



Uranerz Energy Corporation
(an Energy Fuels Company)
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April 23, 2018

Department of Environmental Quality – Land Quality Division
District III Supervisor (via email)
2100 West 5th Street
Sheridan, WY 82801

Attn: Document Control Desk
Director (via electronic submission)
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attn: Deputy Director (via email)
Division of Decommissioning, Uranium Recovery and Waste Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Mail Stop T-8F5
Rockville, MD 20852-2738

Re: Uranerz Energy Corporation Nichols Ranch ISR Project, WDEQ-LQD Permit to Mine No. 778 and NRC SUA-1597 Quarterly Report

Dear Mr. Rogaczewski and Mr. Dapas,

Pursuant to the Permit to Mine No. 778 and SUA-1597 License Condition 11.1, quarterly reporting is required. A comparison of quarterly reporting requirements between Wyoming Department of Environmental Quality – Land Quality Division (WDEQ-LQD) permit and the NRC License SUA-1597 shows similar reporting requirements. Uranerz has therefore combined the WDEQ-LQD quarterly report with the NRC License SUA-1597 quarterly report. It is worth noting that the report format more closely follows the WDEQ-LQD Chapter 11 Section 15 requirement list.

If you have any questions regarding the provided information, please contact me at 307-232-6680 or by email at bbonifas@energyfuels.com.

Sincerely,

Bernard Bonifas
Mine Manager
Uranerz Energy Corporation (an Energy Fuels company)
BB/bv

Attachments
1st Quarter 2018 Report



Uranerz Energy Corporation
(an Energy Fuels Company)
1701 East "E" Street
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cc: BJ Kristiansen, Assistant Supervisor, District III, WDEQ-LQD (via email)
Ron Linton, Project Manager, NRC
Bernadette Baca, Health Physicist, NRC



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1st Quarter 2018 Report

Nichols Ranch ISR Project

WDEQ-LQD Permit to Mine No. 778

And

NRC License SUA-1597



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1.0 Introduction

Uranerz Energy Corporation (Uranerz) received its Wyoming Department of Environmental Quality – Land Quality Division (WDEQ-LQD) Permit to Mine No. 778 on December 29, 2010. The permit was amended to add the Jane Dough Unit, approved March 3, 2017. On July 19, 2011 Source Material License SUA-1597 was issued to Uranerz by the Nuclear Regulatory Commission (NRC). The license was amended to add the Jane Dough Unit, approved March 22, 2017. Quarterly reports are required by WDEQ-LQD Non-Coal Rules and Regulations Chapter 11, Section 15 and NRC License SUA-1597 Condition 11.1.

The following highlights Uranerz activities during the quarter:

Nichols Ranch and Jane Dough Units

- Production continues in Production Area #1 (PA#1) in Header Houses 1 through 8.
- Production continues in Production Area #2 (PA#2) in Header House 9.
- No activities took place at the Jane Dough Unit during the quarter.

Hank Unit

- No activities took place at the Hank Unit during the quarter.

2.0 Monitoring

2.1 Injection Fluid Characteristics

A typical lixiviant solution is provided in Table 3c of the WDEQ-LQD Mine Plan with representative concentration ranges that could be found in the lixiviant. If changes to the ranges occur, Uranerz committed to updating the table during completion of the annual report. Additionally, WDEQ-LQD Chapter 11, Section 14(a)(ii)(A) Non Coal Rules and Regulations requires that the nature of the injection fluids be monitored at least monthly to yield representative data on the characteristics of the fluid. WDEQ-LQD Chapter 11, Section 15(b)(i) requires that the analysis of the injection fluid is reported in the Quarterly Reports.

Table 1, below, depicts the injection fluid composition for January, February and March 2018 based on a grab sample collected each month and submitted to a third-party laboratory for analysis. A comparison of the monthly composition results to values in Table 3c of the Mine Plan show that all analytical results were within or below the values presented in Table 3c.



Table 1: Injection Fluid Composition				
Parameter	Value Range	January	February	March
		2018	2018	2018
Calcium (mg/L)	20-500	210	236	246
Chloride (mg/L)	200-5000	89	97	87
Carbonate as CO ₃ (mg/L)	1-2500	ND	ND	ND
Bicarbonate as HCO ₃ (mg/L)	400-5000	1030	1210	1110
Potassium (mg/L)	15-300	12	13	13
Magnesium (mg/L)	3-100	23	26	28
Manganese (mg/L)	0.01-50	0.46	0.48	0.51
Sodium (mg/L)	400-6000	582	669	732
Sulfate (mg/L)	400-5000	1040	1120	1100
TDS @ 180 (mg/L)	1500-12000	2370	2500	2750
U ₃ O ₈ (mg/L)	0.01-500	0.26	0.57	1.45
V ₂ O ₅ (mg/L)	0.01-100	0.34	0.41	0.42

2.2 Injection Pressure and Flow Volumes (Class III Wells)

According to WDEQ-LQD Chapter 11 Section 14(a)(ii)(B) the injection pressure and either flow rate or volume is to be monitored at least weekly. Chapter 11, Section 14(a)(ii)(C) allows monitoring to be performed at the header house manifold. Uranerz monitors injection pressure and flow rate by header house. At this time, operations are occurring in PA#1, Header Houses 1 through 8 and PA#2 Header House 9.

Table 2, below, is a tabulation of the weekly maximum injection pressures for the header houses in PA#1 and PA#2. The Uranerz system continuously records injection pressure via electronic instrumentation at the header houses. Per the NRC Source Material License SUA-1597, License Condition 11.1(C), the readings are kept on site and are available for inspection upon request. The maximum pressure for Nichols Ranch is 150 psi. As shown in Table 2, the 150 psi maximum injection pressure was not exceeded during the quarter.



Table 2: Weekly Maximum Injection Pressure

Week Ending	Header House 1	Header House 2	Header House 3	Header House 4	Header House 5	Header House 6	Header House 7	Header House 8	Header House 9
January 07, 2018	104	54	122	131	106	133	116	115	113
January 14, 2018	111	51	111	139	106	135	110	111	118
January 21, 2018	134	56	122	131	107	131	108	116	131
January 28, 2018	122	53	101	123	95	127	96	112	126
February 04, 2018	150	58	107	120	98	140	105	114	114
February 11, 2018	145	65	140	140	106	132	106	113	126
February 18, 2018	150	65	144	132	115	135	104	121	132
February 25, 2018	143	55	131	126	95	130	102	114	125
March 04, 2018	131	53	131	128	106	128	105	110	129
March 11, 2018	133	52	135	125	105	130	101	110	114
March 18, 2018	131	45	131	119	118	130	112	109	112
March 25, 2018	135	50	130	124	112	130	102	108	112
April 01, 2018	137	67	151	118	116	121	101	112	110
* Value exceeds maximum injection pressure									

Flow rates are also continuously recorded via electronic instrumentation at the header houses. Table 3, below, is a tabulation of the recovery (aka production) and injection flow volumes for the quarter in PA#1 and PA#2.

Table 3: Wellfield Weekly Flow Volumes

Week Ending	Recovery (gallons)	Injection (gallons)
January 07, 2018	23,116,650	22,968,668
January 14, 2018	23,335,500	23,185,707
January 21, 2018	23,392,050	23,247,613
January 28, 2018	23,473,700	23,328,119
February 04, 2018	23,346,850	23,192,120
February 11, 2018	22,576,000	22,407,772
February 18, 2018	21,602,650	21,431,358
February 25, 2018	22,706,850	22,526,071
March 04, 2018	22,961,650	22,772,342
March 11, 2018	23,069,250	22,880,823
March 18, 2018	23,005,950	22,822,489
March 25, 2018	22,930,150	22,745,598
April 01, 2018	22,181,000	21,998,282
Totals	297,698,250	295,506,962



2.3 Monitor Well Sampling Results

Monitor well sampling is performed during operations to detect and correct conditions leading to a potential excursion. Monitor well sampling and analysis is performed according to the WDEQ-LQD Mine Plan, Section 3.14.7.8.10 and the NRC License Condition 11.5. The monitor wells in producing wellfields are sampled twice a month, not less than 10 days between each sampling event, for water levels and the Upper Control Limit (UCL) parameters: chloride, conductivity, and alkalinity. All perimeter (ring), overlying and underlying monitor wells were sampled as required.

2.3.1 Production Area #1

Monitor well sampling in PA#1 continued during the quarter. Sampling results for each well in PA#1 are enclosed in Appendix A. Monitor ring wells (MRN) located around the perimeter of PA#1 show fluctuations in water levels as would be expected in an active production area. These fluctuations are attributed to the balancing of water flow throughout the production area in order to maintain the required inward hydraulic gradient according to NRC License 1597 Condition 10.9 and the WDEQ-LQD Mine Plan Section 3.4.

The overlying monitor well MON-11 continued to show high conductivity values during the quarter. Uranerz believes this to be a naturally occurring anomaly and continues to closely observe the conductivity levels through routine monitoring of the well.

MON-12 has shown a slight upward trend in conductivity since 2014 with conductivity values exceeding the UCL for the first time in the 3rd quarter, 2017, as previously reported. Because chloride and total alkalinity values show no corresponding trend, Uranerz believes this to be a naturally occurring anomaly similar to MON-11. Conductivity values for this quarter are below the UCL. Uranerz continues to closely observe the conductivity levels through routine monitoring of the well.

2.3.2 Production Area #2

Monitor well sampling of PA#2, Header House 9, continued during the quarter as illustrated in Figure 3-19 of the Mine Plan (LQD Change No. 20). Phase 1 monitor ring wells (MRN) located around the operational area of PA#2 show fluctuations in water levels as would be expected in an active production area. These fluctuations are attributed to the balancing of water flow throughout the production area in order to maintain the required inward hydraulic gradient according to NRC License 1597 Condition 10.9 and the WDEQ-LQD Mine Plan Section 3.4. Sampling results for each well currently monitored in PA#2 are enclosed in Appendix B.



2.3.3 Excursion Status

Based on the monitor well water quality reports and analysis, there were no excursions to report during the report period.

3.0 Mechanical Integrity Testing

No wells were tested for mechanical integrity during the report period.

4.0 Defective Wells, Well Repair and Plugging

No wells were repaired or plugged during the report period.

5.0 Certification

Certification is required by WDEQ-LQD Non-Coal Rules and Regulations Chapter 11, Section 2(g). I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

Bernard Bonifas
Mine Manager
Uranerz Energy Corporation (an Energy Fuels Company)

Appendix A



Appendix A

Production Area 1 Well ID MON-01		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/11/2018	7	522	118	8.4	4,642.0
01/24/2018	7	532	115	8.4	4,642.6
02/07/2018	7	540	116	8.4	4,642.9
02/22/2018	8	544	117	8.4	4,642.8
03/12/2018	7	537	115	8.6	4,641.7
03/27/2018	7	540	115	8.5	4,641.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-02		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/09/2018	7	536	115	8.6	4,646.1
01/24/2018	7	534	116	8.5	4,646.1
02/07/2018	6	542	114	8.5	4,646.6
02/22/2018	7	538	115	8.7	4,647.0
03/12/2018	7	540	115	8.6	4,645.3
03/27/2018	7	544	115	8.5	4,645.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-03		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/10/2018	7	536	117	8.4	4,649.9
01/24/2018	7	535	117	8.6	4,650.9
02/07/2018	6	545	115	8.5	4,650.6
02/22/2018	7	546	117	8.5	4,650.9
03/12/2018	7	539	114	8.6	4,648.9
03/27/2018	7	544	113	8.5	4,649.2

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-04		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/15/2018	6	521	113	8.6	4,654.3
01/29/2018	7	514	113	8.6	4,653.8
02/12/2018	7	515	114	8.6	4,654.5
02/26/2018	7	516	115	8.6	4,654.7
03/13/2018	7	520	115	8.8	4,652.6
03/27/2018	7	526	115	8.7	4,653.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-05		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/15/2018	7	565	116	8.8	4,655.3
01/29/2018	7	563	113	8.8	4,654.8
02/12/2018	7	556	116	8.7	4,655.5
02/26/2018	7	548	114	8.8	4,655.5
03/13/2018	7	554	114	9.0	4,653.9
03/27/2018	7	567	114	8.9	4,654.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-06		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/15/2018	7	560	116	8.4	4,657.0
01/29/2018	7	554	117	8.5	4,656.9
02/12/2018	7	550	116	8.6	4,657.1
02/27/2018	7	542	116	8.5	4,657.2
03/14/2018	7	542	117	8.7	4,655.4
03/28/2018	7	558	117	8.6	4,655.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-07		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS			Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation	
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface	
Upper Control Limits	21	733	145			

Date

01/16/2018	6	563	116	8.6	4,654.9
01/29/2018	7	556	115	8.5	4,651.0
02/12/2018	7	556	114	8.4	4,654.4
02/26/2018	7	541	114	8.5	4,655.3
03/13/2018	7	561	114	8.7	4,653.6
03/28/2018	7	561	115	8.6	4,654.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-08		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	7	566	116	8.3	4,660.4
01/29/2018	7	558	116	8.3	4,657.4
02/12/2018	7	558	115	8.3	4,660.0
02/26/2018	8	547	115	8.3	4,660.6
03/13/2018	7	559	114	8.6	4,659.2
03/28/2018	7	563	114	8.6	4,659.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-09		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	7	562	116	8.4	4,661.3
01/30/2018	7	554	117	8.4	4,661.0
02/12/2018	7	554	116	8.4	4,660.9
02/26/2018	8	540	115	8.3	4,661.3
03/14/2018	7	547	115	8.5	4,660.5
03/28/2018	7	560	116	8.5	4,660.6

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-10		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	7	573	113	8.3	4,663.7
01/29/2018	7	567	113	8.5	4,663.2
02/12/2018	7	564	114	8.3	4,663.2
02/27/2018	7	552	110	8.4	4,663.6
03/14/2018	7	555	111	8.5	4,662.7
03/28/2018	7	566	113	8.5	4,662.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-11		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	6	*885	103	8.2	4,664.3
01/29/2018	6	*851	103	8.3	4,664.5
02/12/2018	6	*854	104	8.2	4,664.9
02/26/2018	7	*821	103	8.3	4,665.0
03/14/2018	6	*835	102	8.4	4,664.0
03/28/2018	7	*855	103	8.2	4,664.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-12		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	6	707	109	8.2	4,664.7
01/29/2018	7	692	110	8.3	4,664.8
02/12/2018	6	693	109	8.3	4,665.0
02/27/2018	8	677	109	8.3	4,665.1
03/14/2018	7	680	107	8.4	4,664.4
03/28/2018	7	697	107	8.3	4,664.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-13		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	733	145		

Date

01/16/2018	7	594	113	8.3	4,665.2
01/29/2018	7	585	113	8.4	4,665.2
02/12/2018	7	585	115	8.3	4,665.1
02/27/2018	7	568	112	8.4	4,665.4
03/14/2018	7	578	113	8.5	4,664.8
03/28/2018	7	591	111	8.3	4,664.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-01		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	7	537	118	8.6	4,603.2
01/17/2018	7	544	117	8.6	4,632.3
02/01/2018	7	545	118	8.7	4,619.6
02/13/2018	7	539	118	8.7	4,617.9
03/01/2018	8	533	119	8.6	4,625.4
03/15/2018	7	541	116	8.7	4,614.4

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-02-2		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	7	557	118	8.5	4,605.9
01/17/2018	7	559	119	8.6	4,628.2
02/01/2018	7	561	117	8.6	4,614.0
02/13/2018	7	555	116	8.5	4,613.3
03/01/2018	8	546	118	8.6	4,620.1
03/15/2018	7	570	118	8.7	4,608.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-03-2		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	8	563	116	8.6	4,609.0
01/17/2018	7	567	115	8.6	4,625.1
02/01/2018	8	560	112	8.6	4,610.9
02/13/2018	8	556	114	8.7	4,610.8
03/01/2018	8	544	111	8.6	4,615.6
03/15/2018	8	553	112	8.8	4,605.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-04		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	7	564	116	8.5	4,613.8
01/17/2018	7	568	115	8.6	4,617.5
02/01/2018	7	569	115	8.6	4,614.2
02/13/2018	7	569	116	8.6	4,612.8
03/01/2018	8	552	114	8.6	4,610.2
03/15/2018	7	572	114	8.7	4,609.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-05		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	7	568	114	8.5	4,607.4
01/17/2018	7	563	112	8.7	4,602.9
02/01/2018	7	568	111	8.7	4,616.6
02/13/2018	7	564	113	8.6	4,609.8
03/05/2018	7	537	110	8.5	4,609.2
03/19/2018	7	548	110	8.7	4,617.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-06		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/02/2018	8	572	112	8.7	4,607.1
01/17/2018	7	572	112	8.7	4,597.8
02/01/2018	7	576	111	8.7	4,618.5
02/13/2018	8	573	111	8.6	4,612.2
03/01/2018	8	558	109	8.6	4,607.3
03/15/2018	8	572	112	8.8	4,615.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-07		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/03/2018	8	571	110	8.6	4,618.2
01/18/2018	7	579	112	8.7	4,602.6
02/01/2018	7	580	109	8.3	4,622.1
02/13/2018	8	577	108	8.4	4,620.6
03/05/2018	8	547	104	8.4	4,609.0
03/19/2018	8	565	105	8.7	4,624.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-08		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/03/2018	8	577	111	8.6	4,623.4
01/18/2018	7	583	111	8.6	4,606.8
02/01/2018	7	581	112	8.6	4,610.1
02/13/2018	7	575	110	8.6	4,618.2
03/06/2018	8	577	106	8.6	4,607.0
03/20/2018	7	563	106	8.7	4,619.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-09		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS			Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation	
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface	
Upper Control Limits	21	731	152			

Date

01/03/2018	7	576	114	8.6	4,627.3
01/18/2018	7	584	112	8.5	4,614.7
02/01/2018	7	581	115	8.5	4,611.7
02/13/2018	7	574	116	8.5	4,618.3
03/05/2018	7	552	115	8.3	4,611.3
03/20/2018	7	564	113	8.6	4,621.9

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-10		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/03/2018	8	564	107	8.6	4,636.0
01/18/2018	8	571	109	8.5	4,624.5
02/01/2018	8	572	107	8.4	4,620.6
02/13/2018	8	567	108	8.5	4,624.4
03/05/2018	7	543	106	8.3	4,622.6
03/20/2018	8	556	105	8.7	4,627.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-11		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	8	567	105	8.7	4,636.3
01/18/2018	8	575	105	8.6	4,625.7
02/01/2018	8	575	107	8.5	4,623.8
02/13/2018	8	571	108	8.5	4,624.1
03/05/2018	7	550	109	8.3	4,624.6
03/20/2018	8	566	109	8.7	4,624.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-12		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/03/2018	7	577	119	8.5	4,636.0
01/18/2018	7	579	119	8.5	4,627.6
02/01/2018	7	581	119	8.5	4,628.3
02/13/2018	7	573	122	8.1	4,624.2
03/05/2018	7	553	119	8.2	4,628.4
03/20/2018	7	563	117	8.6	4,625.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-13		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/03/2018	7	579	119	8.5	4,640.3
01/22/2018	7	567	120	8.6	4,634.3
02/05/2018	7	586	121	8.2	4,635.1
02/20/2018	7	564	120	8.4	4,637.8
03/06/2018	8	578	119	8.3	4,637.9
03/20/2018	7	562	115	8.6	4,634.1

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-14		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	577	118	8.5	4,642.9
01/22/2018	7	571	121	8.5	4,640.3
02/05/2018	7	593	122	8.4	4,641.2
02/20/2018	7	567	120	8.3	4,643.3
03/06/2018	7	577	118	8.4	4,640.4
03/20/2018	7	565	116	8.7	4,638.4

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-15		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	6	567	124	8.5	4,645.2
01/22/2018	6	561	123	8.4	4,646.8
02/05/2018	6	581	124	8.4	4,648.0
02/20/2018	7	559	123	8.2	4,651.5
03/06/2018	6	574	122	8.3	4,641.2
03/21/2018	7	569	121	8.5	4,641.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-16		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	554	124	8.4	4,652.4
01/22/2018	7	550	123	8.4	4,654.4
02/05/2018	6	569	123	8.3	4,659.0
02/20/2018	7	551	123	8.3	4,658.8
03/06/2018	7	562	121	8.3	4,648.3
03/21/2018	7	560	122	8.5	4,647.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-17		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	543	125	8.4	4,652.8
01/22/2018	7	538	123	8.4	4,653.4
02/05/2018	7	555	123	8.3	4,650.3
02/20/2018	7	536	123	8.4	4,655.1
03/07/2018	7	549	123	8.3	4,649.9
03/21/2018	7	545	122	8.6	4,649.1

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-18-1		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	6	540	122	8.4	4,647.5
01/22/2018	7	534	122	8.2	4,649.9
02/05/2018	7	551	124	8.3	4,652.9
02/20/2018	7	531	123	8.4	4,650.1
03/07/2018	7	548	120	8.4	4,645.3
03/21/2018	7	541	121	8.5	4,643.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-20-1		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	544	120	8.5	4,642.3
01/23/2018	7	533	123	8.4	4,650.1
02/05/2018	7	550	122	8.4	4,647.9
02/21/2018	7	547	121	8.5	4,647.5
03/06/2018	6	542	120	8.3	4,644.8
03/21/2018	7	548	119	8.6	4,640.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-21		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	534	119	8.4	4,643.2
01/23/2018	7	526	121	8.4	4,646.6
02/05/2018	7	546	121	8.4	4,645.5
02/21/2018	7	540	119	8.4	4,644.1
03/06/2018	6	536	117	8.2	4,643.2
03/21/2018	7	535	118	8.6	4,638.4

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-22		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	535	116	8.5	4,640.3
01/23/2018	7	529	116	8.6	4,639.7
02/06/2018	7	527	118	8.4	4,636.7
02/21/2018	7	538	117	8.4	4,637.0
03/06/2018	7	533	114	8.3	4,637.8
03/21/2018	7	537	115	8.7	4,629.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-23		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	539	125	8.6	4,642.3
01/23/2018	7	528	125	8.5	4,635.9
02/06/2018	7	536	125	8.3	4,630.5
02/21/2018	7	539	124	8.5	4,633.2
03/08/2018	7	540	122	8.6	4,634.9
03/21/2018	7	534	123	8.7	4,629.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-24		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS			Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation	
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface	
Upper Control Limits	21	731	152			

Date

01/04/2018	7	538	121	8.5	4,644.4
01/23/2018	7	528	120	8.4	4,636.2
02/05/2018	7	549	122	8.5	4,632.2
02/20/2018	7	529	120	8.6	4,634.9
03/07/2018	7	543	122	8.3	4,630.5
03/21/2018	7	539	120	8.6	4,631.7

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-25		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	538	120	8.5	4,637.8
01/23/2018	7	529	119	8.5	4,631.0
02/05/2018	7	548	124	8.6	4,625.5
02/20/2018	7	528	120	8.5	4,626.6
03/07/2018	7	547	120	8.3	4,620.5
03/22/2018	7	537	118	8.5	4,626.6

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-26		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	530	121	8.5	4,621.6
01/23/2018	7	520	122	8.6	4,619.6
02/05/2018	7	547	122	8.7	4,617.2
02/20/2018	7	520	120	8.6	4,616.1
03/07/2018	7	535	120	8.4	4,611.7
03/22/2018	7	529	120	8.5	4,615.2

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-27		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	531	121	8.5	4,613.0
01/24/2018	7	531	121	8.6	4,613.3
02/05/2018	7	543	121	8.6	4,614.3
02/20/2018	7	524	121	8.6	4,609.8
03/08/2018	6	538	120	8.7	4,608.5
03/22/2018	7	529	118	8.5	4,611.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-28		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	7	528	121	8.6	4,612.4
01/24/2018	7	530	121	8.7	4,616.3
02/05/2018	7	545	121	8.6	4,619.3
02/20/2018	7	526	119	8.6	4,610.2
03/08/2018	7	536	119	8.7	4,611.8
03/22/2018	7	529	119	8.5	4,613.3

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-29		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/04/2018	9	540	120	8.6	4,611.6
01/23/2018	10	533	121	8.6	4,615.0
02/05/2018	10	554	120	8.6	4,620.0
02/21/2018	10	546	120	8.6	4,613.7
03/08/2018	8	542	119	8.7	4,609.4
03/22/2018	8	534	119	8.5	4,608.9

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-33		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/11/2018	7	510	118	8.6	4,621.9
01/24/2018	7	517	118	8.7	4,633.6
02/06/2018	7	523	119	8.6	4,629.3
02/21/2018	7	523	117	8.6	4,621.7
03/12/2018	7	524	117	8.7	4,622.8
03/27/2018	7	532	116	8.7	4,621.5

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-34-2		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	731	152		

Date

01/08/2018	7	531	119	8.6	4,608.1
01/24/2018	7	531	120	8.7	4,628.5
02/06/2018	7	539	119	8.6	4,624.6
02/21/2018	7	540	120	8.5	4,618.7
03/12/2018	7	540	120	8.7	4,620.0
03/28/2018	7	540	117	8.7	4,617.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-01-1		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/11/2018	6	389	203	8.7	4,623.6
01/24/2018	6	388	202	8.7	4,624.7
02/07/2018	5	392	200	8.7	4,624.3
02/22/2018	6	408	200	8.6	4,624.7
03/12/2018	5	396	199	8.8	4,623.8
03/27/2018	6	405	199	8.8	4,623.9

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-02		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/09/2018	5	401	207	8.8	4,625.3
01/24/2018	6	401	207	8.8	4,624.0
02/07/2018	5	401	203	8.8	4,624.7
02/22/2018	6	400	204	8.9	4,625.5
03/12/2018	5	401	203	8.9	4,623.7
03/27/2018	6	413	201	8.7	4,623.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-03		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/10/2018	6	397	200	8.7	4,623.9
01/24/2018	6	386	202	8.7	4,624.6
02/07/2018	5	388	199	8.6	4,623.8
02/22/2018	6	395	201	8.7	4,624.6
03/12/2018	5	398	199	8.8	4,622.5
03/27/2018	6	399	197	8.8	4,622.6

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-04		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/15/2018	4	425	222	8.6	4,624.1
01/29/2018	5	426	225	8.6	4,624.6
02/12/2018	5	422	223	8.6	4,624.6
02/26/2018	5	419	222	8.6	4,624.7
03/13/2018	4	424	221	8.8	4,622.2

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-05-1		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/15/2018	5	387	198	8.7	4,624.3
01/29/2018	5	387	199	8.7	4,624.1
02/12/2018	5	385	199	8.7	4,624.6
02/26/2018	6	397	198	8.7	4,624.8
03/13/2018	5	389	196	8.9	4,623.0

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-06		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/15/2018	5	382	186	8.7	4,630.7
01/29/2018	5	386	195	8.7	4,622.2
02/12/2018	5	383	197	8.7	4,623.5
02/27/2018	6	388	193	8.8	4,622.5
03/14/2018	5	377	195	8.9	4,621.3
03/28/2018	6	398	196	8.7	4,621.4

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-07		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/16/2018	5	377	179	8.9	4,622.5
01/29/2018	6	380	177	8.8	4,622.2
02/12/2018	6	379	180	8.7	4,622.5
02/26/2018	6	374	178	8.7	4,622.7
03/13/2018	5	373	177	8.9	4,621.4
03/28/2018	6	379	175	8.8	4,621.8

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-08		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/16/2018	5	365	179	8.7	4,623.6
01/29/2018	6	365	181	8.6	4,623.1
02/12/2018	5	364	181	8.7	4,623.5
02/26/2018	6	370	180	8.7	4,623.8
03/13/2018	6	371	180	8.9	4,622.7
03/28/2018	6	375	178	8.9	4,623.1

*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-09		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	20	490	274		

Date

01/16/2018	6	394	187	8.7	4,624.2
01/30/2018	6	390	188	8.8	4,624.5
02/12/2018	6	392	189	8.7	4,623.4
02/26/2018	7	389	188	8.7	4,624.1
03/14/2018	6	395	185	8.9	4,622.7
03/28/2018	6	397	186	8.9	4,623.3

*Value Exceeds Upper Control Limit

Appendix B



Appendix B

Production Area 2 Well ID MON-14		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	725	148		

Date

01/11/2018	7	514	117	8.7	4,639.6
01/24/2018	7	519	117	8.7	4,640.6
02/06/2018	7	525	116	8.7	4,640.2
02/22/2018	7	527	118	8.7	4,640.5
03/13/2018	7	521	117	8.8	4,638.5
03/28/2018	7	522	116	8.6	4,639.5

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MON-15		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	725	148		

Date

01/10/2018	7	556	117	8.8	4,635.1
01/24/2018	7	553	118	8.8	4,635.2
02/06/2018	7	557	117	8.8	4,635.3
02/22/2018	8	562	119	8.6	4,635.4
03/13/2018	7	554	116	8.9	4,634.0
03/28/2018	7	562	117	8.9	4,634.1

*Value Exceeds Upper Control Limit

Production Area 2		Uranerz Energy Corporation Nichols Ranch			Quarterly Report	
Well ID MPN-16		PERIMETER, OVER AND UNDER MONITOR WELLS			1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation	
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface	
Upper Control Limits	21	681	161			

Date

01/11/2018	7	509	121	9.1	4,619.5
01/23/2018	7	506	121	9.1	4,618.2
02/06/2018	7	519	122	9.0	4,619.0
02/22/2018	7	515	122	9.1	4,617.3
03/12/2018	7	517	121	9.1	4,616.5
03/28/2018	7	522	122	8.8	4,615.1

*Value Exceeds Upper Control Limit

Production Area 2		Uranerz Energy Corporation Nichols Ranch		Quarterly Report	
Well ID MRN-35		PERIMETER, OVER AND UNDER MONITOR WELLS		1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	681	161		

Date

01/11/2018	7	498	121	8.7	4,617.1
01/24/2018	7	510	120	8.7	4,627.0
02/06/2018	8	521	120	8.8	4,624.9
02/21/2018	7	515	119	8.7	4,617.6
03/12/2018	7	513	118	8.8	4,616.0
03/27/2018	7	523	118	8.8	4,615.7

*Value Exceeds Upper Control Limit

Production Area 2		Uranerz Energy Corporation Nichols Ranch		Quarterly Report	
Well ID MRN-36		PERIMETER, OVER AND UNDER MONITOR WELLS		1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	681	161		

Date

01/11/2018	7	484	122	8.7	4,616.0
01/24/2018	7	489	122	8.7	4,620.3
02/06/2018	7	499	123	8.8	4,622.8
02/21/2018	7	499	121	8.8	4,616.5
03/12/2018	7	499	119	8.8	4,615.1
03/27/2018	7	501	119	8.9	4,617.8

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MRN-37		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	681	161		

Date

01/04/2018	7	489	122	8.7	4,608.1
01/23/2018	6	483	123	8.7	4,618.1
02/06/2018	6	495	124	8.7	4,617.6
02/21/2018	7	497	123	8.7	4,615.1
03/07/2018	7	495	122	8.6	4,608.2
03/27/2018	7	502	122	8.6	4,617.0

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MRN-38		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	681	161		

Date

01/09/2018	6	486	124	8.7	4,612.8
01/23/2018	7	477	124	8.7	4,616.9
02/05/2018	6	495	125	8.8	4,615.9
02/21/2018	7	494	124	8.7	4,615.0
03/07/2018	6	488	122	8.5	4,609.5
03/27/2018	6	491	124	8.8	4,613.5

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MRN-58		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	21	681	161		

Date

01/04/2018	7	524	119	8.6	4,616.6
01/23/2018	7	518	119	8.6	4,618.9
02/05/2018	7	537	120	8.7	4,620.0
02/21/2018	7	533	118	8.6	4,615.9
03/08/2018	7	532	119	8.7	4,613.0
03/22/2018	7	522	118	8.6	4,615.2

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MUN-14		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	19	468	249		

Date

01/11/2018	5	382	203	8.8	4,623.9
01/24/2018	5	389	202	8.7	4,625.4
02/06/2018	5	397	204	8.7	4,624.8
02/22/2018	5	406	202	8.8	4,623.9
03/13/2018	5	403	200	8.9	4,622.2
03/28/2018	5	398	196	8.7	4,623.0

*Value Exceeds Upper Control Limit

Production Area 2 Well ID MUN-15		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 1st QTR 2018	
Water Quality Parameters	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
Units	mg/l	u mho/cm	mg/l as CaCo3		msl @ surface
Upper Control Limits	19	468	249		

Date

01/10/2018	5	390	200	8.9	4,622.7
01/24/2018	5	389	200	9.1	4,621.9
02/06/2018	5	390	201	8.9	4,621.7
02/22/2018	5	395	197	8.8	4,621.9
03/13/2018	5	401	196	9.1	4,615.3
03/28/2018	6	401	197	9.0	4,620.5

*Value Exceeds Upper Control Limit