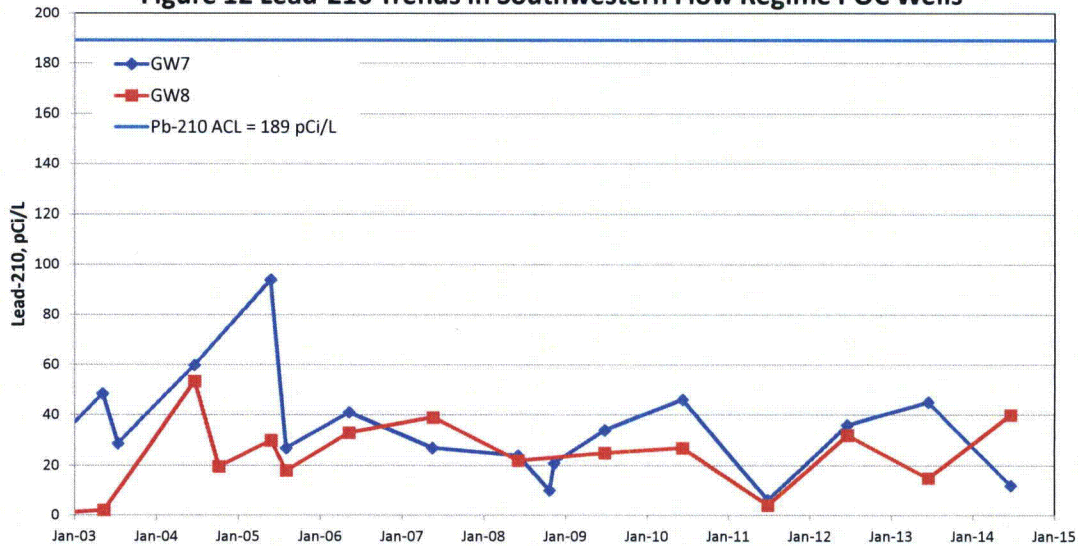


Figure 13 Nickel Trends in Southwestern Flow Regime POC Wells

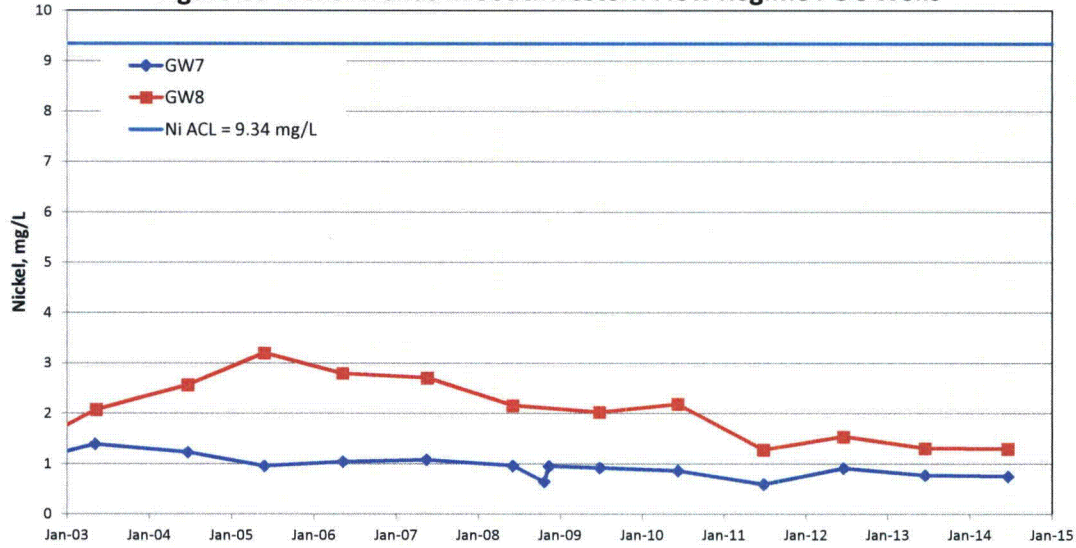


Figure 14 Radium-226 plus -228 Trends in Southwestern Flow Regime POC Wells

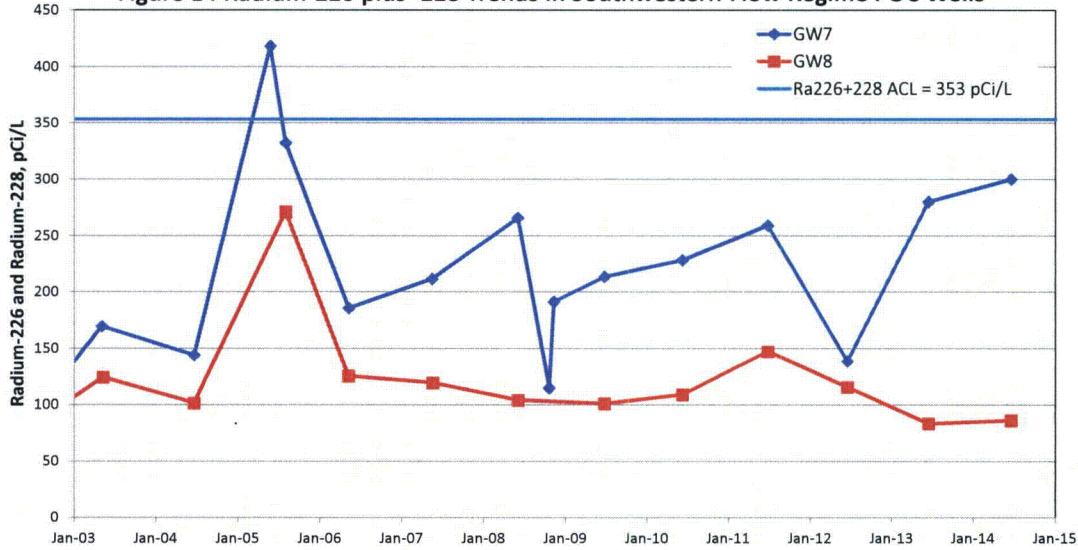


Figure 15 Selenium Trends in Southwestern Flow Regime POC Wells

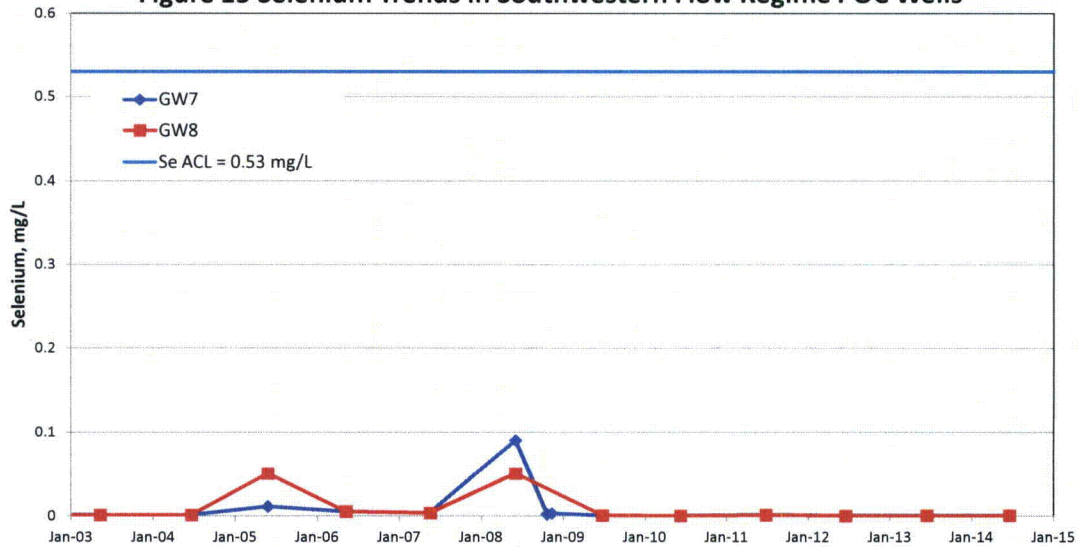


Figure 16 Thorium-230 Trends in Southwestern Flow Regime POC Wells

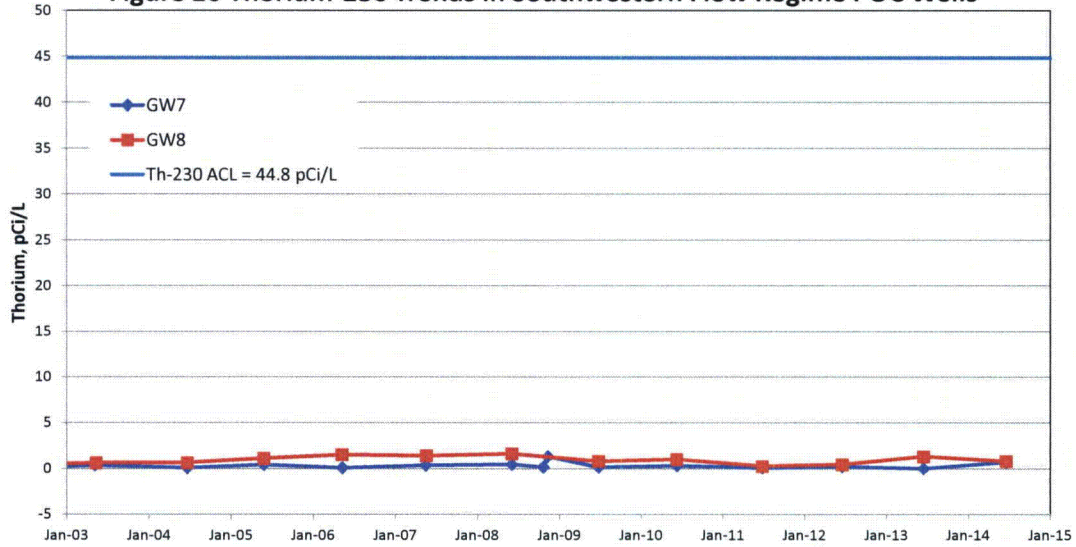
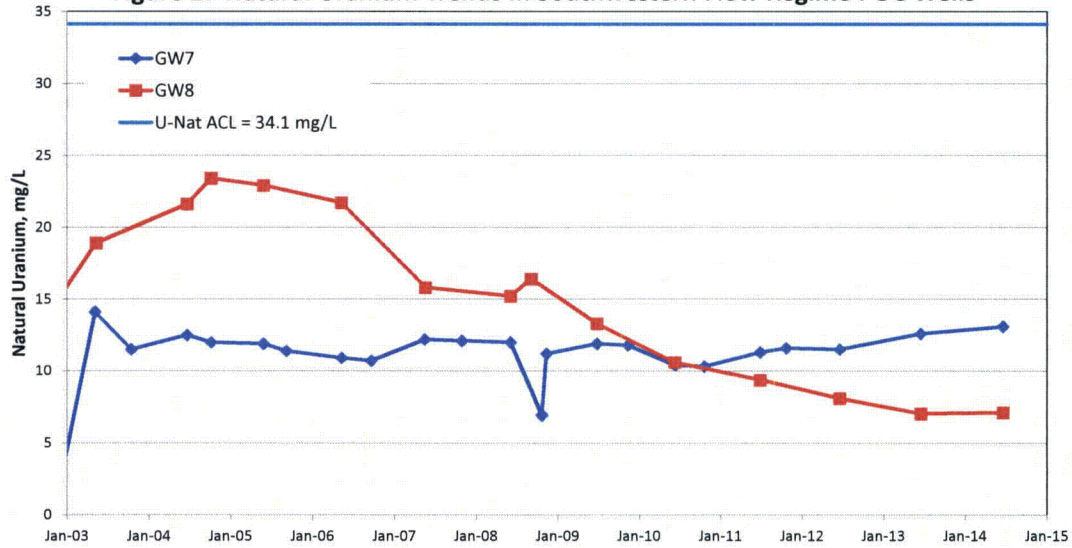
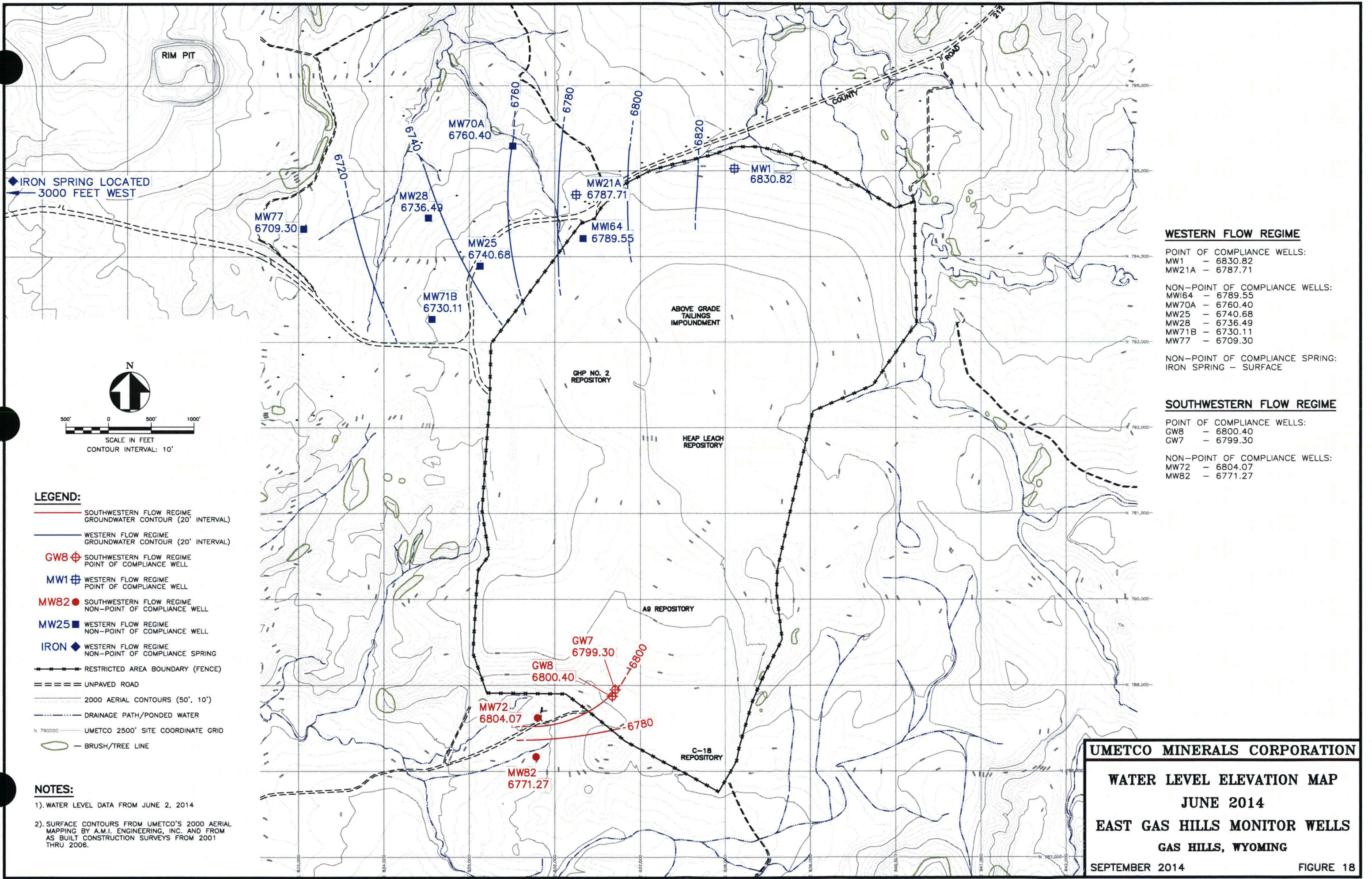
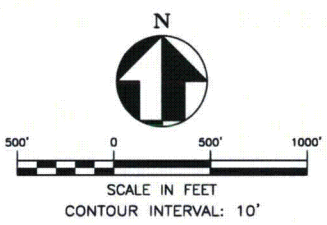


Figure 17 Natural Uranium Trends in Southwestern Flow Regime POC Wells





◆ IRON SPRING LOCATED
3000 FEET WEST



- LEGEND:**
- SOUTHWESTERN FLOW REGIME GROUNDWATER CONTOUR (20' INTERVAL)
 - WESTERN FLOW REGIME GROUNDWATER CONTOUR (20' INTERVAL)
 - GW8 ⊕ SOUTHWESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW1 ⊕ WESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW82 ● SOUTHWESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - MW25 ■ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - IRON ◆ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE SPRING
 - +—+—+— RESTRICTED AREA BOUNDARY (FENCE)
 - ==== UNPAVED ROAD
 - 2000 AERIAL CONTOURS (50', 10')
 - DRAINAGE PATH/PONDED WATER
 - N 790000 — UMETCO 2500' SITE COORDINATE GRID
 - — BRUSH/TREE LINE

- NOTES:**
- 1). WATER LEVEL DATA FROM JUNE 2, 2014
 - 2). SURFACE CONTOURS FROM UMETCO'S 2000 AERIAL MAPPING BY A.M.I. ENGINEERING, INC. AND FROM AS BUILT CONSTRUCTION SURVEYS FROM 2001 THRU 2006.

WESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
MW1 - 6830.82
MW21A - 6787.71

NON-POINT OF COMPLIANCE WELLS:
MW164 - 6789.55
MW70A - 6760.40
MW25 - 6740.68
MW28 - 6736.49
MW71B - 6730.11
MW77 - 6709.30

NON-POINT OF COMPLIANCE SPRING:
IRON SPRING - SURFACE

SOUTHWESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
GW8 - 6800.40
GW7 - 6799.30

NON-POINT OF COMPLIANCE WELLS:
MW72 - 6804.07
MW82 - 6771.27

UMETCO MINERALS CORPORATION
WATER LEVEL ELEVATION MAP
JUNE 2014
EAST GAS HILLS MONITOR WELLS
GAS HILLS, WYOMING
SEPTEMBER 2014 FIGURE 18

Figure 19 Phreatic Elevations in Western Flow Regime Monitor Wells

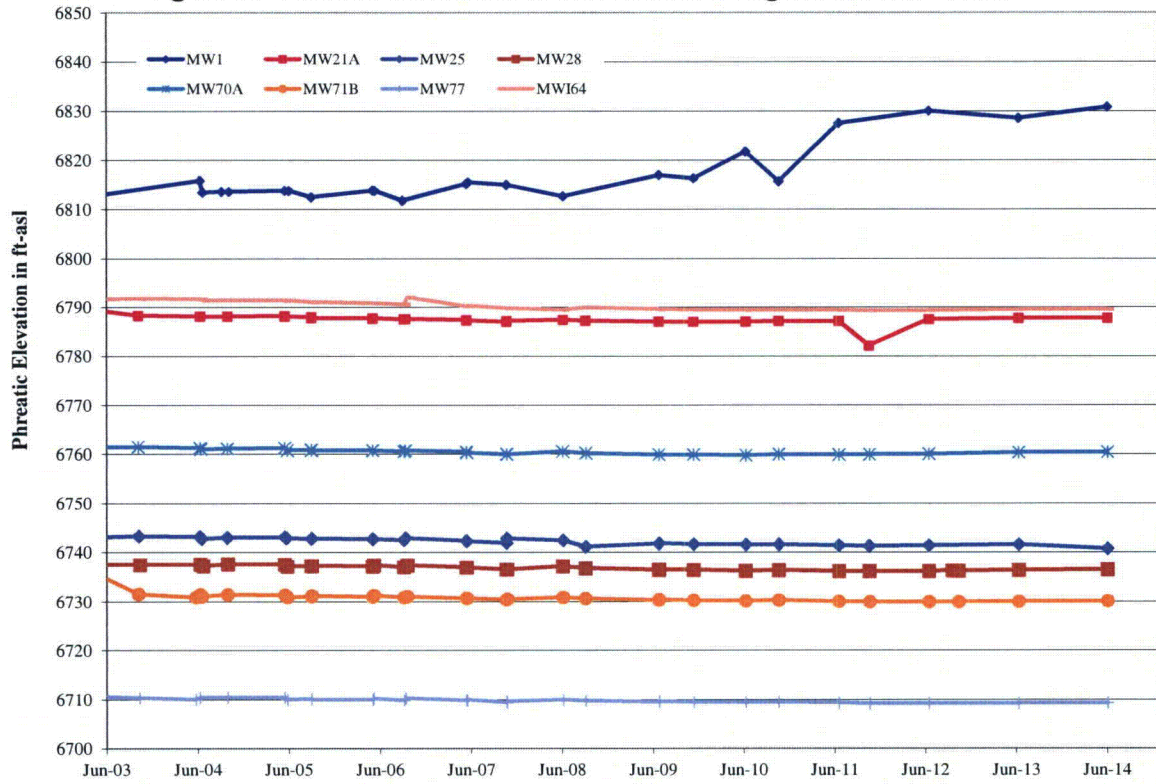


Figure 20 Phreatic Elevations in Southwestern Flow Regime Monitor Wells

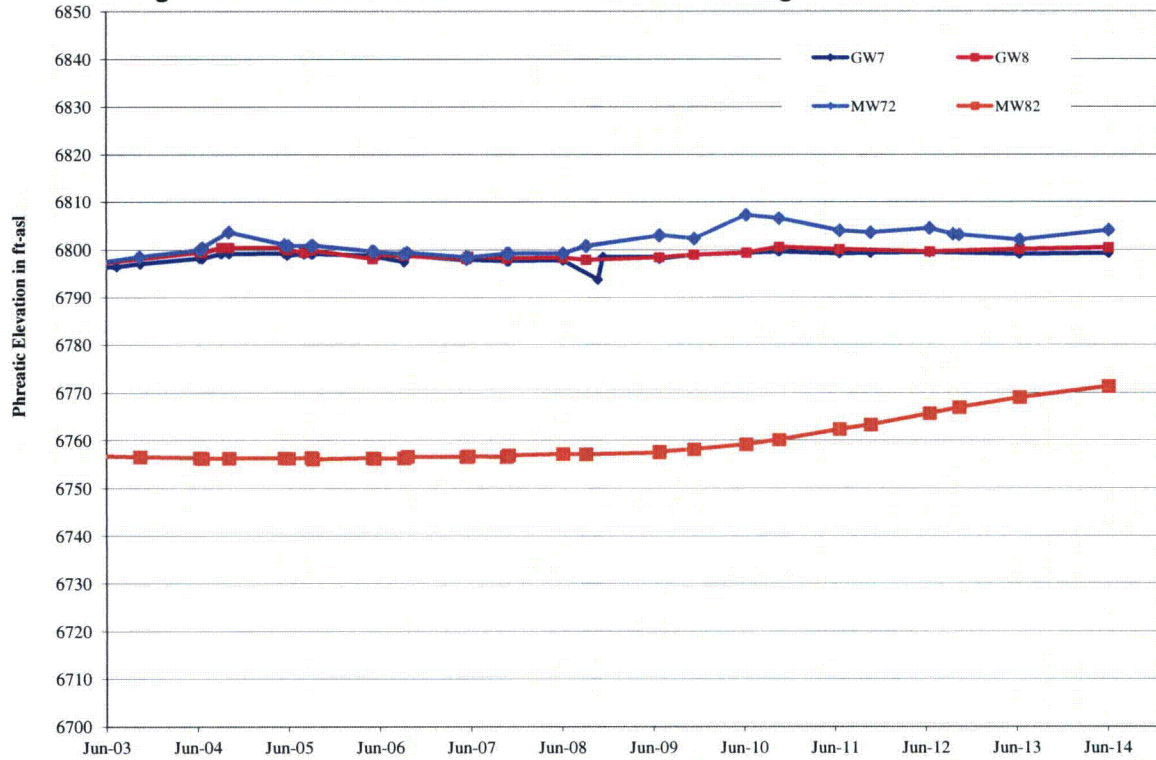


Figure 21 Chloride Trends in Western Flow Regime Monitor Wells

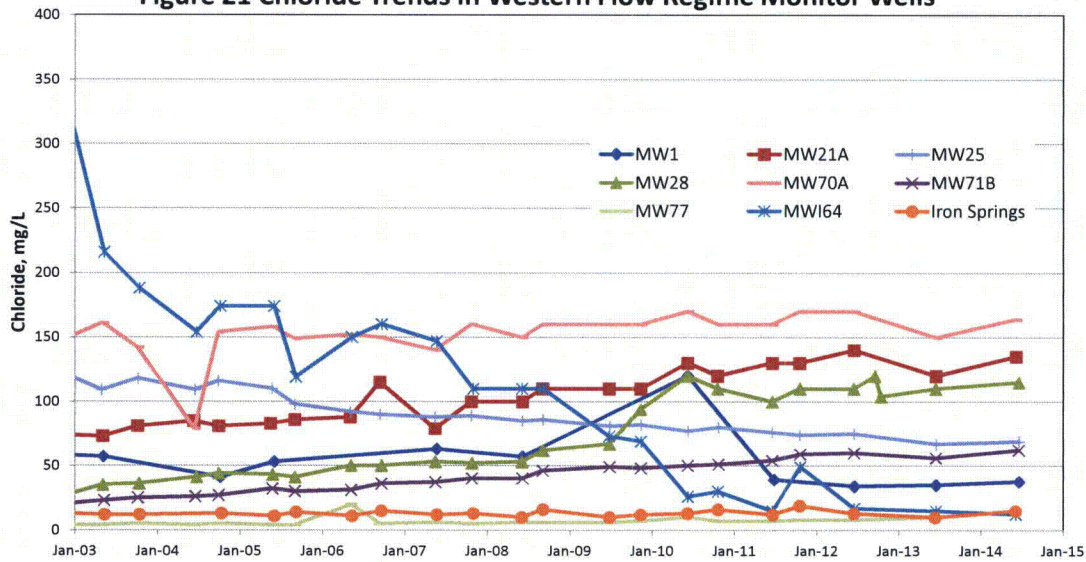


Figure 22 Sulfate Trends in Western Flow Regime Monitor Wells

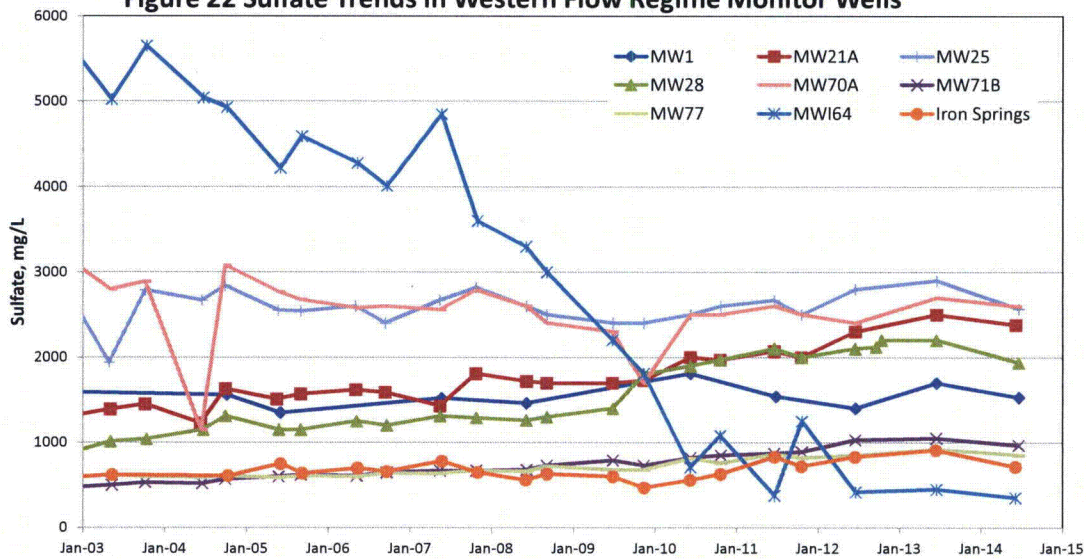


Figure 23 Natural Uranium Trends in Western Flow Regime Monitor Wells

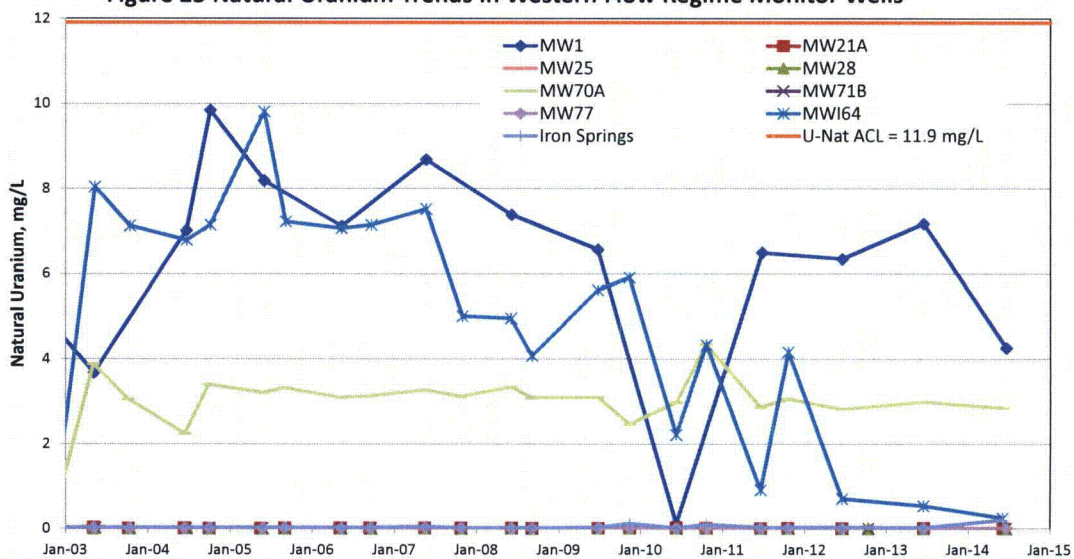


Figure 24 Chloride Trends in Southwestern Flow Regime Monitor Wells

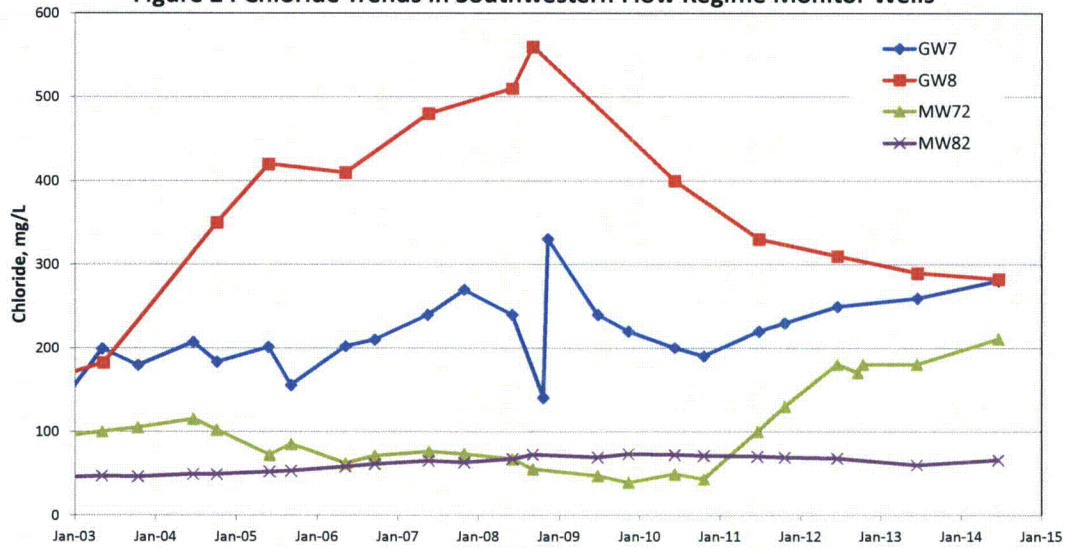


Figure 25 Sulfate Trends in Southwestern Flow Regime Monitor Wells

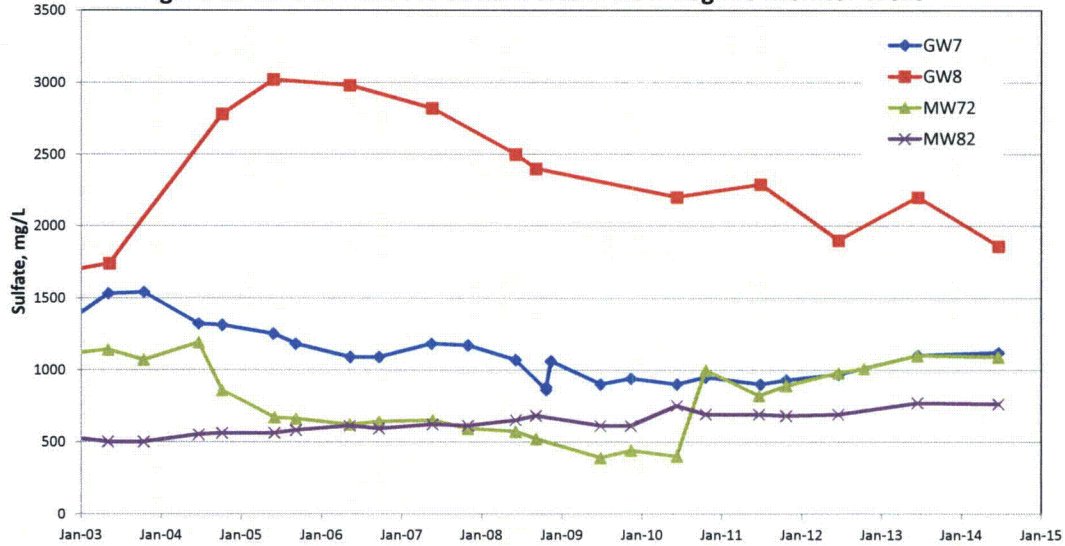
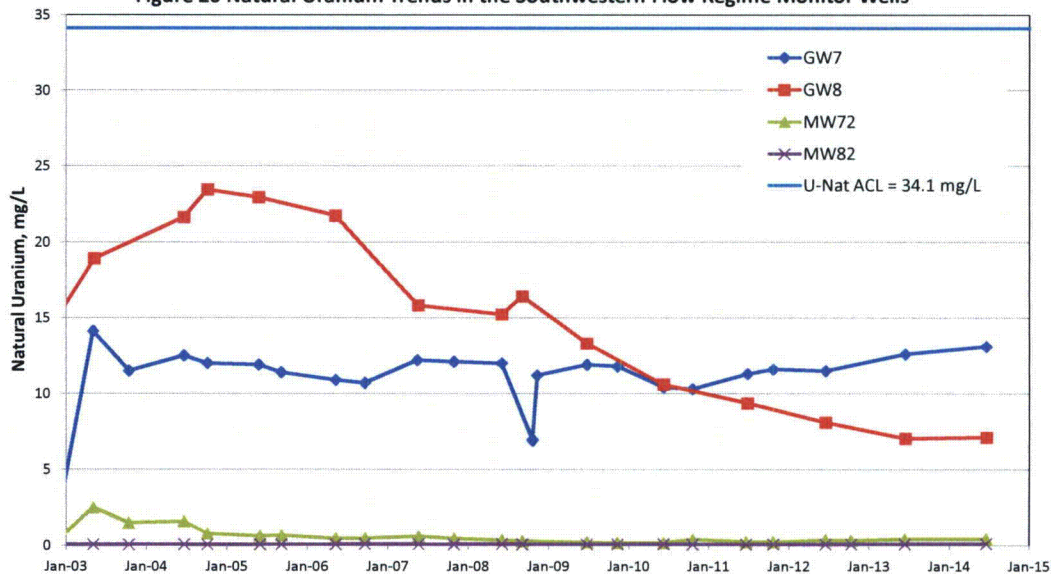
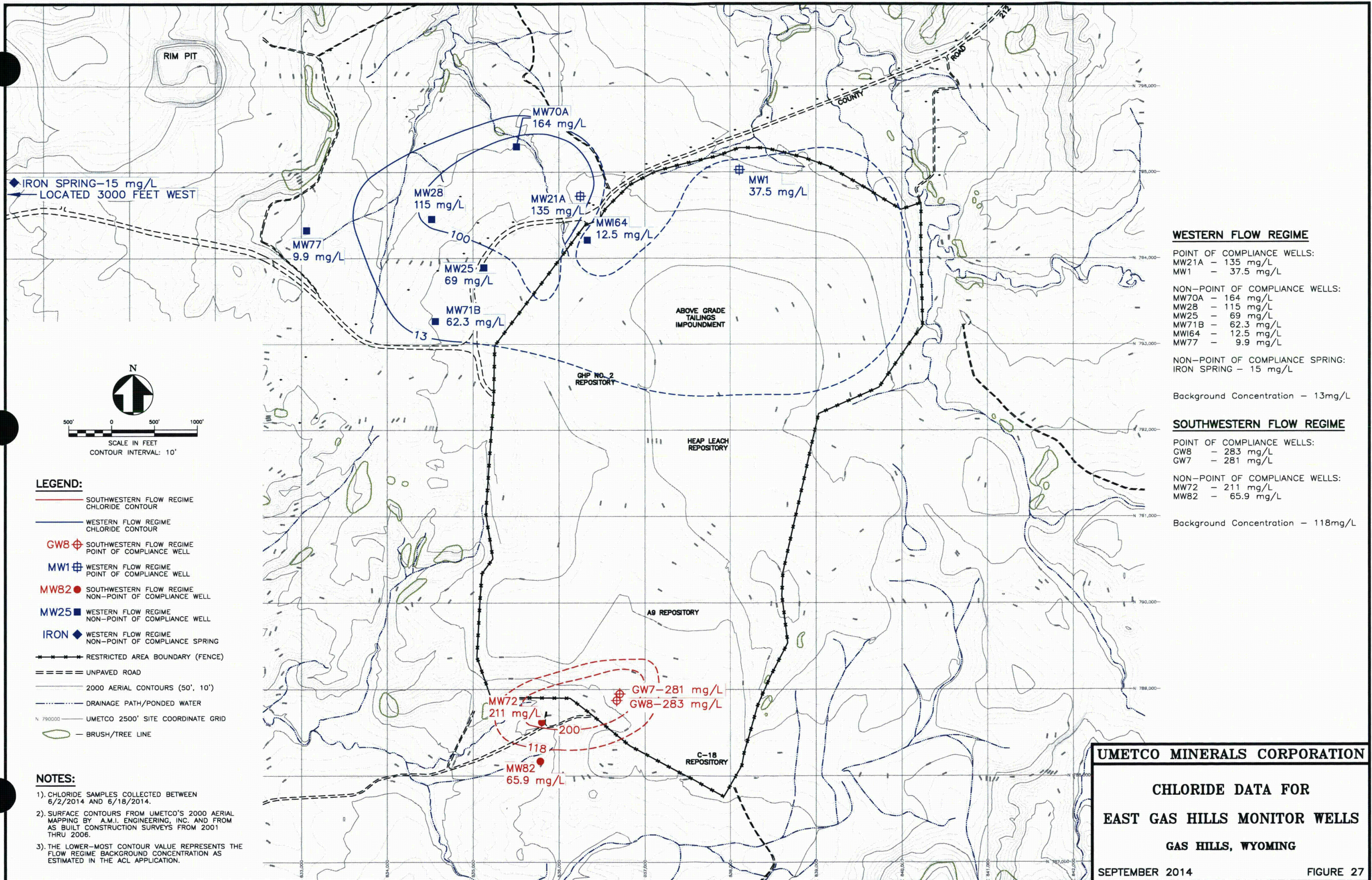
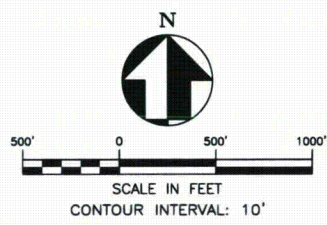


Figure 26 Natural Uranium Trends in the Southwestern Flow Regime Monitor Wells





◆ IRON SPRING—15 mg/L
 ← LOCATED 3000 FEET WEST



- LEGEND:**
- SOUTHWESTERN FLOW REGIME CHLORIDE CONTOUR
 - WESTERN FLOW REGIME CHLORIDE CONTOUR
 - GW8 ⊕ SOUTHWESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW1 ⊕ WESTERN FLOW REGIME POINT OF COMPLIANCE WELL
 - MW82 ● SOUTHWESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - MW25 ■ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
 - IRON ◆ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE SPRING
 - RESTRICTED AREA BOUNDARY (FENCE)
 - == UNPAVED ROAD
 - 2000 AERIAL CONTOURS (50', 10')
 - DRAINAGE PATH/PONDED WATER
 - UMETCO 2500' SITE COORDINATE GRID
 - BRUSH/TREE LINE

- NOTES:**
- 1) CHLORIDE SAMPLES COLLECTED BETWEEN 6/2/2014 AND 6/18/2014.
 - 2) SURFACE CONTOURS FROM UMETCO'S 2000 AERIAL MAPPING BY A.M.I. ENGINEERING, INC. AND FROM AS BUILT CONSTRUCTION SURVEYS FROM 2001 THRU 2006.
 - 3) THE LOWER-MOST CONTOUR VALUE REPRESENTS THE FLOW REGIME BACKGROUND CONCENTRATION AS ESTIMATED IN THE ACL APPLICATION.

WESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
 MW21A - 135 mg/L
 MW1 - 37.5 mg/L

NON-POINT OF COMPLIANCE WELLS:
 MW70A - 164 mg/L
 MW28 - 115 mg/L
 MW25 - 69 mg/L
 MW71B - 62.3 mg/L
 MWI64 - 12.5 mg/L
 MW77 - 9.9 mg/L

NON-POINT OF COMPLIANCE SPRING:
 IRON SPRING - 15 mg/L

Background Concentration - 13mg/L

SOUTHWESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
 GW8 - 283 mg/L
 GW7 - 281 mg/L

NON-POINT OF COMPLIANCE WELLS:
 MW72 - 211 mg/L
 MW82 - 65.9 mg/L

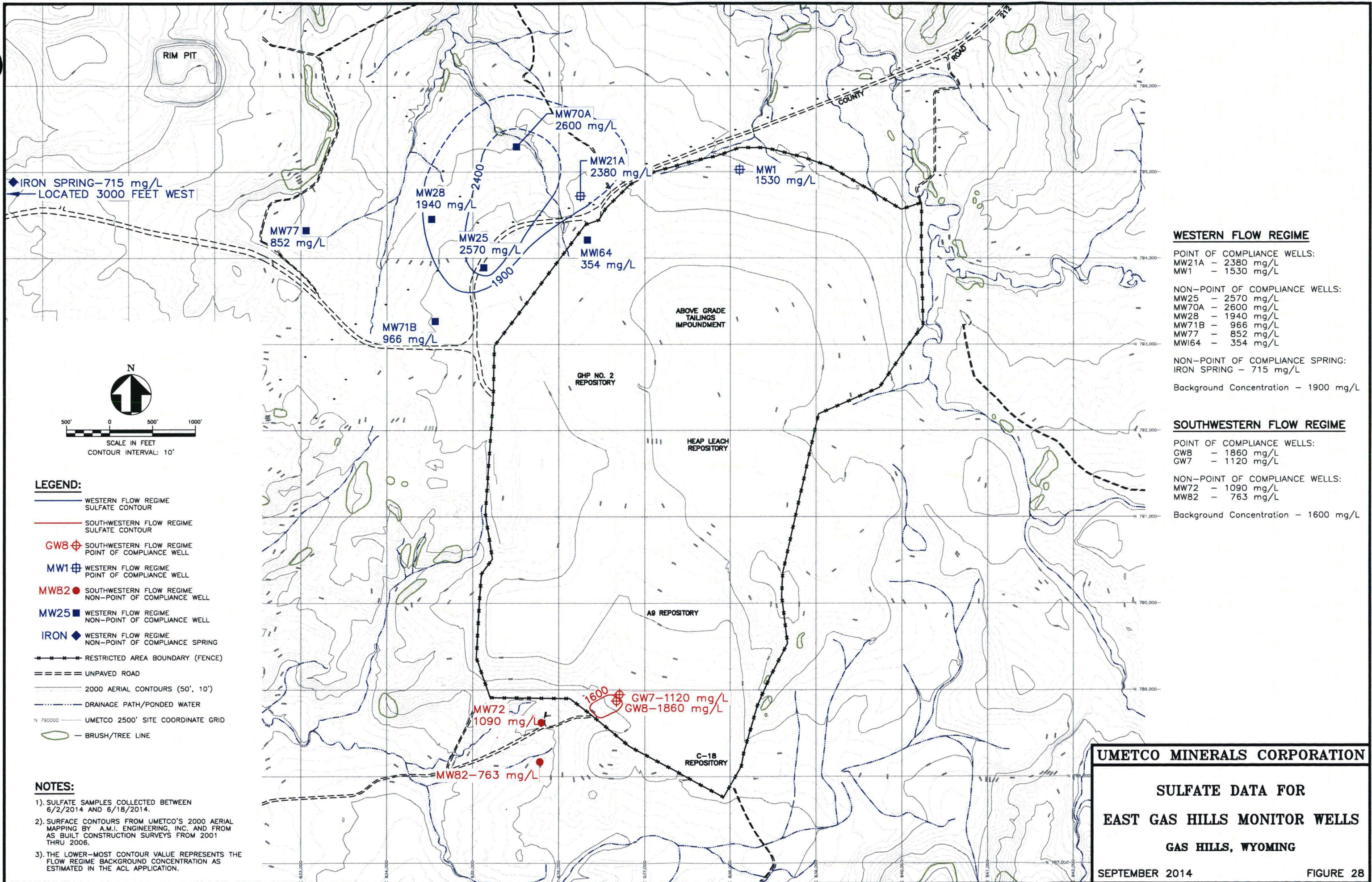
Background Concentration - 118mg/L

UMETCO MINERALS CORPORATION

**CHLORIDE DATA FOR
 EAST GAS HILLS MONITOR WELLS
 GAS HILLS, WYOMING**

SEPTEMBER 2014

FIGURE 27



WESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
 MW21A - 2380 mg/L
 MW1 - 1530 mg/L

NON-POINT OF COMPLIANCE WELLS:
 MW25 - 2570 mg/L
 MW70A - 2600 mg/L
 MW28 - 1940 mg/L
 MW71B - 966 mg/L
 MW77 - 852 mg/L
 MWI64 - 354 mg/L

NON-POINT OF COMPLIANCE SPRING:
 IRON SPRING - 715 mg/L

Background Concentration - 1900 mg/L

SOUTHWESTERN FLOW REGIME

POINT OF COMPLIANCE WELLS:
 GW8 - 1860 mg/L
 GW7 - 1120 mg/L

NON-POINT OF COMPLIANCE WELLS:
 MW72 - 1090 mg/L
 MW82 - 763 mg/L

Background Concentration - 1600 mg/L

LEGEND:

- WESTERN FLOW REGIME SULFATE CONTOUR
- SOUTHWESTERN FLOW REGIME SULFATE CONTOUR
- GW8 ⊕ SOUTHWESTERN FLOW REGIME POINT OF COMPLIANCE WELL
- MW1 ⊕ WESTERN FLOW REGIME POINT OF COMPLIANCE WELL
- MW82 ● SOUTHWESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
- MW25 ■ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE WELL
- IRON ◆ WESTERN FLOW REGIME NON-POINT OF COMPLIANCE SPRING
- * * * * RESTRICTED AREA BOUNDARY (FENCE)
- == UNPAVED ROAD
- 2000 AERIAL CONTOURS (50', 10')
- DRAINAGE PATH/PONDED WATER
- N 790000 UMETCO 2500' SITE COORDINATE GRID
- BRUSH/TREE LINE

NOTES:

- 1). SULFATE SAMPLES COLLECTED BETWEEN 6/2/2014 AND 6/18/2014.
- 2). SURFACE CONTOURS FROM UMETCO'S 2000 AERIAL MAPPING BY A.M.I. ENGINEERING, INC. AND FROM AS BUILT CONSTRUCTION SURVEYS FROM 2001 THRU 2006.
- 3). THE LOWER-MOST CONTOUR VALUE REPRESENTS THE FLOW REGIME BACKGROUND CONCENTRATION AS ESTIMATED IN THE ACL APPLICATION.

UMETCO MINERALS CORPORATION

**SULFATE DATA FOR
 EAST GAS HILLS MONITOR WELLS
 GAS HILLS, WYOMING**

SEPTEMBER 2014

FIGURE 28

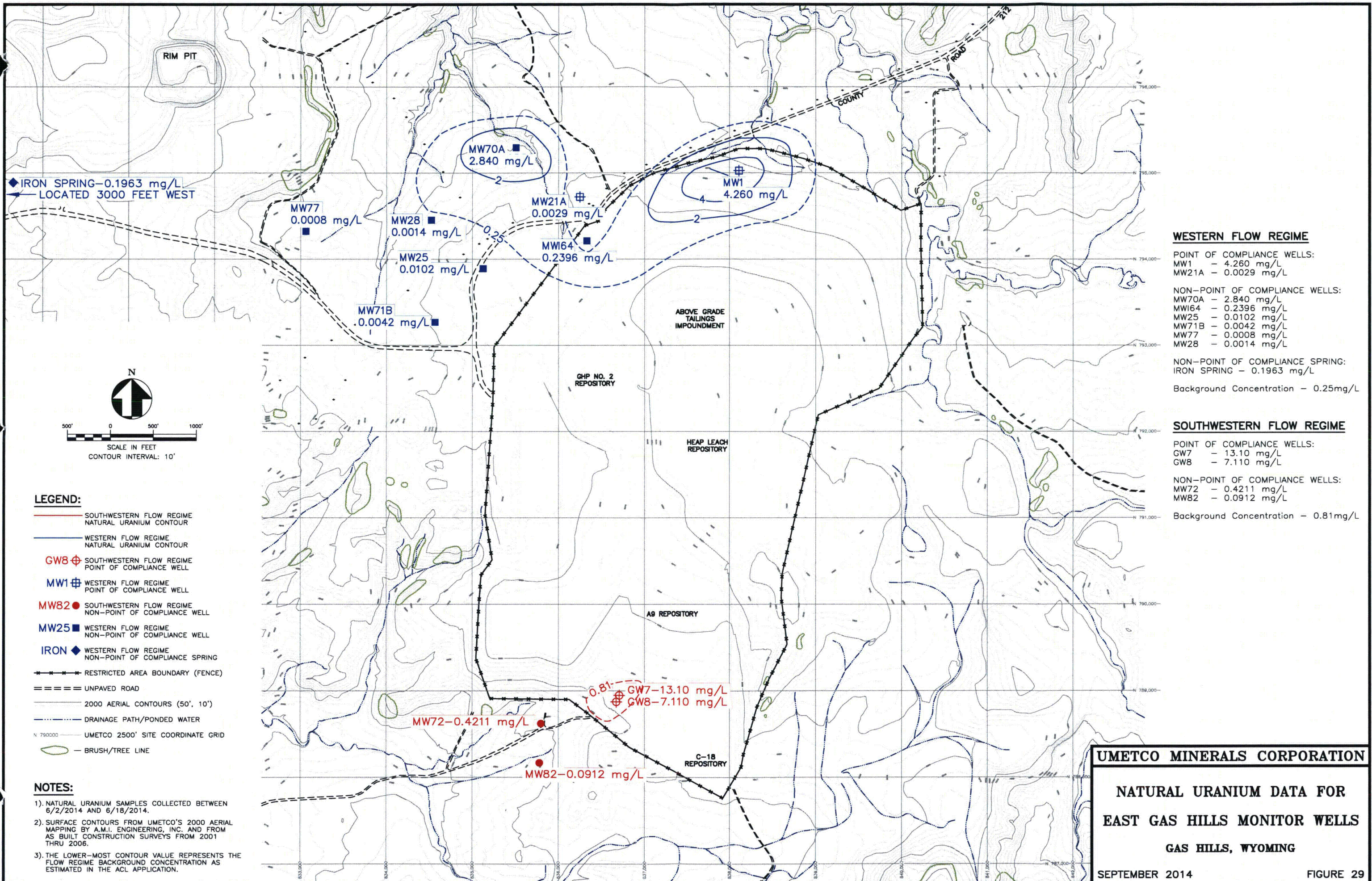


Figure 30 Simulated Chloride Trends at MW28 (50 Years) Versus Actual Data Western Flow Regime

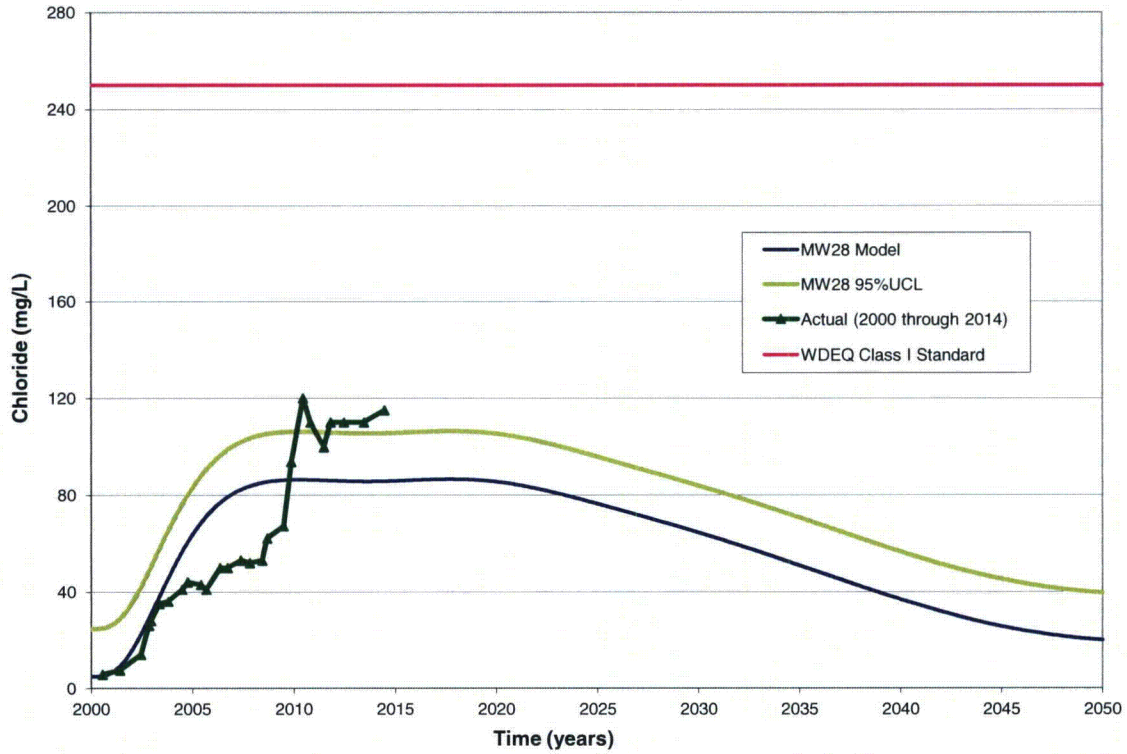


Figure 31 Simulated Chloride Trends at MW71B (50 Years) Versus Actual Data Western Flow Regime

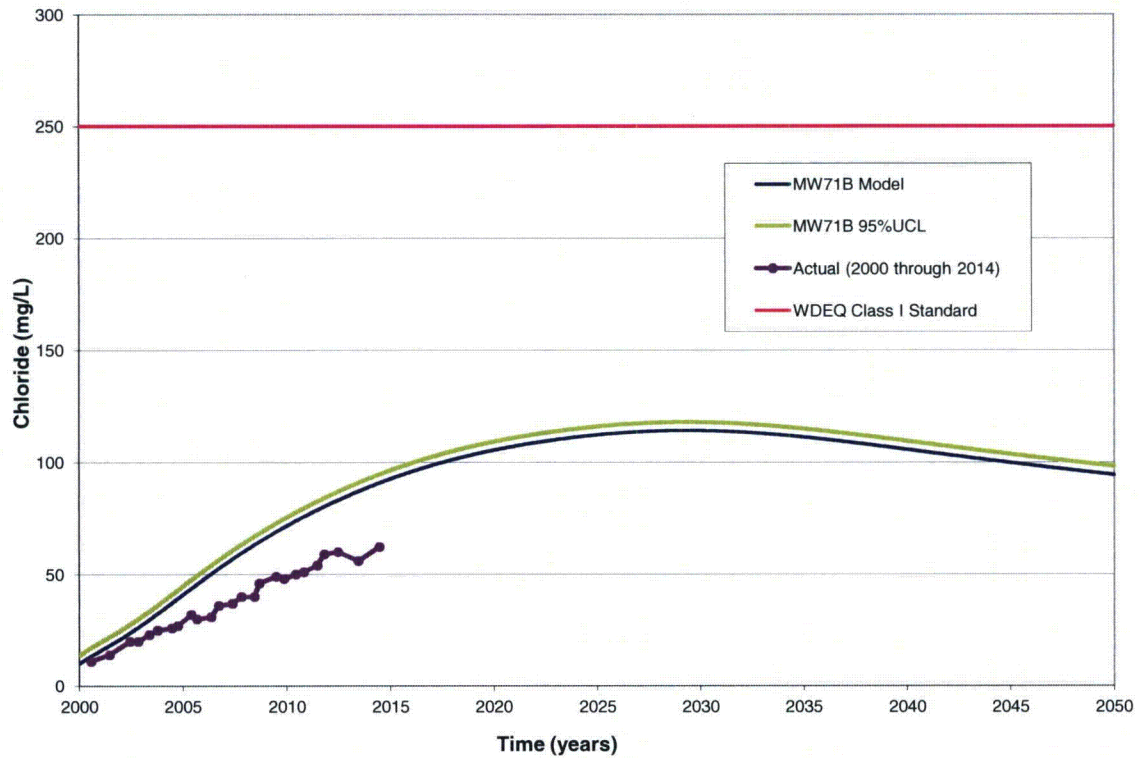


Figure 32 Simulated Chloride Trends at MW72 (50 Years) Versus Actual Data Southwestern Flow Regime

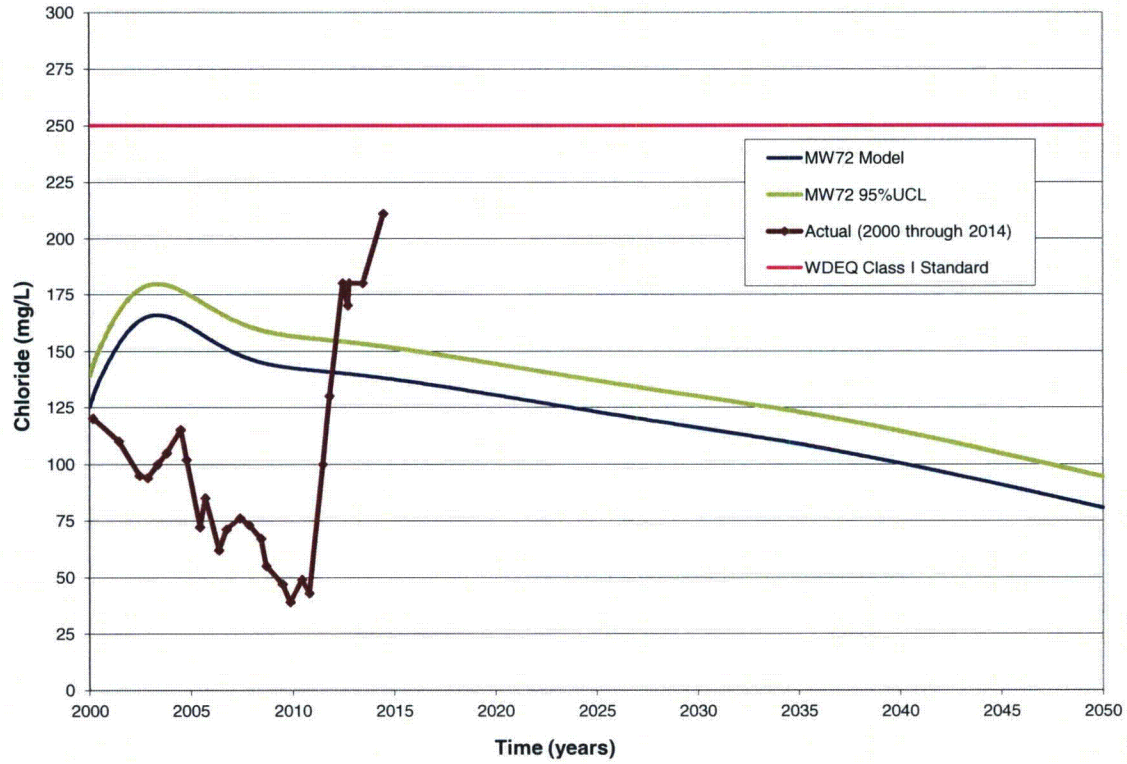


Figure 33 Simulated Chloride Trends at MW82 (50 Years) Versus Actual Data Southwestern Flow Regime

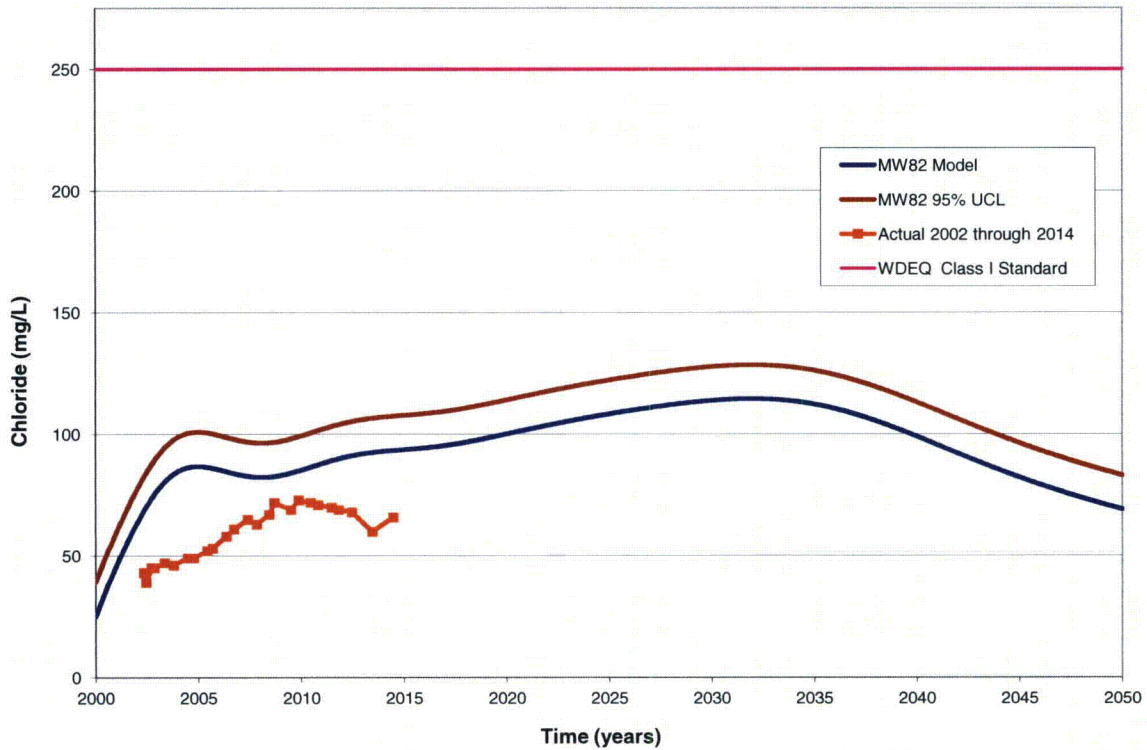


Figure 34 Simulated Sulfate Trends at MW28 (50 Years) Versus Actual Data Western Flow Regime

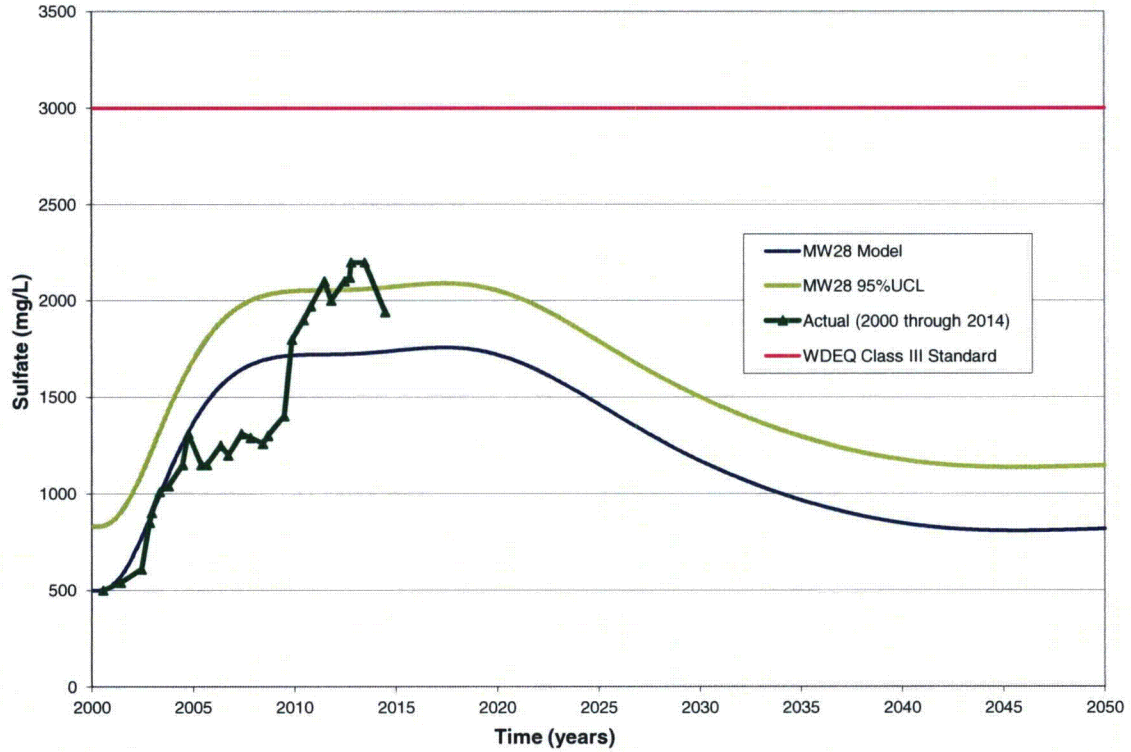


Figure 35 Simulated Sulfate Trends at MW71B (50 Years) Versus Actual Data Western Flow Regime

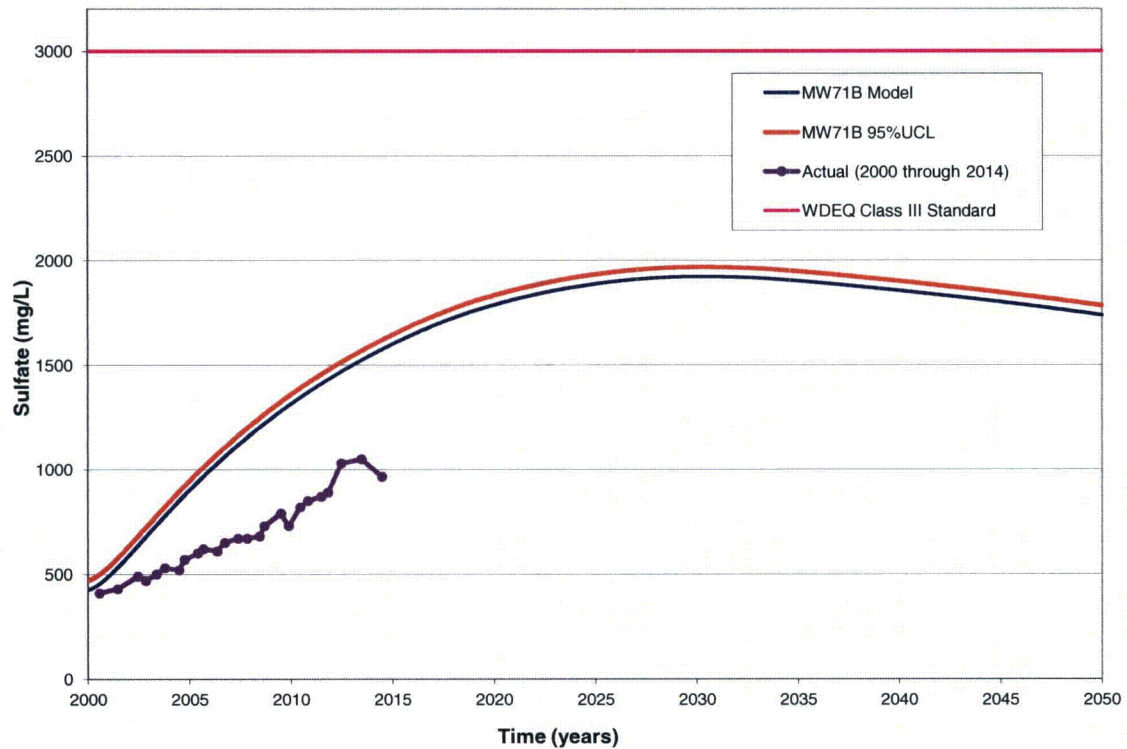


Figure 36 Simulated Sulfate Trends at MW72 (50 Years) Versus Actual Data Southwestern Flow Regime

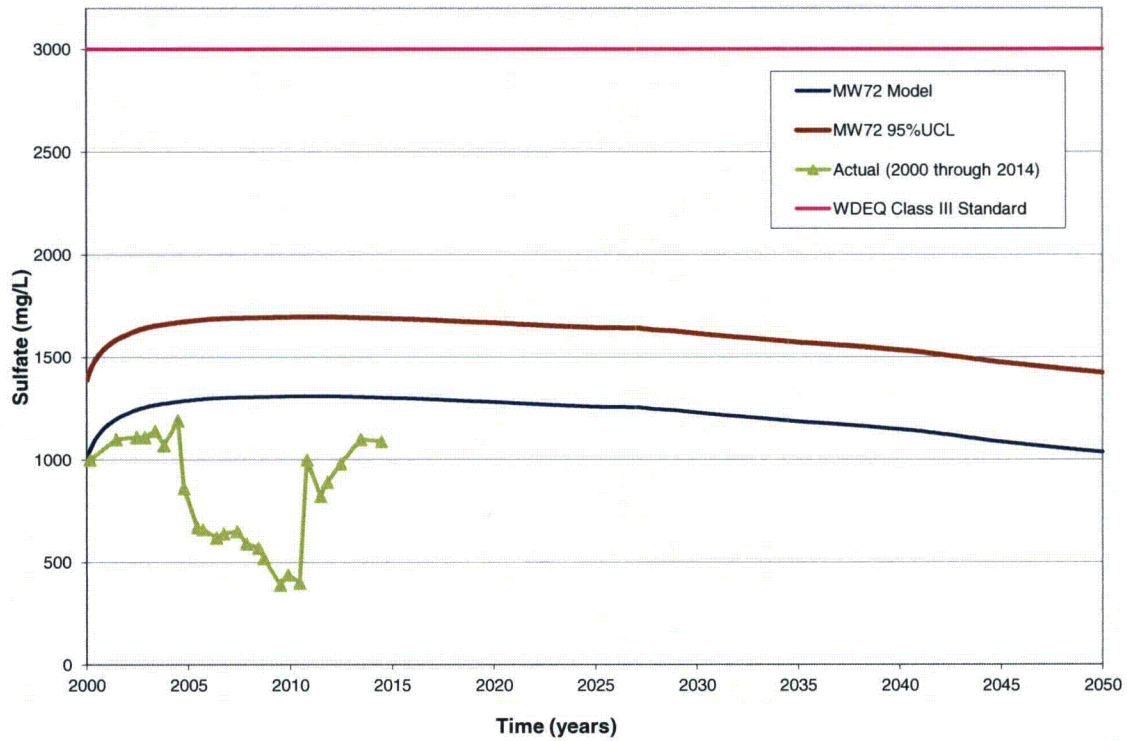


Figure 37 Simulated Sulfate Trends at MW82 (50 Years) Versus Actual Data Southwestern Flow Regime

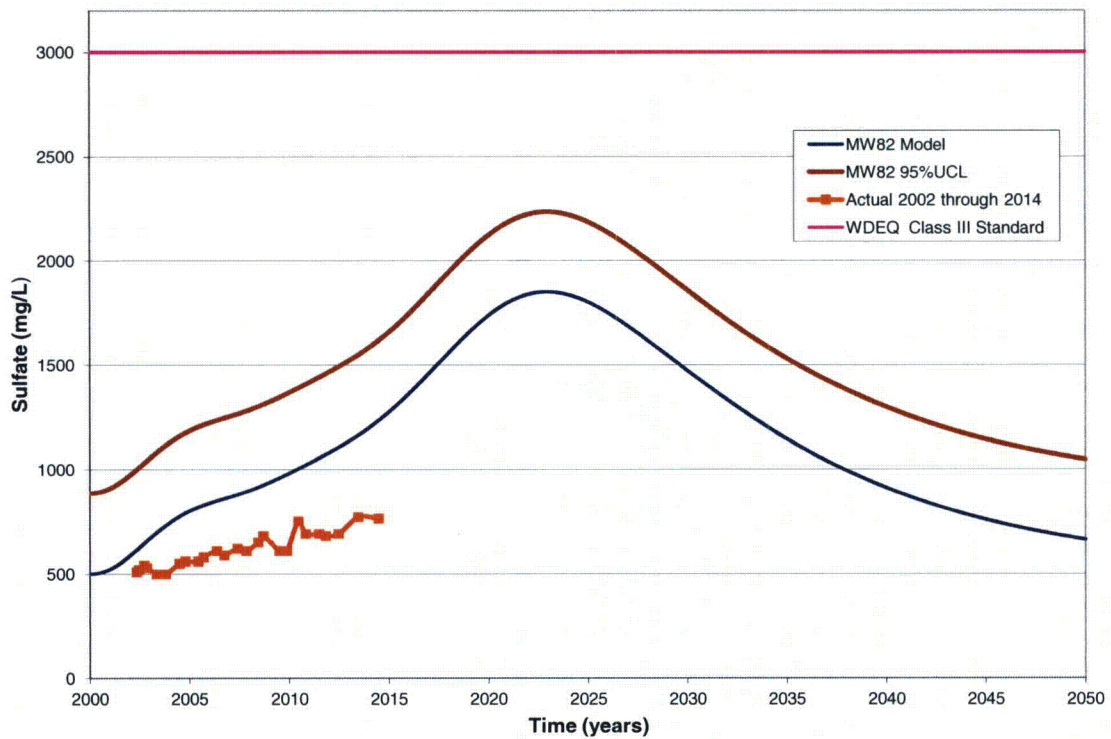


Figure 38 Radium-226 plus -228 Trends in Western Flow Regime Monitor Wells

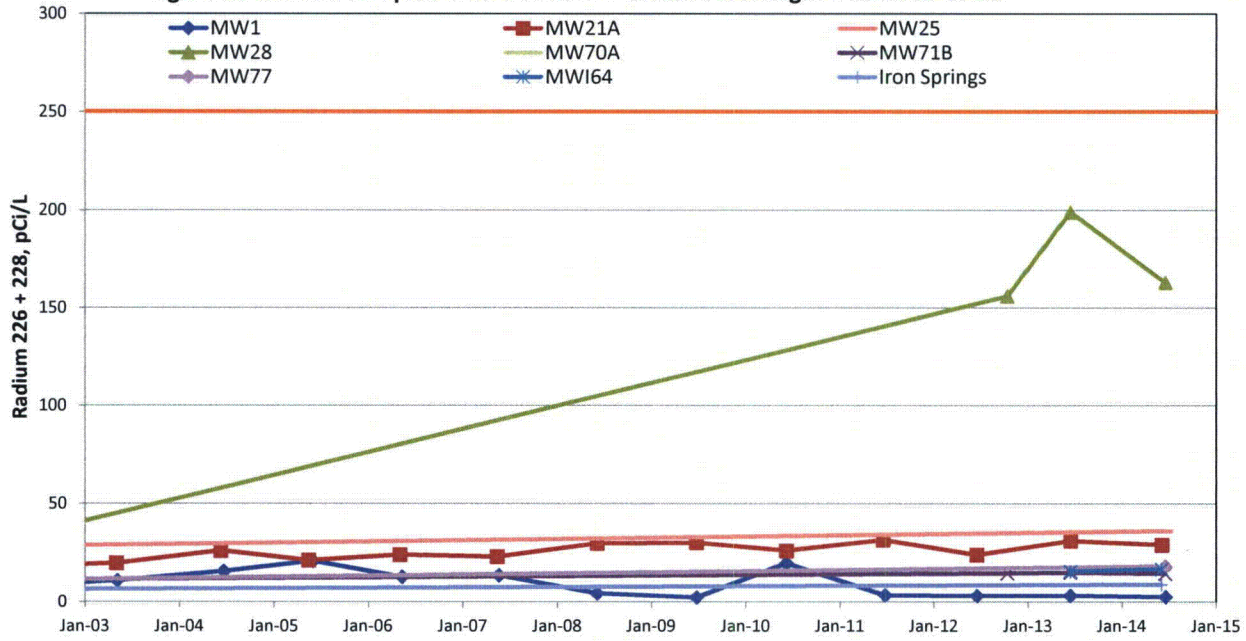
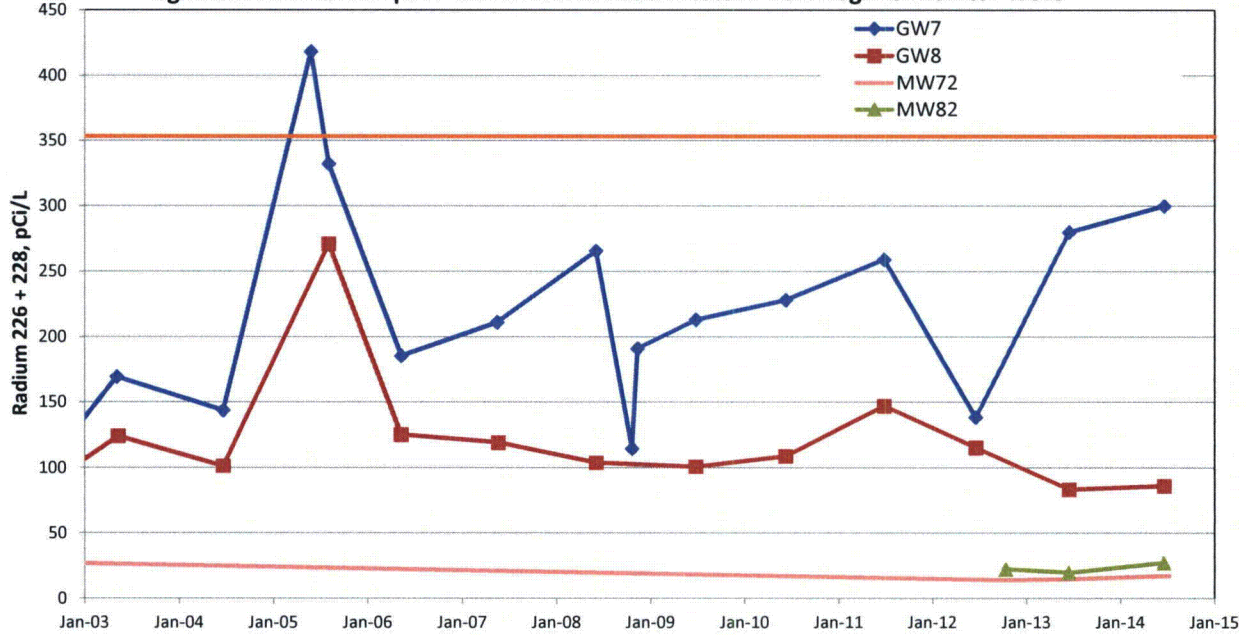
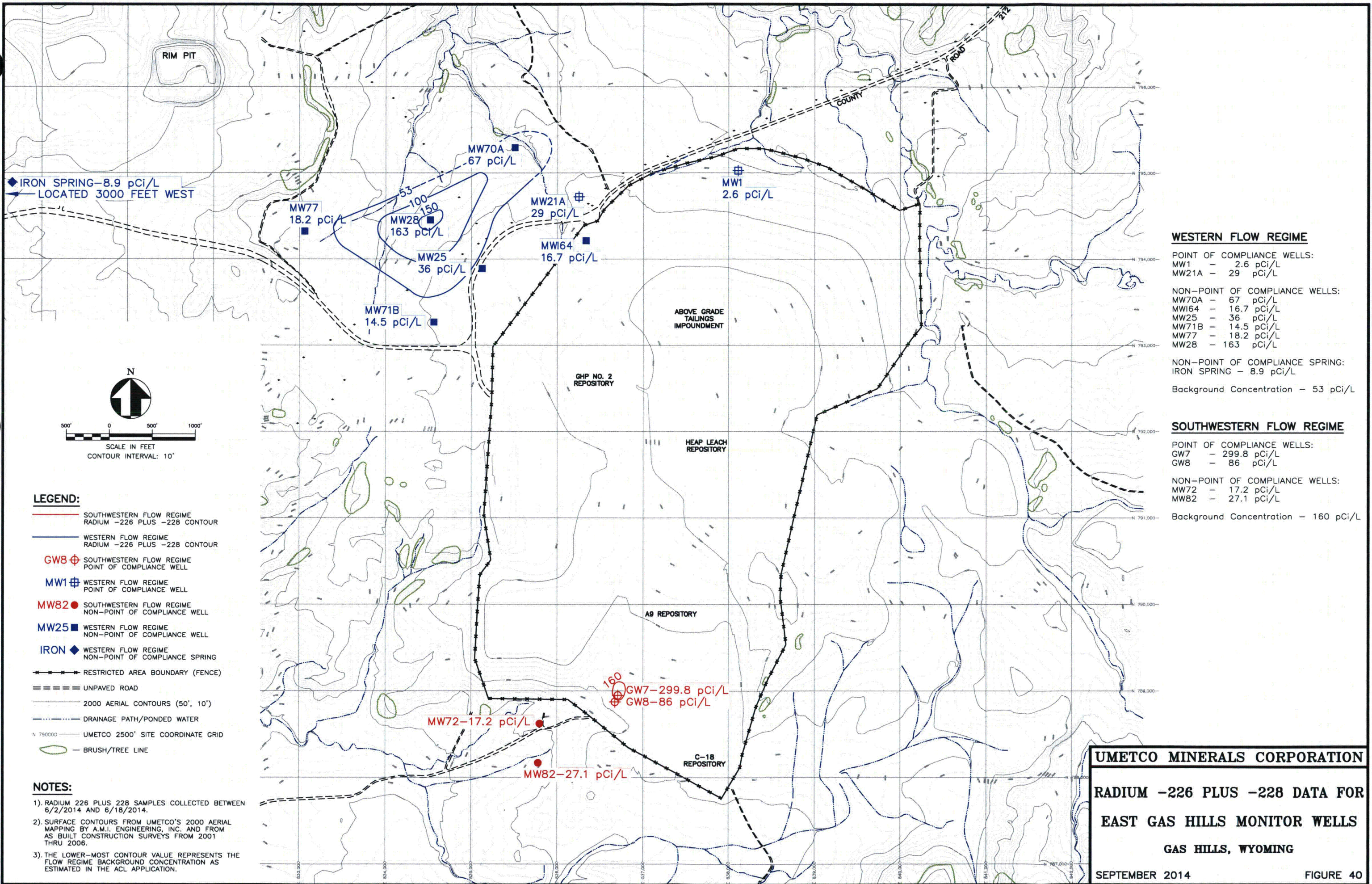


Figure 39 Radium-226 plus -228 Trends in Southwestern Flow Regime Monitor Wells





Appendix A

Request for Approval of New Site Radiation Safety Officer

Letter Dated August 13, 2014

Umetco Minerals Corporation



2754 Compass Drive, Suite 280
Grand Junction, Colorado 81506-8728
(970) 245-3700

August 13, 2014

Mr. Dominic Orlando, Senior Project Manager
Decommissioning and Uranium Licensing Directorate
Division of Waste management and Environmental Protection
Office of Federal and State materials and Environmental management Programs
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike
Rockville, Maryland 20852

Reference: **Radioactive Materials License SUA-648 Docket No. 40-0299**
Subject: **Administrative Amendment Request to Change RSO Designation**

Umetco Minerals Corporation is requesting that Ms. Brittany Sandberg be approved as site Radiation Safety Officer (RSO) for the former uranium mill at Gas Hills, Wyoming, regulated by the U.S. Nuclear Regulatory Commission, Material License SUA-648. Ms. Sandberg's experience is given in the enclosed resume along with her RSO refresher training certificate which shows she meets the minimum qualifications specified in Section 2.4.1 of Regulatory Guide 8.31.

Ms. Sandberg has been working in the nuclear industry for eight years, in which time she has held various positions relating to radiation safety applications at uranium recovery facilities. As part of her duties, Ms. Sandberg has had responsibilities for nuclear density gauges, health physics monitoring, materials monitoring and radiation safety training. Ms. Sandberg has been approved and served previously as an RSO for facilities in Arizona and Colorado.

If you have any questions or need any additional information please contact me at 970-256-8889.

Sincerely,

Thomas E Gieck
Remediation Leader

TEG/jfc
Enclosures (2)

Umetco Minerals Corporation
Gas Hills, Wyoming

14-024.docx

A-1

Nuclear Regulatory Commission Annual Report

Appendix A

September 2014

Appendix B

Water Rights Within Five-Mile Radius of East Gas Hills Site

Appendix B
Water Rights Within Five-Mile Radius of East Gas Hills Site

Permit Number (Appropriation)	Facility Name	Permittee	Twn	Rng	Sec	Qtr-Qtr	Priority	Status	Uses	Facility Type	Latitude	Longitude
P49333.OW	Barrel Springs #1	Matador Cattle Co.	032N	089W	08	SW1/4SW1/4	08/06/1979	Complete	STK	Well	42.75531	-107.52333
P198586.OW	NE/NW 1-32-90(12wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	NE1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.7808	-107.557219
P198585.OW	NE/SW 1-32-90(2wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	NE1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.772803	-107.55575
P198584.OW	NW/NE 1-32-90(2wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	NW1/4NE1/4	08/08/2012	Incomplete	MON	Well	42.77955	-107.550997
P198583.OW	NW/NW 1-32-90(3wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	NW1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.779672	-107.560997
P198582.OW	NW/SW 1-32-90(2wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	NW1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.772786	-107.560781
P198581.OW	SE/NW 1-32-90(6wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	SE1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.776278	-107.555956
P198580.OW	SW/NW 1-32-90(4wells) - Gas Hills Mine Unit 1	Cameco Resources	032N	090W	01	SW1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.776322	-107.560925
P4483.0E	Cross Ell Ditch, Enlargement No. 3	Diamond Ring Co.	033N	088W	00		03/18/1926	Fully Adjudicated	IRR_SW	Not Applicable		
P71757.OW	Little Cross L #1 Spring	Clear Creek Cattle Co.	033N	088W	06	NW1/4SW1/4	09/13/1984	Fully Adjudicated	STK	Well	42.85899	-107.44005
P46387.OW	Little X-L #1	Matador Cattle Co.	033N	088W	06	NW1/4SW1/4	08/14/1978	Fully Adjudicated	STK	Well	42.85899	-107.44005
P71764.OW	Government #1 West (Rattlesnake)		033N	088W	06	SE1/4SE1/4	10/09/1984	Fully Adjudicated	STK	Well	42.85546	-107.42041
P9431.0D	Cross Ell Ditch	Clayton, Leonidas	033N	088W	07		10/11/1909	Fully Adjudicated	IRR_SW	Stream		
P44796.OW	Rattlesnake #1		033N	088W	07	NE1/4NE1/4	09/01/1978	Fully Adjudicated	STK	Well	42.85183	-107.42048
P71755.OW	Cross L #2 Spring	Clear Creek Cattle Co.	033N	088W	07	NW1/4NE1/4	09/13/1984	Fully Adjudicated	DOM_GW; STK	Well	42.85182	-107.4254
CR CC77/017	ENL Cross ELL Ditch	Clear Creek Cattle Co.	033N	088W	07	NW1/4NW1/4	03/18/1926	Fully Adjudicated	IRR_SW	Stream	42.8506	-107.43883
CR CC33/360	Holliday Ditch	Holliday, John J.	033N	088W	07	SE1/4NE1/4	08/27/1896		IRR_SW	Stream	42.84815	-107.42061
P1314.0D	Holliday Ditch	Holliday, John J.	033N	088W	07	SE1/4NE1/4	08/27/1896	Fully Adjudicated	DOM_SW; IRR_SW; STO	Stream	42.848146	-107.420606
P44797.OW	Rattlesnake #2		033N	088W	08	SE1/4NE1/4	09/01/1978	Fully Adjudicated	STK	Well	42.84822	-107.40082
P44798.OW	Rattlesnake #3		033N	088W	08	SW1/4NE1/4	09/01/1978	Fully Adjudicated	STK	Well	42.8482	-107.40577
P44799.OW	Rattlesnake #4		033N	088W	08	SW1/4SW1/4	09/01/1978	Fully Adjudicated	STK	Well	42.84079	-107.41591
P71759.OW	Frebcg Rocks #1 West	Clear Creek Cattle Co.	033N	088W	09	SE1/4SW1/4	09/13/1984	Fully Adjudicated	STK	Well	42.84088	-107.39086
P44800.OW	Rattlesnake #5		033N	088W	17	NE1/4NE1/4	09/01/1978	Fully Adjudicated	STK	Well	42.83723	-107.40085
P94134.OW	Spring #7	USDI - BLM	033N	088W	19	NW1/4SW1/4	04/17/1926	Fully Adjudicated	STK	Well	42.81553	-107.44021
P71758.OW	McKenzie Spring	Clear Creek Cattle Co.	033N	088W	19	SW1/4SW1/4	09/13/1984	Fully Adjudicated	STK	Well	42.81368	-107.43523
P46384.OW	Holiday #1	Matador Cattle Co.	033N	088W	19	SW1/4SW1/4	08/14/1978	Fully Adjudicated	STK	Well	42.81368	-107.43523
P94135.OW	Spring #8	USDI - BLM	033N	088W	19	SW1/4SW1/4	04/17/1926	Fully Adjudicated	STK	Well	42.81368	-107.43523
P94133.OW	Upper Mac Spring	USDI - BLM	033N	088W	30	NW1/4NW1/4	04/17/1926	Fully Adjudicated	STK	Well	42.80831	-107.44013
CR CC77/041	Diamond Ring Ditch No. 5	Clear Creek Cattle Co. (Lessee)	033N	089W	01	SE1/4NE1/4	03/18/1926		IRR_SW	Stream	42.8626	-107.44482
P17093.0D	Diamond Ring Ditch No. 5	Diamond Ring Co.	033N	089W	01	SE1/4NE1/4	03/18/1926	Fully Adjudicated	IRR_SW	Stream	42.862626	-107.44618
CR CC77/025	Cross Ell Ditch	Andrus, Vincent D.	033N	089W	01	SE1/4SE1/4	10/11/1909		IRR_SW	Stream	42.85542	-107.44487
P102340.OW	Philps #1		033N	089W	04	NE1/4SE1/4	05/13/1996		STK	Well	42.85907	-107.50388
CR CC44/698	C. B. C. Ditch	Cunningham, Charles B.	033N	089W	04	SE1/4NW1/4	08/09/1918		DOM_SW; IRR_SW; STO	Stream	42.86283	-107.51384
P15179.0D	C. B. C. Ditch	Cunningham, Charles B.	033N	089W	04	SE1/4NW1/4	08/09/1918	Fully Adjudicated	DOM_SW; IRR_SW; STO	Stream	42.862776	-107.514057
P194063.OW	RHS-3-M-10	Strathmore Resources	033N	089W	04	SW1/4SE1/4	10/15/2010	Incomplete	MON	Well	42.85557	-107.50878
P194062.OW	RHS-2-M-10	Strathmore Resources	033N	089W	05	SE1/4SE1/4	10/15/2010	Incomplete	MON	Well	42.85467	-107.52247
P46388.OW	Medicine Springs #1	Matador Cattle Co.	033N	089W	07	NW1/4NW1/4	08/14/1978	Fully Adjudicated	STK	Well	42.85214	-107.55804
P49121.OW	Lincoln Springs #1	Matador Cattle Co.	033N	089W	07	SE1/4NE1/4	07/11/1979	Fully Adjudicated	STK	Well	42.8485	-107.54333
P67189.OW	RIM 3		033N	089W	08	NE1/4SE1/4	04/23/1984		MON	Well	42.84479	-107.52351
P104184.OW	MW 76	Umetco Minerals Corporation	033N	089W	08	NE1/4SE1/4	10/15/1996	Complete	MON	Well	42.84479	-107.52351
P46389.OW	Iron Spring #1	Matador Cattle Co.	033N	089W	08	SE1/4SW1/4	08/14/1978	Fully Adjudicated	STK	Well	42.84123	-107.53338
P194061.OW	RHS-1-M-10	Strathmore Resources	033N	089W	08	SW1/4SE1/4	10/15/2010	Incomplete	MON	Well	42.84017	-107.52612
P40468.OW	RHW-2		033N	089W	09	NE1/4SW1/4	08/05/1977	Complete	MON	Well	42.84479	-107.51363
P67188.OW	RIM 2		033N	089W	09	SE1/4NW1/4	04/23/1984		MON	Well	42.8484	-107.51365
P41022.OW	RHW-3		033N	089W	09	SE1/4SE1/4	11/16/1977	Complete	MON	Well	42.84119	-107.50378
P77793.OW	MW 28	Umetco Minerals Corporation	033N	089W	09	SE1/4SE1/4	08/03/1988	Complete	MON	Well	42.84119	-107.50378
P40467.OW	RHW-1		033N	089W	09	SE1/4SW1/4	08/05/1977	Complete	MON	Well	42.84118	-107.51362
P41021.OW	RHW-4		033N	089W	09	SW1/4NE1/4	11/16/1977	Complete	MON	Well	42.8484	-107.50873

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Permit Number (Appropriation)	Facility Name	Permittee	Tw	Rng	Sec	Qtr-Qtr	Priority	Status	Uses	Facility Type	Latitude	Longitude
P104185.0W	MW 77	Umetco Minerals Corporation	033N	089W	09	SW1/4SE1/4	10/15/1996	Complete	MON	Well	42.84119	-107.5087
P67187.0W	RIM 1		033N	089W	09	SW1/4SW1/4	04/23/1984		MON	Well	42.84117	-107.51854
P41023.0W	RHW-5		033N	089W	09	SW1/4SW1/4	11/16/1977	Complete	MON	Well	42.84117	-107.51854
P91277.0W	MWC 55	Umetco Minerals Corporation	033N	089W	10	NE1/4SE1/4	03/19/1993		MIS	Well	42.84452	-107.4844
P67154.0W	MW17		033N	089W	10	NE1/4SW1/4	04/23/1984		MON	Well	42.84469	-107.49402
P85776.0W	ENL MWC-42	Umetco Minerals Corporation	033N	089W	10	NE1/4SW1/4	07/24/1991		MIS	Well	42.84469	-107.49402
P67155.0W	MW18		033N	089W	10	NW1/4SE1/4	04/23/1984		MON	Well	42.84461	-107.4892
P67159.0W	MW23		033N	089W	10	NW1/4SE1/4	04/23/1984		MON	Well	42.84461	-107.4892
P76333.0W	MW26	Umetco Minerals Corporation	033N	089W	10	NW1/4SW1/4	02/19/1988		MON	Well	42.84477	-107.4989
P83055.0W	MW-21A	Umetco Minerals Corporation	033N	089W	10	NW1/4SW1/4	07/23/1990	Complete	MON	Well	42.84477	-107.4989
P67156.0W	MW19		033N	089W	10	SE1/4SE1/4	04/23/1984		MON	Well	42.84091	-107.4844
P82564.0W	MWC-35	Umetco Minerals Corporation	033N	089W	10	SE1/4SW1/4	04/27/1990		MIS	Well	42.84107	-107.49404
P82565.0W	MWC-36	Umetco Minerals Corporation	033N	089W	10	SE1/4SW1/4	04/27/1990		MIS	Well	42.84107	-107.49404
P83269.0W	MWC-42	Umetco Minerals Corporation	033N	089W	10	SE1/4SW1/4	08/15/1990		MIS	Well	42.84107	-107.49404
P91280.0W	MWC 58	Umetco Minerals Corporation	033N	089W	10	SE1/4SW1/4	03/19/1993		MIS	Well	42.84107	-107.49404
P91281.0W	MWC 59	Umetco Minerals Corporation	033N	089W	10	SE1/4SW1/4	03/19/1993		MIS	Well	42.84107	-107.49404
P67148.0W	MW4		033N	089W	10	SW1/4SE1/4	04/23/1984		MON	Well	42.84099	-107.48923
P67146.0W	MW1		033N	089W	10	SW1/4SE1/4	04/23/1984	Complete	MON	Well	42.84099	-107.48923
P67147.0W	MW2		033N	089W	10	SW1/4SW1/4	04/23/1984		MON	Well	42.84115	-107.49889
P67158.0W	MW21		033N	089W	10	SW1/4SW1/4	04/23/1984		MON	Well	42.84115	-107.49889
P105493.0W	MW 70B	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	04/11/1997		MON	Well	42.84115	-107.49889
P108004.0W	MW81	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	11/04/1997		MON	Well	42.84115	-107.49889
P105492.0W	MW 70A	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	04/11/1997	Complete	MON	Well	42.84115	-107.49889
P82566.0W	MWI-37	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	04/27/1990		MON	Well	42.84115	-107.49889
P82567.0W	MWI-38	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	04/27/1990		MON	Well	42.84115	-107.49889
P82568.0W	MWI-39	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	04/27/1990		MON	Well	42.84115	-107.49889
P84649.0W	MWI-44	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	03/18/1991		MON	Well	42.84115	-107.49889
P91082.0W	MW-64	Umetco Minerals Corporation	033N	089W	10	SW1/4SW1/4	03/19/1993	Complete	MON	Well	42.84115	-107.49889
P76334.0W	MW27	Umetco Minerals Corporation	033N	089W	11	SW1/4SW1/4	02/19/1988		MON	Well	42.84088	-107.47955
P182674.0W	Cross Meadows 12-1		033N	089W	12	SW1/4SW1/4	07/09/2007	Complete	STK	Well	42.840667	-107.458233
P104183.0W	MW 75	Umetco Minerals Corporation	033N	089W	14	NE1/4SW1/4	10/15/1996		MON	Well	42.83006	-107.47455
P80484.0W	LA 1	Lidstone & Anderson Inc.	033N	089W	14	SW1/4NW1/4	08/14/1989	Complete	MON	Well	42.83365	-107.4795
P80487.0W	LA 4	Lidstone & Anderson Inc.	033N	089W	14	SW1/4SW1/4	08/14/1989		MON	Well	42.8264	-107.47943
P80485.0W	LA 2	Lidstone & Anderson Inc.	033N	089W	14	SW1/4SW1/4	08/14/1989	Complete	MON	Well	42.8264	-107.47943
P67157.0W	MW20		033N	089W	15	NE1/4NE1/4	04/23/1984		MON	Well	42.83729	-107.48439
P84650.0W	MWI-50	Umetco Minerals Corporation	033N	089W	15	NE1/4NE1/4	03/18/1991		MON	Well	42.83729	-107.48439
P84651.0W	MWI-51	Umetco Minerals Corporation	033N	089W	15	NE1/4NE1/4	03/18/1991		MON	Well	42.83729	-107.48439
P84652.0W	MWI-52	Umetco Minerals Corporation	033N	089W	15	NE1/4NE1/4	03/18/1991		MON	Well	42.83729	-107.48439
P82562.0W	MWC-33	Umetco Minerals Corporation	033N	089W	15	NE1/4NW1/4	04/27/1990		MIS	Well	42.83744	-107.49405
P82563.0W	MWC-34	Umetco Minerals Corporation	033N	089W	15	NE1/4NW1/4	04/27/1990		MIS	Well	42.83744	-107.49405
P91278.0W	MWC 56	Umetco Minerals Corporation	033N	089W	15	NE1/4NW1/4	03/19/1993		MIS	Well	42.83744	-107.49405
P91279.0W	MWC 57	Umetco Minerals Corporation	033N	089W	15	NE1/4NW1/4	03/19/1993		MIS	Well	42.83744	-107.49405
P13001.0R	B-Spoils Reservoir	Umetco Minerals Corporation	033N	089W	15	NE1/4SE1/4	08/27/2007	Complete	IND_SW	Reservoir	42.830039	-107.48435
CR CR21/153	B-Spoils Reservoir	Umetco Minerals Corporation	033N	089W	15	NE1/4SE1/4	08/27/2007	Fully Adjudicated	IND_SW	Reservoir	42.829444	-107.4825
P67150.0W	MW7		033N	089W	15	NE1/4SW1/4	04/23/1984		MON	Well	42.83018	-107.49402
P67168.0W	PW1		033N	089W	15	NE1/4SW1/4	04/23/1984		MON	Well	42.83018	-107.49402
P80432.0W	MW 29	Umetco Minerals Corporation	033N	089W	15	NE1/4SW1/4	08/04/1989		MON	Well	42.83018	-107.49402
P80433.0W	MW 31	Umetco Minerals Corporation	033N	089W	15	NE1/4SW1/4	08/04/1989		MON	Well	42.83018	-107.49402

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Permit Number (Appropriation)	Facility Name	Permittee	Tw	Rng	Sec	Qtr-Qtr	Priority	Status	Uses	Facility Type	Latitude	Longitude
P84751.0W	MWC-45	Umetco Minerals Corporation	033N	089W	15	NW1/4NE1/4	03/18/1991		MIS	Well	42.83737	-107.48922
P84753.0W	MWC-47	Umetco Minerals Corporation	033N	089W	15	NW1/4NE1/4	03/18/1991		MIS	Well	42.83737	-107.48922
P84754.0W	MWC-48	Umetco Minerals Corporation	033N	089W	15	NW1/4NE1/4	03/18/1991		MIS	Well	42.83737	-107.48922
P84755.0W	MWC-49	Umetco Minerals Corporation	033N	089W	15	NW1/4NE1/4	03/18/1991		MIS	Well	42.83737	-107.48922
P84648.0W	MWI 43	Umetco Minerals Corporation	033N	089W	15	NW1/4NW1/4	03/18/1991		MON	Well	42.83752	-107.49888
P76332.0W	MW25	Umetco Minerals Corporation	033N	089W	15	NW1/4NW1/4	02/19/1988	Complete	MON	Well	42.83752	-107.49888
P67149.0W	MW6		033N	089W	15	NW1/4SE1/4	04/23/1984		MON	Well	42.83011	-107.48918
P80486.0W	LA 3	Lidstone & Anderson Inc.	033N	089W	15	SE1/4SE1/4	08/14/1989	Complete	MON	Well	42.82642	-107.48433
P67075.0W	Guard Well 3B		033N	089W	15	SE1/4SW1/4	02/16/1984		IND_GW; MIS	Well	42.82656	-107.494
P67076.0W	Guard Well 3C		033N	089W	15	SE1/4SW1/4	02/16/1984		IND_GW; MIS	Well	42.82656	-107.494
P67160.0W	GW1		033N	089W	15	SE1/4SW1/4	04/23/1984		MON	Well	42.82656	-107.494
P67161.0W	GW2		033N	089W	15	SE1/4SW1/4	04/23/1984		MON	Well	42.82656	-107.494
P67162.0W	GW3		033N	089W	15	SE1/4SW1/4	04/23/1984		MON	Well	42.82656	-107.494
P67178.0W	DW2		033N	089W	15	SE1/4SW1/4	04/23/1984		MON	Well	42.82656	-107.494
P67166.0W	GW7		033N	089W	15	SE1/4SW1/4	04/23/1984	Complete	MON	Well	42.82656	-107.494
P108001.0W	MW78	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	11/04/1997		MON	Well	42.82656	-107.494
P108002.0W	MW79	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	11/04/1997		MON	Well	42.82656	-107.494
P108003.0W	MW80	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	11/04/1997		MON	Well	42.82656	-107.494
P80434.0W	MW 32	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	08/04/1989		MON	Well	42.82656	-107.494
P91282.0W	MWC 60	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	03/19/1993		MIS	Well	42.82656	-107.494
P91283.0W	MWC 61	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	03/19/1993		MIS	Well	42.82656	-107.494
P91284.0W	MWC 62	Umetco Minerals Corporation	033N	089W	15	SE1/4SW1/4	03/19/1993		MIS	Well	42.82656	-107.494
P67151.0W	MW8		033N	089W	15	SW1/4NE1/4	04/23/1984		MON	Well	42.83374	-107.4892
P67152.0W	MW10		033N	089W	15	SW1/4NE1/4	04/23/1984		MON	Well	42.83374	-107.4892
P198334.0W	Aljob #2	US Department of Energy	033N	089W	15	SW1/4NE1/4	11/22/2011	Complete	STK	Well	42.833331	-107.486978
P67179.0W	DW3		033N	089W	15	SW1/4NW1/4	04/23/1984		MON	Well	42.83387	-107.49887
P67185.0W	HW3		033N	089W	15	SW1/4NW1/4	04/23/1984		MON	Well	42.83387	-107.49887
P67186.0W	HW4		033N	089W	15	SW1/4NW1/4	04/23/1984		MON	Well	42.83387	-107.49887
P67164.0W	GW5		033N	089W	15	SW1/4SE1/4	04/23/1984		MON	Well	42.82649	-107.48916
P67174.0W	PW7		033N	089W	15	SW1/4SE1/4	04/23/1984		MON	Well	42.82649	-107.48916
P67169.0W	PW2		033N	089W	15	SW1/4SW1/4	04/23/1984		MON	Well	42.82663	-107.49884
P67170.0W	PW3		033N	089W	15	SW1/4SW1/4	04/23/1984		MON	Well	42.82663	-107.49884
P67183.0W	HW1		033N	089W	15	SW1/4SW1/4	04/23/1984		MON	Well	42.82663	-107.49884
P105494.0W	MW 71A	Umetco Minerals Corporation	033N	089W	16	NE1/4NE1/4	04/11/1997		MON	Well	42.83756	-107.50376
P105495.0W	MW 71B	Umetco Minerals Corporation	033N	089W	16	NE1/4NE1/4	04/11/1997	Complete	MON	Well	42.83756	-107.50376
P67184.0W	HW2		033N	089W	16	NE1/4SE1/4	04/23/1984		MON	Well	42.83028	-107.50373
P67175.0W	EPW1		033N	089W	16	SE1/4SE1/4	04/23/1984		MON	Well	42.82667	-107.50372
P162305.0W	Process Water Well #6	Umetco Minerals Corporation	033N	089W	18	NE1/4SW1/4	08/16/2004	Complete	IND_GW; MIS	Well	42.830431	-107.552961
P93801.0W	PWR #107 Spring (77)	USDI - BLM	033N	089W	18	NE1/4SW1/4	04/17/1926	Fully Adjudicated	STK	Well	42.83043	-107.55296
P46385.0W	Cole #80	Matador Cattle Co.	033N	089W	18	SW1/4NW1/4	08/14/1978	Fully Adjudicated	STK	Well	42.83406	-107.55787
P45371.0W	Monitor Well GW 10	Power Resources Inc.	033N	089W	21	SE1/4SE1/4	09/26/1978		MON	Well	42.81217	-107.50368
P106690.0W	GW 10 A	Power Resources Inc.	033N	089W	21	SE1/4SE1/4	07/01/1997	Complete	MON	Well	42.81217	-107.50365
P80489.0W	LA 6	Lidstone & Anderson Inc.	033N	089W	22	NE1/4NE1/4	08/14/1989	Complete	MON	Well	42.82281	-107.4843
P93567.0W	LA-8	Lidstone & Anderson Inc.	033N	089W	22	NE1/4NE1/4	12/10/1993	Complete	MON	Well	42.82281	-107.4843
P67163.0W	GW4		033N	089W	22	NE1/4NW1/4	04/23/1984		MON	Well	42.82294	-107.49398
P67172.0W	PW5		033N	089W	22	NE1/4NW1/4	04/23/1984		MON	Well	42.82294	-107.49398
P67173.0W	PW6		033N	089W	22	NE1/4NW1/4	04/23/1984		MON	Well	42.82294	-107.49398
P67167.0W	GW8		033N	089W	22	NE1/4NW1/4	04/23/1984	Complete	MON	Well	42.82294	-107.49398

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Permit Number (Appropriation)	Facility Name	Permittee	Twn	Rng	Sec	Qtr-Qtr	Priority	Status	Uses	Facility Type	Latitude	Longitude
P105497.0W	MW 73	Umetco Minerals Corporation	033N	089W	22	NE1/4NW1/4	04/11/1997		MON	Well	42.82294	-107.49398
P106684.0W	PIXMO97-1	Power Resources Inc.	033N	089W	22	NE1/4SW1/4	07/01/1997	Complete	MON	Well	42.81566	-107.49385
P106686.0W	PIX MU 97-1	Power Resources Inc.	033N	089W	22	NE1/4SW1/4	07/01/1997	Complete	MON	Well	42.81574	-107.49391
P67165.0W	GW6		033N	089W	22	NW1/4NE1/4	04/23/1984		MON	Well	42.82288	-107.48914
P80488.0W	LA 5	Lidstone & Anderson Inc.	033N	089W	22	NW1/4NE1/4	08/14/1989	Complete	MON	Well	42.82288	-107.48914
P67176.0W	EPW2		033N	089W	22	NW1/4NW1/4	04/23/1984		MON	Well	42.82301	-107.49882
P67177.0W	EPW3		033N	089W	22	NW1/4NW1/4	04/23/1984		MON	Well	42.82301	-107.49882
P67180.0W	MW30026		033N	089W	22	NW1/4NW1/4	04/23/1984		MON	Well	42.82301	-107.49882
P67181.0W	RW1		033N	089W	22	NW1/4NW1/4	04/23/1984		MON	Well	42.82301	-107.49882
P67182.0W	RW2		033N	089W	22	NW1/4NW1/4	04/23/1984		MON	Well	42.82301	-107.49882
P144110.0W	MW82		033N	089W	22	NW1/4NW1/4	04/26/2002	Complete	MON	Well	42.82301	-107.49882
P105498.0W	MW 74	Umetco Minerals Corporation	033N	089W	22	NW1/4NW1/4	04/11/1997		MON	Well	42.82301	-107.49882
P105496.0W	MW 72	Umetco Minerals Corporation	033N	089W	22	NW1/4NW1/4	04/11/1997	Complete	MON	Well	42.82301	-107.49882
P9573.0R	Veca Pond Reservoir	USDI - BLM	033N	089W	22	NW1/4SW1/4	01/23/1990	Unadjudicated	STO; WIL; COMBBU	Reservoir	42.815969	-107.498363
CR CR15/076	Veca Pond Reservoir	USDI - BLM	033N	089W	22	NW1/4SW1/4	01/23/1990	Fully Adjudicated	STO; WL	Reservoir	42.816453	-107.498203
P80490.0W	LA 7	Lidstone & Anderson Inc.	033N	089W	23	NW1/4NW1/4	08/14/1989	Complete	MON	Well	42.82279	-107.47941
P46378.0W	Sage Hen #1	Matador Cattle Co.	033N	089W	26	SE1/4SE1/4	08/14/1978	Complete	STK	Well	42.79767	-107.46452
P71766.0W	Beaver Rim #2		033N	089W	27	NE1/4NE1/4	01/17/1986	Complete	STK	Well	42.80843	-107.4842
P45369.0W	Monitor Well GW 8	Silver King Mines, Inc.	033N	089W	27	NE1/4NE1/4	09/26/1978	Complete	MON	Well	42.80843	-107.4842
CR CR15/079	Cap Pit Reservoir	USDI - BLM	033N	089W	27	NE1/4NW1/4	03/31/1994	Fully Adjudicated	STO	Reservoir	42.807647	-107.492222
P45368.0W	Monitor Well GW 7	Power Resources Inc.	033N	089W	27	NE1/4SE1/4	09/26/1978	Complete	MON	Well	42.80125	-107.48416
P10040.0R	Buss III Reservoir	Highlant Uranium Project Power Resources Inc.	033N	089W	27	NE1/4SW1/4	03/31/1994	Unadjudicated	STO	Reservoir	42.801259	-107.49386
CR CR15/078	Buss III Reservoir	USDI - BLM	033N	089W	27	NE1/4SW1/4	03/31/1994	Fully Adjudicated	STO	Reservoir	42.801625	-107.495403
P10041.0R	Cap Pit Reservoir	Highlant Uranium Project Power Resources Inc.	033N	089W	27	NW1/4NE1/4	03/31/1994	Unadjudicated	STO	Reservoir	42.809325	-107.492552
P95290.0W	Buss I Reservoir		033N	089W	27	SE1/4NW1/4	04/26/1994	Fully Adjudicated	MIS	Well	42.8049	-107.493869
CR UW10/404	Buss I Reservoir	Power Resources, et al.	033N	089W	27	SE1/4NW1/4	04/26/1994		MIS	Well	42.8049	-107.49387
P10039.0R	Buss I Reservoir	Highlant Uranium Project Power Resources Inc.	033N	089W	27	SW1/4NW1/4	03/31/1994	Unadjudicated	STO	Reservoir	42.804587	-107.496324
CR CR15/077	Buss I Reservoir	USDI - BLM	033N	089W	27	SW1/4NW1/4	03/31/1994	Fully Adjudicated	STO	Reservoir	42.803617	-107.496661
P103586.0W	WSL96M-1	Power Resources Inc.	033N	089W	28	NE1/4SE1/4	08/29/1996	Complete	MON	Well	42.80128	-107.50366
P184398.0W	Carol Well # 1	Power Resources Inc.	033N	089W	28	NE1/4SW1/4	01/07/2008	Complete	MIS; MIS	Well	42.803047	-107.512689
P103591.0W	WSL96MP1	Power Resources Inc.	033N	089W	28	NW1/4SE1/4	08/29/1996	Complete	MON	Well	42.80133	-107.50856
P92914.0W	PRI #1	PRI Environmental Inc.	033N	089W	28	SE1/4NE1/4	10/01/1993	Complete	MON	Well	42.80491	-107.50367
P198579.0W	NE/SE 31-33-89(9wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	NE1/4SE1/4	08/08/2012	Incomplete	MON	Well	42.786522	-107.542717
P107839.0W	MUMP 97-1	Power Resources Inc.	033N	089W	31	NE1/4SE1/4	10/06/1997	Complete	MON	Well	42.78699	-107.54272
P198578.0W	NE/SW31-33-89(4wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	NE1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.786564	-107.552678
P103587.0W	MU 96 M-2	Power Resources Inc.	033N	089W	31	NE1/4SW1/4	08/29/1996	Complete	MON	Well	42.78704	-107.55259
P103588.0W	MU 96 M-1	Power Resources Inc.	033N	089W	31	NE1/4SW1/4	08/29/1996	Complete	MON	Well	42.78704	-107.55259
P82823.0W	Muskrat-MO	Power Resources Inc.	033N	089W	31	NE1/4SW1/4	06/28/1990	Complete	MON	Well	42.78704	-107.55259
P198577.0W	NW/SE31-33-89(16wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	NW1/4SE1/4	08/08/2012	Incomplete	MON	Well	42.7865	-107.547581
P82824.0W	Muskrat PUMP	Power Resources Inc.	033N	089W	31	NW1/4SE1/4	06/28/1990	Complete	MON	Well	42.78701	-107.54764
P82825.0W	Muskrat MP	Power Resources Inc.	033N	089W	31	NW1/4SE1/4	06/28/1990	Complete	MON	Well	42.78701	-107.54764
P198576.0W	SE/NE31-33-89(4wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	SE1/4NE1/4	08/08/2012	Incomplete	MON	Well	42.790117	-107.542756
P198575.0W	SE/SW31-33-89(12wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	SE1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.782897	-107.552606
P198574.0W	SW/NE 31-33-89(3wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	SW1/4NE1/4	08/08/2012	Incomplete	MON	Well	42.79015	-107.547678
P198573.0W	SW/SE 31-33-89(2wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	SW1/4SE1/4	08/08/2012	Incomplete	MON	Well	42.78295	-107.547608
P198572.0W	SW/SW 31-33-89(4wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	31	SW1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.783017	-107.557678
P103584.0W	BS 96 M-1	Power Resources Inc.	033N	089W	32	NE1/4NW1/4	08/29/1996	Complete	MON	Well	42.79425	-107.53293
P112330.0W	BSMU-1	Power Resources Inc.	033N	089W	32	NE1/4NW1/4	10/08/1998	Complete	MON	Well	42.79425	-107.53293

Appendix B
Water Rights Within Five-Mile Radius of East Gas Hills Site

Permit Number (Appropriation)	Facility Name	Permittee	Twn	Rng	Sec	Qtr-Qtr	Priority	Status	Uses	Facility Type	Latitude	Longitude
P112331.0W	BSMP-1	Power Resources Inc.	033N	089W	32	NE1/4NW1/4	10/08/1998	Complete	MON	Well	42.79425	-107.53293
P112332.0W	BSMP-2	Power Resources Inc.	033N	089W	32	NE1/4NW1/4	10/08/1998	Complete	MON	Well	42.79425	-107.53293
P112333.0W	BSMP-3	Power Resources Inc.	033N	089W	32	NE1/4NW1/4	10/08/1998	Complete	MON	Well	42.79425	-107.53293
P198571.0W	NE/SW 32-33-89(2wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	32	NE1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.786436	-107.532889
P31501.0W	BS12-1030P		033N	089W	32	NW1/4SE1/4	11/12/1975	Complete	MON	Well	42.78696	-107.52803
P31499.0W	BS12-1028P	Federal American Partners	033N	089W	32	NW1/4SE1/4	11/12/1975	Complete	MON	Well	42.78696	-107.52803
P31500.0W	BS12-1029P	Federal American Partners	033N	089W	32	NW1/4SE1/4	11/12/1975	Complete	MON	Well	42.78696	-107.52803
P198570.0W	NW/SW 32-33-89(9wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	32	NW1/4SW1/4	08/08/2012	Incomplete	MON	Well	42.786531	-107.537808
P198569.0W	SE/NW 32-33-89(5wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	32	SE1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.790092	-107.532986
P112329.0W	BSPW-1	Power Resources Inc.	033N	089W	32	SE1/4NW1/4	10/08/1998	Complete	MON	Well	42.7906	-107.53292
P179593.0W	Gas Hills Water Well-1	Power Resources Inc.	033N	089W	32	SE1/4NW1/4	02/14/2007		MIS	Well	42.7906	-107.53292
P31498.0W	BS12-1027P		033N	089W	32	SW1/4NE1/4	11/12/1975	Complete	MON	Well	42.79059	-107.52804
P31496.0W	BS12-1025P	Federal American Partners	033N	089W	32	SW1/4NE1/4	11/12/1975	Complete	MON	Well	42.79059	-107.52804
P31497.0W	BS12-1026P	Federal American Partners	033N	089W	32	SW1/4NE1/4	11/12/1975	Complete	MON	Well	42.79059	-107.52804
P198568.0W	SW/NW 32-33-89(7wells) - Gas Hills Mine Unit 1	Cameco Resources	033N	089W	32	SW1/4NW1/4	08/08/2012	Incomplete	MON	Well	42.790114	-107.537847
P106687.0W	BUMP97-1	Power Resources Inc.	033N	089W	34	NE1/4NW1/4	07/01/1997	Complete	MON	Well	42.79411	-107.49382
P106688.0W	BUMO97-1	Power Resources Inc.	033N	089W	34	NE1/4NW1/4	07/01/1997	Complete	MON	Well	42.7941	-107.4938
P106689.0W	BUMU97-1	Power Resources Inc.	033N	089W	34	NE1/4NW1/4	07/01/1997	Complete	MON	Well	42.79404	-107.49397
P10075.0S	Rim Stock Reservoir		033N	089W	35	NE1/4SW1/4	01/27/1987	Complete	STO	Reservoir	42.786867	-107.474328
CR UW10/187	Lucky MC #8	Wyo Board of Land Commissioners	033N	090W	00		03/14/1958		IND_GW	Well		
P3.0W	Lucky MC #8	Pathfinder Mines Corp.	033N	090W	00		03/14/1958	Fully Adjudicated	IND_GW	Well		
P682.0G	Lucky MC #5	Pathfinder Mines Corp.	033N	090W	23	NE1/4SW1/4	07/02/1957	Incomplete	DOM_GW; IND_GW	Not Applicable	42.81735	-107.59184
P438.0G	Lucky MC 1	Pathfinder Mines Corp.	033N	090W	23	NW1/4SE1/4	05/01/1956	Complete	DOM_GW	Not Applicable	42.81701	-107.58513
P716.0G	Lucky MC #6	Pathfinder Mines Corp.	033N	090W	23	SW1/4NW1/4	11/21/1957	Incomplete	DOM_GW; IND_GW	Not Applicable	42.82084	-107.59708
P199352.0W	Lucky MC #14	Range Drilling LLC	033N	090W	24	NE1/4SW1/4	11/21/2012	Complete	MIS	Well	42.816803	-107.572633
P199353.0W	Lucky MC #12	Range Drilling LLC	033N	090W	24	SE1/4NW1/4	11/21/2012	Complete	MIS	Well	42.819489	-107.57465
P175221.0W	Gunnek #1	BRS Inc.	033N	090W	25	NE1/4NW1/4	06/26/2006	Complete	MIS	Well	42.808272	-107.571236
P9723.0R	Area 5 Reclamation Reservoir	Pathfinder Mines Corporation	033N	090W	26		12/24/1991	Complete	STO; WIL	Reservoir	42.80346	-107.589297
P439.0G	Lucky MC 2	Pathfinder Mines Corp.	033N	090W	26	NE1/4NW1/4	05/01/1956	Complete	DOM_GW	Not Applicable	42.81025	-107.59338
P76997.0W	4WW 1		033N	090W	26	NW1/4SE1/4	05/23/1988	Complete	MON	Well	42.80276	-107.58913
P76996.0W	JGW 1		033N	090W	26	SE1/4NE1/4	05/23/1988	Complete	MON	Well	42.80542	-107.58195
P87215.0W	Area 5 Reclamation Reservoir	Pathfinder Mines Corp.	033N	090W	26	SE1/4NW1/4	12/24/1991	Incomplete	MIS	Well	42.80903	-107.59185
P530.0G	Jay #1	Vitro Minerals Corporation	033N	090W	26	SW1/4NE1/4	01/29/1957	Incomplete	IND_GW	Not Applicable	42.80536	-107.58642
P501.0G	Lucky MC #3	Pathfinder Mines Corp.	033N	090W	26	SW1/4NW1/4	12/03/1956	Incomplete	DOM_GW; IND_GW	Not Applicable	42.80675	-107.59754
CR CR19/123	Area 5 Reclamation Reservoir	Pathfinder Mines Corp.	033N	090W	26	SW1/4NW1/4	12/24/1991	Fully Adjudicated	STO; WL	Reservoir	42.806861	-107.596611
P76998.0W	JGW 3		033N	090W	26	SW1/4SE1/4	05/23/1988	Complete	MON	Well	42.79933	-107.58682
P9722.0R	Area 4 Recalvation Reservoir	Pathfinder Mines Corporation	033N	090W	36		12/24/1991	Fully Adjudicated	STO; WIL; COMBBU	Reservoir	42.788949	-107.569661
P191436.0W	Ervay Basin No. 3	Herbst Lazy Ty Ranch, LLP	034N	088W	19	NE1/4NW1/4	09/11/2009	Complete	STK	Well	42.907111	-107.430811
P71762.0W	Roberts Spring	Clear Creek Cattle Co.	034N	088W	31	NW1/4NE1/4	09/13/1984	Fully Adjudicated	STK	Well	42.88063	-107.42572
P24172.0P	JE Ranch #12-5		034N	088W	32	NE1/4NW1/4	08/13/1973	Complete	DOM_GW; STK	Not Applicable	42.88075	-107.41077
P13527.0S	Lilly Pad Stock Reservoir	USDI - BLM	034N	089W	19	NW1/4SW1/4	11/01/1982	Fully Adjudicated	STO	Not Applicable	42.906612	-107.548776
P98996.0W	Herbst Ervay Basin #2		034N	089W	23	NE1/4SW1/4	04/20/1995	Complete	STK	Well	42.90264	-107.47464
P96884.0W	Herbst Ervay Basin #1		034N	089W	23	SW1/4SW1/4	08/25/1994	Complete	STK	Well	42.89906	-107.47959
P13528.0S	Lilly Pad Stock Reservoir	USDI - BLM	034N	089W	29	NE1/4SW1/4	11/01/1982	Fully Adjudicated	STO	Not Applicable	42.888447	-107.533792
P174546.0W	Burgett #1	Burgett, Glenn H.	034N	089W	31	NW1/4NE1/4	05/04/2006	Complete	STK	Well		
P198858.0W	Pine Tree Spring	Philp Sheep Company	034N	089W	33	NW1/4SE1/4	05/02/2012	Complete	STK	Spring	42.874278	-107.5095
P169586.0W	Liam	Burgett, Glenn H.	034N	090W	36	NE1/4NE1/4	08/25/2005		STK	Well	42.88126	-107.5631