



Uranerz Energy Corporation  
(an Energy Fuels Company)  
1701 East "E" Street  
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July 25, 2016

40-9067

Department of Environmental Quality – Land Quality Division  
District III Supervisor  
2100 West 5<sup>th</sup> Street  
Sheridan, WY 82801

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

Attn: Deputy Director  
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. Persinko,

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, in an effort to reduce redundant reporting and our environmental footprint with duplicate paper copies, 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 Bernard Bonifas at 307-232-6680 or by email at [bbonifas@energyfuels.com](mailto:bbonifas@energyfuels.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'William P. Goranson', written over a horizontal line.

William P. Goranson  
Executive Vice President ISR Operations  
Uranerz Energy Corporation (an Energy Fuels company)

NM5520



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WG/th

Attachments

2<sup>nd</sup> Quarter 2016 Report

cc: Dorrان Larner, Project Manager, WDEQ-LQD (via email)  
Ron Linton, Project Manager, NRC (via email)  
Linda Gersey, Lead Inspector, NRC (via email)



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# **2<sup>nd</sup> Quarter 2016 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. On July 19, 2011 Source Material License SUA-1597 was issued to Uranerz by the Nuclear Regulatory Commission (NRC). 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 Unit

- Production continues in Production Area #1 (PA#1) in header houses 1 through 7.
- Header house 8 was installed during the quarter and will be brought online in the third quarter. Well completion details are available at the mine site and are provided in the annual report to the WDEQ-LQD.
- Production Area #2 (PA#2) baseline sampling was completed during the quarter.
- A pump test plan for PA#2 was submitted to, and approved by the WDEQ-LQD. The pump test was initiated in March. Baseline sampling of the monitor wells in PA#2 were collected during the period. Once the hydrologic data is prepared and the baseline sampling results compiled, the Hydrologic Test Document will be submitted to the WDEQ-LQD for review and comment with a copy to the NRC for review.

### Hank Unit

- No activities took place at the Hank Unit.

## 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 occur to the ranges, Uranerz committed to updating the table in 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 and Section 15(b)(i) requires that it is reported in the Quarterly Reports.

Table 1 depicts the injection fluid composition for April, May, and June 2016 based on a grab sample collected each month and submitted to a third party laboratory for analysis. A comparison of monthly



composition results to those in Table 3c show that all analytical results were within or below the values presented in Table 3c of the Mine Plan.

Parameter	Value Range	April 2016	May 2016	June 2016
Calcium (mg/L)	20-500	130	87	106
Chloride (mg/L)	200-5000	80	117	82
Carbonate as CO <sub>3</sub> (mg/L)	1-2500	Not Detected	Not Detected	Not Detected
Bicarbonate as HCO <sub>3</sub> (mg/L)	400-5000	1440	1420	1240
Potassium (mg/L)	15-300	13	11	12
Magnesium (mg/L)	3-100	18	17	17
Manganese (mg/L)	0.01-50	0.06	0.18	0.04
Sodium (mg/L)	400-6000	678	691	654
Sulfate (mg/L)	400-5000	475	477	538
TDS @ 180 (mg/L)	1500-12000	2060	1910	1920
U <sub>3</sub> O <sub>8</sub> (mg/L)	0.01-500	0.17	0.83	0.20
V <sub>2</sub> O <sub>5</sub> (mg/L)	0.01-100	0.56	1.33	1.19

## 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 rates by header house. At this time, operations are occurring in PA#1, header houses 1 through 7.

Table 2 is a tabulation of the maximum weekly injection pressures. The Uranerz system continuously records injection pressure via electronic instrumentation at the header houses. Readings are recorded by the millisecond. 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. There were no exceedances of the maximum pressure.

Week Ending	Header House 1	Header House 2	Header House 3	Header House 4	Header House 5	Header House 6	Header House 7
4/3/2016	145	143	139	127	114	133	77
4/10/2016	141	145	145	138	117	139	83
4/17/2016	145	143	145	127	110	134	82



**Table 2: Weekly Maximum Injection Pressure (Continued)**

4/24/2016	141	146	145	130	118	135	83
5/1/2016	145	143	146	131	127	140	92
5/8/2016	140	143	145	129	116	133	81
5/15/2016	145	138	149	132	133	137	84
5/22/2016	140	143	138	133	128	134	81
5/29/2016	143	133	144	134	119	138	81
6/5/2016	143	145	148	132	133	142	82
6/12/2016	148	147	149	133	135	136	85
6/19/2016	143	145	137	134	137	138	82
6/26/2016	142	133	140	133	123	136	81

Flow rates are also continuously recorded via electronic instrumentation at the header houses. Table 3 is a tabulation of the recovery (aka production), injection, and wellfield bleed flow volumes for the quarter. Per section 3.10.1 of the WDEQ-LQD Mine Plan and Section 3.2.3.3 of the NRC Technical Report, the approximate average of 0.5 to 1.5% is the bleed rate for Nichols Ranch needed to maintain the inward gradient. The average bleed rate for the period was 0.7%.

**Table 3: Wellfield Weekly Flow Volumes**

<b>Production Area #1</b>				
<b>Week Ending</b>	<b>Recovery (gallons)</b>	<b>Injection (gallons)</b>	<b>Wellfield Bleed (gallons)</b>	<b>% Bleed</b>
4/3/2016	21,370,850	21,246,250	124,600	0.6%
4/10/2016	22,082,900	21,942,800	140,100	0.6%
4/17/2016	20,882,050	20,751,750	130,300	0.6%
4/24/2016	21,726,650	21,586,350	140,300	0.6%
5/1/2016	21,277,500	21,123,850	153,650	0.7%
5/8/2016	20,493,200	20,346,600	146,600	0.7%
5/15/2016	21,694,100	21,553,050	141,050	0.7%
5/22/2016	22,352,150	22,148,500	203,650	0.9%
5/29/2016	22,131,400	21,974,850	156,550	0.7%
6/5/2016	21,432,950	21,275,700	157,250	0.7%
6/12/2016	21,246,300	21,166,100	80,200	0.4%
6/19/2016	21,098,050	20,950,550	147,500	0.7%
6/26/2016	21,187,150	21,017,050	170,100	0.8%
<b>Totals</b>	<b>300,607,900</b>	<b>298,523,800</b>	<b>2,084,100</b>	<b>0.7%</b>



## 2.3 Monitor Well Sampling Results

Monitor well sampling is performed during operation to detect and correct conditions leading to a potential excursion. Monitor well sampling and analysis is performed according to the WDEQ-LQD Mine Plan, Volume VIII, Section 3.14.7.8.10 and the NRC License Condition 11.5. The monitor wells in producing wellfields are sampled twice a month, at least 10 days between each sampling event, for water levels and the Upper Control Limit (UCL) parameters; chloride, conductivity, and alkalinity. Monitor well sampling in PA#1 continued during the period. All ring, overlying and underlying monitor wells were sampled. Results for each well have been tabulated and are enclosed in Appendix A.

The overlying monitor well MON-11 continues to show increased conductivity values during the second quarter of 2016. Uranerz believes this is a naturally occurring anomaly and will continue to closely observe the conductivity levels through routine monitoring of the well.

Monitor ring wells (MRN) located throughout PA#1 show fluctuations in water levels as would be expected in an active production area. These fluctuations continue to be attributed to the start-up of header house 7 and the subsequent balancing of water flow throughout the production area in order to maintain the required inward hydraulic gradient according to NRC License SUA-1597 Condition 10.9 and the WDEQ-LQD Mine Plan.

### 2.3.1 Excursion Status

Based on the monitor well water quality reports and analysis, there were no potential excursions which required reporting during the quarter.

## **3.0 Mechanical Integrity Testing**

The WDEQ-LQD Permit to Mine No. 778 requires mechanical integrity test (MIT) results, for wells, to be reported quarterly. NRC License Condition 11.1B requires a summary of MIT results semi-annually; however, the MIT information remains the same regardless of the reporting timeframe. Uranerz will therefore report the results quarterly to both agencies. The MIT procedure is followed pursuant to Section 3.6 of WDEQ-LQD Mine Plan, Volume VIII and NRC License Application Volume I, Section 3.4. Results of the MITs are maintained on site and include the signature of the individual responsible for conducting the test.

Forty four (44) Class III wells were tested for mechanical integrity during the report period and the MIT results are attached in Table 4. Wells tested with a pressure at or below 10% in a 10-minute timeframe have passed the MIT. There were no failed MITs during the quarter.

The format of column designations in Table 4 was established based on WDEQ-LQD criteria. The first column is a simple line designation for ease in review.





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#### 4.0 Defective Wells, Well Repair and Plugging

Per Chapter 11, Section 8(c), a well lacking mechanical integrity must be plugged if it cannot be repaired. Chapter 11, Section 15(b)(iii) requires the status of defective wells be reported quarterly. During the 2<sup>nd</sup> quarter, Uranerz did not plug and abandon any wells.

Plugging and abandonment of wells is performed in accordance with Permit to Mine No. 778, Volume VIII, Mine Plan Section 3.8, and in accordance with Wyoming Statute 35-11-404 (described in NRC License Application Volume I Section 6.1). Well abandonment reports will be submitted in the WDEQ-LQD Annual Report as required by Permit to Mine No. 778.

#### 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.

A handwritten signature in black ink, appearing to read 'William P. Goranson', written over a horizontal line.

William P. Goranson  
Executive Vice President ISR Operations  
Uranerz Energy Corporation (an Energy Fuels Company)

**Table 4: Mechanical Integrity Tests  
WDEQ - Quarterly Report/2nd QTR 2016  
MITs for Nichols Ranch Production**



#	Well Name	Date Tested	Casing Type	Bottom Casing (top of completion ft)	Lower Packer Depth (feet)	Initial Pressure (psi)	Final Pressure (psi)	Pressure Loss (net)	Next Test Date	Pass-Fail
1	EG099	04/04/2016	PVC	480	450	190	185	5	04/04/2021	PASS
2	DV089	04/06/2016	PVC	478	460	190	180	10	04/06/2021	PASS
3	DX088	04/05/2016	PVC	468	450	190	181	9	04/06/2021	PASS
4	DV092	04/07/2016	PVC	478	460	190	180	10	04/07/2021	PASS
5	DW090	04/07/2016	PVC	494	470	190	179	11	04/07/2021	PASS
6	DW090B	04/07/2016	PVC	474	450	190	182	8	04/07/2021	PASS
7	DU092	04/11/2016	PVC	518	500	190	185	5	04/11/2021	PASS
8	DX091	04/11/2016	PVC	468	450	190	178	12	04/11/2021	PASS
9	DX093	04/11/2016	PVC	476	460	190	179	11	04/11/2021	PASS
10	EA095	04/11/2016	PVC	472	450	190	175	15	04/11/2021	PASS
11	EA096	04/12/2016	PVC	470	450	190	173	17	04/12/2021	PASS
12	EB095	04/12/2016	PVC	475	460	190	179	11	04/12/2021	PASS
13	EB096	04/12/2016	PVC	470	450	190	180	10	04/12/2021	PASS
14	ED095B	04/13/2016	PVC	473	450	190	172	18	04/13/2021	PASS
15	ED097	04/13/2016	PVC	464	440	190	175	15	04/13/2021	PASS
16	ED098	04/13/2016	PVC	463	440	190	175	15	04/13/2021	PASS
17	EG100	04/13/2016	PVC	498	480	190	180	10	04/13/2021	PASS
18	EC098	04/14/2016	PVC	463	440	190	177	13	04/14/2021	PASS
19	EE097	04/14/2016	PVC	467	450	190	178	12	04/14/2021	PASS
20	EE099	04/14/2016	PVC	473	450	190	178	12	04/14/2021	PASS
21	MPN-12	04/18/2016	PVC	482	460	190	174	16	04/18/2021	PASS
22	MPN-13	04/18/2016	PVC	489	470	190	178	12	04/18/2021	PASS
23	MUN-13	04/18/2016	PVC	471	450	190	172	18	04/18/2021	PASS
24	N1G-001	04/19/2016	PVC	479	460	190	181	9	04/19/2021	PASS
25	N1G-002	04/19/2016	PVC	458	440	190	183	7	04/19/2021	PASS
26	N1G-006	04/19/2016	PVC	475	460	190	181	9	04/19/2021	PASS
27	N1G-010	04/19/2016	PVC	474	450	190	175	15	04/19/2021	PASS

**Table 4: Mechanical Integrity Tests  
WDEQ - Quarterly Report/2nd QTR 2016  
MITs for Nichols Ranch Production**



#	Well Name	Date Tested	Casing Type	Bottom Casing (top of completion ft)	Lower Packer Depth (feet)	Initial Pressure (psi)	Final Pressure (psi)	Pressure Loss (net)	Next Test Date	Pass-Fail
28	N1G-011	04/20/2016	PVC	458	440	190	186	4	04/20/2021	PASS
29	EF099	04/21/2016	PVC	499	480	190	181	9	04/21/2021	PASS
30	EF100	04/21/2016	PVC	473	450	190	183	7	04/21/2021	PASS
31	EF101	04/21/2016	PVC	491	470	190	185	5	04/21/2021	PASS
32	EF104	04/21/2016	PVC	484	460	190	185	5	04/21/2021	PASS
33	DY092	05/02/2016	PVC	488	470	190	178	12	05/02/2021	PASS
34	DY092B	05/02/2016	PVC	465	450	190	179	11	05/02/2021	PASS
35	EC102	05/02/2016	PVC	494	470	190	177	13	05/02/2021	PASS
36	ED103	05/02/2016	PVC	485	470	190	180	10	05/02/2021	PASS
37	EE103	05/03/2016	PVC	487	470	190	177	13	05/03/2021	PASS
38	EG102	05/03/2016	PVC	486	470	190	181	9	05/03/2021	PASS
39	EH102	05/03/2016	PVC	490	470	190	180	10	05/03/2021	PASS
40	EH103	05/03/2016	PVC	485	470	190	175	15	05/03/2021	PASS
41	DR087	05/04/2016	PVC	536	520	190	175	15	05/04/2021	PASS
42	DW092	05/04/2016	PVC	488	470	190	180	10	05/04/2021	PASS
43	N1G-007	05/04/2016	PVC	550	530	190	180	10	05/04/2021	PASS
44	N1G-003	05/05/2016	PVC	514	490	190	180	10	05/05/2021	PASS



Appendix A

Production Area 1 Well ID MON-01		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/06/2016	8	544	113	8.1	4,639.9
04/20/2016	7	551	113	8.3	4,639.9
05/10/2016	7	519	113	7.8	4,640.9
05/24/2016	7	537	113	7.5	4,640.9
06/07/2016	7	536	114	7.4	4,639.9
06/23/2016	8	561	114	7.9	4,640.9

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-02		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/06/2016	7	542	114	8.6	4,643.4
04/19/2016	8	519	113	8.6	4,643.4
05/11/2016	7	525	112	7.9	4,644.4
05/24/2016	7	537	113	7.6	4,644.4
06/08/2016	7	546	115	7.9	4,644.4
06/23/2016	7	561	113	7.9	4,644.4

\*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 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	8	544	116	8.4	4,646.4
04/25/2016	7	543	113	8.5	4,646.4
05/11/2016	7	531	113	7.5	4,646.4
05/24/2016	7	517	111	7.4	4,646.4
06/08/2016	7	546	114	7.5	4,646.4
06/27/2016	7	567	114	7.7	4,646.4

\*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 2nd QTR 2016	
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					
04/11/2016	8	518	113	8.5	4,651.5
04/28/2016	7	510	109	8.0	4,650.5
05/11/2016	7	511	111	7.8	4,651.5
05/26/2016	7	535	111	7.4	4,650.5
06/08/2016	7	521	113	7.7	4,651.5
06/27/2016	7	540	112	8.1	4,651.5

\*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 2nd QTR 2016	
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					
04/11/2016	8	562	113	8.9	4,652.8
04/28/2016	7	551	111	8.5	4,652.8
05/11/2016	8	552	111	8.2	4,652.8
05/26/2016	7	572	112	8.4	4,651.8
06/09/2016	7	591	114	8.2	4,652.8
06/27/2016	7	588	113	8.4	4,652.8

\*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 2nd QTR 2016	
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					
04/12/2016	7	536	112	8.5	4,655.4
04/27/2016	8	511	115	8.2	4,653.4
05/12/2016	7	544	112	8.0	4,653.4
05/25/2016	7	562	113	8.0	4,652.4
06/08/2016	7	542	114	8.1	4,653.4
06/27/2016	7	581	115	8.0	4,653.4

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-07		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/12/2016	7	552	111	8.6	4,652.1
04/26/2016	8	518	113	8.2	4,652.1
05/12/2016	7	541	112	8.2	4,652.1
05/25/2016	7	581	113	8.1	4,651.1
06/08/2016	7	575	114	8.2	4,652.1
06/23/2016	8	593	113	8.1	4,651.1

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-08		<b>Urinerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	8	551	112	8.3	4,658.7
04/27/2016	7	521	111	8.2	4,657.7
05/11/2016	7	551	111	7.9	4,657.7
05/24/2016	7	554	111	8.1	4,657.7
06/07/2016	7	574	115	8.2	4,657.7
06/22/2016	6	572	112	8.4	4,657.7

\*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 2nd QTR 2016	
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					
04/11/2016	8	558	115	8.0	4,660.5
04/27/2016	8	524	115	8.0	4,660.5
05/11/2016	7	547	114	8.0	4,659.5
05/24/2016	7	546	113	7.8	4,659.5
06/07/2016	7	579	116	8.0	4,659.5
06/22/2016	7	579	114	7.9	4,659.5

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-10		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/12/2016	7	571	108	8.2	4,662.3
04/27/2016	8	540	110	8.0	4,661.3
05/12/2016	7	570	109	7.9	4,661.3
05/24/2016	7	569	108	7.8	4,661.3
06/06/2016	7	562	108	7.9	4,661.3
06/20/2016	7	560	110	7.8	4,661.3

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-11		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	7	842 *	102	7.8	4,664.8
04/28/2016	6	862 *	99	7.1	4,662.8
05/11/2016	7	778 *	103	7.8	4,662.8
05/24/2016	6	827 *	100	7.6	4,663.8
06/07/2016	6	837 *	105	7.8	4,662.8
06/22/2016	6	848 *	102	7.7	4,662.8

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-12		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	8	645	108	7.9	4,664.7
04/28/2016	7	649	105	7.3	4,665.7
05/11/2016	7	639	106	7.8	4,663.7
05/24/2016	7	653	106	7.7	4,663.7
06/07/2016	7	684	111	7.8	4,663.7
06/22/2016	7	689	107	7.6	4,662.7

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MON-13		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	8	608	111	7.9	4,665.1
04/27/2016	8	585	110	7.9	4,665.1
05/11/2016	7	602	110	7.8	4,664.1
05/24/2016	7	612	109	7.7	4,664.1
06/06/2016	7	632	109	7.8	4,664.1
06/20/2016	7	630	111	7.8	4,664.1

\*Value Exceeds Upper Control Limit



Production Area 1 Well ID MRN-01		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	7	540	114	8.4	4,597.0
04/18/2016	8	552	114	8.5	4,612.0
05/02/2016	7	553	114	7.9	4,593.0
05/17/2016	8	532	115	8.4	4,588.0
06/01/2016	7	562	114	7.6	4,584.0
06/13/2016	7	562	118	8.3	4,598.0

\*Value Exceeds Upper Control Limit

Production Area 1		Uranerz Energy Corporation		Quarterly Report	
Well ID MRN-02-2		Nichols Ranch		2nd QTR 2016	
PERIMETER, OVER AND UNDER MONITOR WELLS					
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					
04/04/2016	7	556	115	8.4	4,636.8
04/18/2016	8	563	115	8.3	4,646.8
05/02/2016	7	568	116	7.8	4,640.8
05/17/2016	8	548	119	8.2	4,634.8
06/02/2016	9	599	120	7.3	4,629.8
06/13/2016	8	575	123	8.1	4,641.8

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-03-2		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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

04/04/2016	8	551	109	8.5	4,638.6
04/18/2016	9	556	107	8.6	4,645.6
05/02/2016	8	561	108	7.8	4,647.6
05/17/2016	8	544	111	8.4	4,642.6
06/01/2016	8	575	109	7.6	4,634.6
06/13/2016	8	578	113	8.2	4,645.6

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-04		Urangerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/04/2016	7	566	113	8.6	4,626.3
04/18/2016	8	573	113	8.5	4,647.3
05/02/2016	7	578	113	7.8	4,657.3
05/17/2016	7	558	114	8.3	4,654.3
06/02/2016	8	612	113	7.3	4,649.3
06/13/2016	7	588	116	8.1	4,655.3

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-05		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	7	569	112	8.5	4,617.6
04/18/2016	8	574	113	8.6	4,647.6
05/03/2016	7	575	112	7.9	4,653.6
05/17/2016	8	559	114	8.3	4,645.6
06/02/2016	8	608	113	7.4	4,656.6
06/13/2016	7	586	116	8.2	4,653.6

\*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 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	8	573	109	8.5	4,614.6
04/18/2016	9	580	109	8.6	4,646.6
05/03/2016	8	577	109	7.8	4,651.6
05/17/2016	8	561	111	8.4	4,640.6
06/02/2016	8	605	110	7.4	4,653.6
06/14/2016	8	604	111	8.2	4,646.6

\*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 2nd QTR 2016	
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		

<u>Date</u>					
04/05/2016	8	595	104	8.5	4,607.4
04/18/2016	9	583	107	8.6	4,626.4
05/03/2016	8	581	108	7.8	4,632.4
05/17/2016	8	568	111	8.4	4,612.4
06/02/2016	8	600	107	7.2	4,633.4
06/14/2016	8	611	108	8.2	4,629.4

\*Value Exceeds Upper Control Limit

Production Area 1		<b>Uranerz Energy Corporation</b>		Quarterly Report	
Well ID MRN-08		<b>Nichols Ranch</b>		2nd QTR 2016	
<b>PERIMETER, OVER AND UNDER MONITOR WELLS</b>					
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		

<u>Date</u>					
04/04/2016	7	579	110	8.2	4,586.0
04/19/2016	8	539	108	8.2	4,592.0
05/02/2016	8	584	104	8.1	4,601.0
05/18/2016	8	581	111	8.2	4,579.0
06/01/2016	8	596	110	8.0	4,596.0
06/13/2016	7	603	114	8.3	4,599.0

\*Value Exceeds Upper Control Limit



Production Area 1 Well ID MRN-09		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/04/2016	7	580	112	8.1	4,584.8
04/19/2016	8	563	112	8.1	4,584.8
05/02/2016	7	588	110	7.9	4,588.8
05/18/2016	8	584	113	8.0	4,575.8
06/01/2016	7	601	113	7.9	4,589.8
06/13/2016	7	605	116	8.1	4,595.8

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-10		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	8	575	108	8.1	4,583.4
04/19/2016	9	566	108	8.0	4,575.4
05/02/2016	8	582	108	7.8	4,570.4
05/18/2016	8	582	108	8.0	4,571.4
06/01/2016	8	593	108	8.0	4,583.4
06/13/2016	8	602	111	8.0	4,590.4

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-11		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	8	578	106	8.2	4,581.3
04/19/2016	8	568	108	8.1	4,565.3
05/03/2016	7	582	115	7.9	4,558.3
05/18/2016	8	585	111	7.9	4,571.3
06/02/2016	8	570	111	8.0	4,575.3
06/14/2016	7	614	112	8.2	4,583.3

\*Value Exceeds Upper Control Limit

Production Area 1		<b>Uranerz Energy Corporation</b>		Quarterly Report	
Well ID MRN-12		<b>Nichols Ranch</b>		2nd QTR 2016	
<b>PERIMETER, OVER AND UNDER MONITOR WELLS</b>					
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		

<u>Date</u>					
04/04/2016	7	577	115	8.0	4,586.9
04/19/2016	8	564	115	8.0	4,563.9
05/02/2016	7	582	110	7.9	4,557.9
05/18/2016	8	579	117	7.9	4,573.9
06/01/2016	7	596	116	7.8	4,574.9
06/14/2016	7	611	117	8.0	4,583.9

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-13		<b>Urinerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/04/2016	7	580	119	8.0	4,606.3
04/19/2016	8	572	118	8.0	4,578.3
05/03/2016	7	583	117	7.8	4,572.3
05/18/2016	7	584	119	8.2	4,587.3
06/02/2016	7	580	118	7.9	4,585.3
06/14/2016	7	614	118	8.1	4,594.3

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-14		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/05/2016	7	561	117	8.2	4,616.0
04/19/2016	8	573	118	8.1	4,592.0
05/03/2016	7	586	117	8.0	4,586.0
05/18/2016	7	587	119	8.0	4,598.0
06/02/2016	7	589	118	7.9	4,597.0
06/14/2016	7	612	118	8.0	4,601.0

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-15		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/05/2016	7	566	120	8.0	4,623.1
04/28/2016	7	571	119	8.0	4,601.1
05/09/2016	7	567	120	8.1	4,599.1
05/23/2016	6	558	120	8.0	4,604.1
06/06/2016	6	600	121	7.9	4,603.1
06/20/2016	7	592	122	8.2	4,613.1

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-16		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/05/2016	7	561	118	8.0	4,633.9
04/20/2016	7	583	117	8.3	4,611.9
05/04/2016	7	581	118	7.8	4,607.9
05/19/2016	7	564	120	8.0	4,613.9
06/02/2016	7	572	119	7.8	4,614.9
06/14/2016	7	601	120	7.9	4,616.9

\*Value Exceeds Upper Control Limit



Production Area 1 Well ID MRN-17		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/13/2016	7	538	122	8.1	4,623.5
04/25/2016	7	547	121	8.1	4,613.5
05/09/2016	7	542	120	7.9	4,612.5
05/23/2016	7	539	120	7.8	4,616.5
06/06/2016	7	573	120	7.9	4,616.5
06/20/2016	7	571	122	8.0	4,623.5

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-18-1		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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	Chloride	Specific Conductance	Total Alkalinity	pH	Piezometric Elevation
04/12/2016	7	542	114	8.2	4,612.7
04/25/2016	7	553	116	8.0	4,601.7
05/09/2016	7	545	116	7.8	4,601.7
05/23/2016	7	543	116	7.7	4,606.7
06/06/2016	7	575	118	7.8	4,605.7
06/20/2016	7	575	118	7.9	4,615.7

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-20-1		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/13/2016	7	536	115	8.4	4,598.4
04/26/2016	7	524	115	8.1	4,592.4
05/09/2016	7	540	115	7.9	4,591.4
05/23/2016	7	540	115	8.0	4,597.4
06/06/2016	7	573	116	8.1	4,599.4
06/20/2016	7	568	116	8.1	4,608.4

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-21		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/11/2016	8	540	117	8.0	4,596.9
04/28/2016	7	538	115	7.1	4,590.9
05/11/2016	7	532	116	8.0	4,587.9
05/24/2016	7	537	116	7.8	4,594.9
06/07/2016	7	563	120	7.9	4,595.9
06/20/2016	7	558	118	7.9	4,606.9

\*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 2nd QTR 2016	
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					
04/13/2016	7	529	114	8.3	4,572.6
04/26/2016	8	518	113	8.0	4,570.6
05/10/2016	7	513	113	8.2	4,567.6
05/23/2016	7	533	113	7.9	4,580.6
06/06/2016	7	562	114	8.0	4,578.6
06/20/2016	7	558	115	7.9	4,592.6

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-23		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/13/2016	7	535	120	8.4	4,563.8
04/26/2016	8	531	118	8.0	4,560.8
05/10/2016	7	516	119	8.0	4,564.8
05/23/2016	6	535	117	7.9	4,573.8
06/06/2016	7	566	118	8.0	4,572.8
06/20/2016	7	565	121	7.9	4,585.8

\*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 2nd QTR 2016	
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					
04/05/2016	7	529	118	8.3	4,589.7
04/19/2016	8	527	118	8.3	4,573.7
05/04/2016	7	546	116	7.8	4,570.7
05/18/2016	7	541	118	8.2	4,589.7
06/06/2016	7	573	116	7.3	4,588.7
06/20/2016	7	560	118	8.0	4,597.7

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-25		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>			Quarterly Report 2nd QTR 2016	
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						
04/13/2016	7	541	117	8.3	4,581.4	
04/25/2016	7	543	117	8.5	4,579.4	
05/09/2016	7	535	117	7.6	4,579.4	
05/23/2016	6	541	116	7.7	4,585.4	
06/06/2016	7	579	118	7.1	4,591.4	
06/20/2016	7	562	119	8.0	4,597.4	

\*Value Exceeds Upper Control Limit



Production Area 1 Well ID MRN-26		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/13/2016	7	531	118	8.5	4,594.2
04/25/2016	8	535	119	8.7	4,594.2
05/09/2016	7	524	118	7.8	4,594.2
05/23/2016	6	533	117	7.7	4,601.2
06/06/2016	7	569	118	7.3	4,603.2
06/20/2016	7	552	120	8.1	4,603.2

\*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 2nd QTR 2016	
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					
04/13/2016	7	534	118	8.5	4,609.2
04/26/2016	8	521	117	8.6	4,612.2
05/09/2016	7	525	117	7.8	4,610.2
05/23/2016	6	533	116	7.6	4,620.2
06/06/2016	7	567	116	7.3	4,621.2
06/20/2016	7	554	118	8.3	4,614.2

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-28		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/14/2016	7	521	118	8.4	4,632.1
04/26/2016	8	525	118	8.6	4,639.1
05/09/2016	7	525	117	7.7	4,635.1
05/23/2016	7	536	117	7.6	4,650.1
06/06/2016	7	564	118	7.4	4,646.1
06/20/2016	7	557	119	8.2	4,637.1

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-29		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/14/2016	7	524	119	8.4	4,635.9
04/26/2016	7	522	117	8.7	4,649.9
05/09/2016	7	521	117	7.7	4,651.9
05/23/2016	6	531	117	7.7	4,663.9
06/06/2016	7	557	117	7.3	4,653.9
06/27/2016	7	554	117	7.9	4,632.9

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-30		Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/14/2016	7	508	115	8.5	4,640.2
04/27/2016	8	512	115	7.8	4,647.2
05/10/2016	7	504	113	8.0	4,657.2
05/23/2016	7	518	114	7.5	4,657.2
06/07/2016	7	541	117	7.4	4,654.2
06/22/2016	7	538	115	8.1	4,645.2

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-31		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/14/2016	7	505	119	8.6	4,645.9
04/27/2016	8	513	119	8.0	4,645.9
05/11/2016	7	509	117	8.2	4,651.9
05/24/2016	7	518	119	7.9	4,640.9
06/07/2016	7	542	123	7.6	4,648.9
06/22/2016	6	536	120	8.2	4,643.9

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-32		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>			Quarterly Report 2nd QTR 2016	
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					
04/05/2016	7	502	119	8.5	4,649.3
04/19/2016	7	510	119	8.5	4,658.3
05/04/2016	6	526	118	8.0	4,657.3
05/18/2016	7	520	120	8.4	4,639.3
06/07/2016	7	542	122	7.5	4,643.3
06/22/2016	7	537	120	8.2	4,642.3

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MRN-33		<b>Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/05/2016	7	513	115	8.5	4,673.2
04/19/2016	8	516	116	8.6	4,655.2
05/04/2016	7	531	115	7.9	4,646.2
05/18/2016	7	524	117	8.5	4,632.2
06/07/2016	7	544	119	7.7	4,642.2
06/22/2016	6	540	117	8.2	4,639.2

\*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 2nd QTR 2016	
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					
04/05/2016	7	530	117	8.5	4,633.7
04/19/2016	8	530	116	8.5	4,645.7
05/04/2016	7	543	115	8.0	4,635.7
05/18/2016	7	542	118	8.4	4,627.7
06/07/2016	7	558	119	7.7	4,635.7
06/22/2016	7	555	118	8.1	4,633.7

\*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 2nd QTR 2016	
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					
04/06/2016	6	404	194	8.7	4,623.2
04/20/2016	5	401	194	8.8	4,623.2
05/10/2016	6	383	195	8.2	4,621.2
05/24/2016	5	392	194	8.0	4,622.2
06/07/2016	6	409	198	7.7	4,622.2
06/23/2016	7	406	196	8.3	4,622.2

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-02		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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		

<u>Date</u>					
04/06/2016	6	402	198	8.8	4,622.2
04/19/2016	6	400	201	8.8	4,623.2
05/11/2016	6	398	200	8.2	4,621.2
05/24/2016	5	399	198	8.1	4,619.2
06/08/2016	5	407	201	8.0	4,621.2
06/23/2016	6	411	201	8.4	4,621.2

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-03		<b>Urnerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS</b>		Quarterly Report 2nd QTR 2016	
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					
04/11/2016	6	394	195	8.6	4,620.8
04/25/2016	6	390	194	9.1	4,619.8
05/11/2016	6	388	194	8.1	4,618.8
05/24/2016	5	386	193	8.0	4,617.8
06/08/2016	5	396	196	7.8	4,618.8
06/27/2016	5	403	196	8.2	4,618.8

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-04		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/11/2016	5	426	217	8.6	4,621.6
04/28/2016	5	422	214	8.2	4,620.6
05/11/2016	5	421	216	8.0	4,619.6
05/26/2016	6	457	217	7.7	4,617.6
06/08/2016	4	432	218	7.8	4,619.6
06/27/2016	4	442	220	8.1	4,619.6

\*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 2nd QTR 2016	
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					
04/11/2016	6	390	194	8.7	4,621.1
04/28/2016	5	380	192	8.3	4,620.1
05/12/2016	5	383	190	8.1	4,619.1
05/26/2016	5	399	193	8.0	4,619.1
06/09/2016	6	407	194	8.0	4,619.1
06/27/2016	5	402	195	8.1	4,620.1

\*Value Exceeds Upper Control Limit

Production Area 1 Well ID MUN-06		Uranerz Energy Corporation Nichols Ranch PERIMETER, OVER AND UNDER MONITOR WELLS		Quarterly Report 2nd QTR 2016	
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					
04/12/2016	5	382	192	8.7	4,620.3
04/27/2016	6	387	192	8.2	4,619.3
05/12/2016	6	383	191	8.1	4,618.3
05/25/2016	5	401	192	8.0	4,618.3
06/08/2016	5	394	194	8.2	4,618.3
06/23/2016	6	402	194	8.1	4,619.3

\*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 2nd QTR 2016	
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					
04/12/2016	5	374	173	8.8	4,617.1
04/26/2016	7	268	174	8.2	4,618.1
05/12/2016	6	377	174	8.4	4,616.1
05/25/2016	6	392	173	8.1	4,616.1
06/08/2016	5	387	176	8.1	4,616.1
06/23/2016	6	393	175	8.3	4,617.1

\*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 2nd QTR 2016	
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					
04/11/2016	6	374	176	8.3	4,621.0
04/28/2016	5	362	175	8.3	4,619.0
05/11/2016	6	363	176	8.2	4,619.0
05/24/2016	5	365	176	8.1	4,619.0
06/07/2016	6	381	180	8.2	4,619.0
06/22/2016	6	375	178	8.2	4,619.0

\*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 2nd QTR 2016	
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					
04/11/2016	7	398	182	8.4	4,622.3
04/28/2016	6	391	181	8.3	4,620.3
05/11/2016	7	396	181	8.4	4,620.3
05/25/2016	6	414	182	8.1	4,618.3
06/07/2016	6	409	186	8.2	4,619.3
06/22/2016	6	405	185	7.2	4,620.3

\*Value Exceeds Upper Control Limit