

April 5, 2012

Attn: Document Control Desk Director Office of Federal and State Materials and Environmental Management Programs U.S. Nuclear Regulatory Commission

Re: Quarterly Report Uranerz Energy Corporation Nichols Ranch ISR Project SUA-1597

Dear Mr. McConnell,

Washington, DC 20555-0001

This letter and attachment serves as the 1st Quarter 2012 quarterly report for the Uranerz Energy Corporation Nichols Ranch ISR Project that is required by License Condition 11.1 in SUA-1597. If you have any questions regarding the provided information, please contact me at 307-265-8900 or by email at mthomas@uranerz.com.

Sincerely,

Michael P. Thomas

Vice President Environmental, Safety, and Health

Uranerz Energy Corporation

Attachment

cc: Ron Linton, NRC Project Manager

FOMED D



April 5, 2012

Mr. Glenn Mooney Project Manager Department of Environmental Quality – Land Quality Division 2100 West 5th Street Sheridan, WY 82801

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Mr. Keith McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Protection
Mail Stop T-8F5
11545 Rockville Pike
Two White Flint North
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. Mooney,

Pursuant to the Permit to Mine No. 778 and SUA-1597 License Condition 11.1, quarterly reporting is required. Review of WDEQ-LQD rules and regulations and the permit, compared to NRC license conditions shows similar reporting requirements. Uranerz has therefore, in an effort to reduce redundant reporting and our environmental footprint with duplicate paper copies, combined the Wyoming Department of Environmental Quality – Land Quality Division quarterly report with the NRC License SUA-1597 quarterly report. The required information and content remains similar to previous quarterly reports; however, please note that some category titles have been added to distinguish information providing for ease of review. If you have any questions regarding the provided information, please contact me at 307-265-8900 or by email at mthoras@uranerz.com.

Sincerely,

Michael P. Thomas

Vice President Environmental, Safety, and Health

Uranerz Energy Corporation

Attachments

Cc: WDEQ/LQD: 1st Quarter 2012 Report (3 sets)

1st set for District 3

2nd set copy for District 1

3rd set copy to send to Buffalo Field Office BLM (as needed)

NRC: Ron Linton, NRC Project Manager



1st Quarter 2012 Report – Nichols Ranch ISR Project WDEQ-LQD Permit to Mine No. 778 and NRC License SUA-1597

ACTIVITIES to DATE

Uranerz received its Wyoming Department of Environmental Quality – Land Quality Division Permit to Mine No. 778 on December 29, 2010. On July 19, 2011 Uranerz received Source Material License SUA-1597. Construction of the Nichols Ranch CPP and Production Area #1 commenced August 2, 2011. During the 1st Quarter 2012 construction activities continued at the Nichols Ranch Unit including:

- Construction of the Plant Building, Office and Maintenance progressed with cement floors being poured, and installation of lighting, interior steel and sheeting.
- Installation of sanitary sewer lines, waterlines, and wastewater lines was completed.
- A phase one overhead power line, including one spur line for the first header house was installed.
- There was no seeding during the period but is scheduled for the first part of the 2nd Quarter 2012.
- Pursuant to the WDEQ-LQD permit to mine and NRC License Condition 10.8 a pump test for Production Area #1 (PA#1) has been completed and a Wellfield Package is being prepared for submittal.
- Monitor well installation concluded during the 1st Quarter and production well installation commenced. The MIT information for the quarter is provided below.
- Monitor well baseline sampling began during the 1st Quarter 2012 for Production Area #1 (PA#1).
- Uranerz met with WDEQ-LQD, in March, to discuss the Jane Dough amendment area and has scheduled to meet with the NRC in the 2nd Quarter 2012 for the same.
- A small portion of an existing access road, known as the North Road, was widened and three culverts were installed. Sufficient surety is available for the activity and this information will be included in the 2012 Annual Report.
- Uranerz indicated in responses to WDEQ-LQD 2011 Annual Report Review that an access road between the cement silo and the first cattle guard into Production Area #1 would be evaluated. At this time, an access road will be installed in that area during the summer months between June and July. There is sufficient surety for the road which will be accounted for in the 2012 Annual Report. Uranerz will contact WDEQ-LQD prior to starting this activity.

No activities took place at the Hank Unit during the 1st Quarter 2012.

MONITORING

In accordance with the WDEQ-LQD permit to mine and NRC License Condition 11.3 and 11.4 baseline sampling for PA#1 was initiated during the 1st Quarter 2012. Monitor well baseline sampling started at the end of February 2012 with completion anticipated by the end of May 2012. Upon receipt

Page 2 of 3

of sampling results, upper control limits (UCLs) and restoration target values (RTVs) will be calculated and submitted to the WDEO-LQD and NRC for review and approval.

Excursion Parameters, Corrective Actions, Well Status

Pursuant to WDEQ-LQD permit to mine and NRC License Condition 11.5 excursion monitoring during production will commence once production in PA#1 starts, following approval of the Wellfield Package and UCLs. There was no injection of fluids in the 1st Quarter of 2012, hence no excursion monitoring and therefore no excursions to report for the period.

WELL INSTALLATION

At the end of the 1st Quarter, eighty-five (85) wells were drilled and completed, consisting of five (5) monitor wells and eighty (80) production wells.

Mechanical Integrity Testing

The WDEQ-LQD Permit to Mine No. 778 requires wells mechanical integrity tested (MIT'd) to be reported quarterly. NRC License Condition 11.1B requires a summary of MITs semi-annually; however, the MIT information remains the same regardless of the reporting timeframe and will therefore just be a more frequent reporting than required.

Sixty-one (62) wells were mechanical integrity tested (MIT'd) during the report period for the Nichols Ranch ISR Project. Of the wells tested thirty-five (35) were production wells and twenty-seven (27) were monitor wells. Five wells failed MIT during the quarter and is discussed in the following section. The results of the MIT are attached as Appendix A.

Defective Wells and Well Repair

As mentioned above, five wells, one production well and four monitor wells, failed initial MIT during the report period. The well status are attached as Appendix B. Two wells, MPN-2 and IA-8, have been plugged and abandoned. One well, MUN-05, is scheduled for abandonment. The remaining two wells, MPN-01 and MUN-01, were retested and passed, but because of location were allocated as production wells.

In the 4th Quarter, 2011 quarterly report, Uranerz indicated five wells failed MIT during that report period and that two of the five had been abandoned. The remaining three wells will be abandoned the first week of the 2nd Quarter 2012 and subsequently reported in the 2nd Quarter report.

Plug and abandonment of wells is performed in accordance Permit to Mine No. 778 requirements. Abandonment reports will be submitted in the WDEQ-LQD Annual Report as required by Permit to Mine No. 778.

Daily Flow Rates and Manifold Pressures

NRC License Condition 11.1c requires flow rates and manifold pressures shall be maintained in an onsite quarterly report available for inspection upon request. PA#1 remains under construction and Page 3 of 3

production has not started; therefore, flow and pressure data is unavailable as there is no data to collect.

CONCLUSION

Construction activities at the Nichols Ranch Unit and facilities continued throughout the 1st Quarter 2012. Production Area #1 (PA#1) well installation progressed with monitor well completions and the initiation of production well installation. One pump test was conducted on the north end of PA#1. The information collected from the pump test will be incorporated into the Nichols Ranch Unit PA#1 Wellfield Package for future submittal to the WDEQ. Construction activities will continue through the 2nd Quarter of 2012 at the Nichols Ranch Unit. No activities occurred at the Hank Unit nor are planned at this time.

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 upon my inquiry of the person or persons who manage the system, or the 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.

Michael P. Thomas

Vice President Environmental, Safety, and Health

Uranerz Energy Corporation

Nichols Ranch ISR Project -1st Quarter 2012 Mechanical Integrity Testing Monitor and Production Wells

Appendix A



	÷.										
 #	Well Name	Date Tested	Top of Completion	Lower_Pckr_Depth	Initial Pressure	Final Pressure	Next Test Date	Pass-Fail		Comments	ı
1	MON-01	1/5/2012	342	330	180	165	1/3/2017	PASS			 <u> </u>
2	MON-02	1/5/2012	357	340	180	160	1/3/2017	PASS		· -	
3	MON-04	1/24/2012	398	390	180	162	1/22/2017	PASS	ķ.		
4	MON-05	1/27/2012	345	330	180	171	1/25/2017	PASS		4	
5	MON-06	1/18/2012	375	360	180	179	1/16/2017	PASS			
6	MON-07	1/17/2012	388	380	180	170	1/15/2017	PASS	\		
7	MPN-01	1/4/2012	559	550	180	150	1/2/2017	FAIL			
8	MPN-01.1	2/6/2012	559	550	180	180	2/4/2017	PASS			
9	MPN-02	1/12/2012	559	550	180	160	1/10/2017	FAIL		•	
10	MPN-02.1	2/1/2012	561	550	180	162	1/30/2017	PASS			
11	MPN-04	1/26/2012	640	610	180	162	1/24/2017	PASS	5.4		
12	MPN-05	1/13/2012	581	570	180	164	1/11/2017	PASS			
13	MPN-06	1/30/2012	629	620	180	173	1/28/2017	PASS			
14	MPN-07	1/19/2012	559	550	180	162	1/17/2017	PASS	:		
15	MRN-02.2	1/9/2012	523	510	180	175	1/7/2017	PASS			
16	MRN-03.2	1/9/2012	557	540	180	173	1/7/2017	PASS			
17	MRN-09A	3/16/2012	535	520	180	180	3/15/2017	PASS			
18	MRN34.2	1/13/2012	496	480	180	176	1/11/2017	PASS			
19	MUN-01	1/4/2012	652	640	180	100	1/2/2017	FAIL			
20	MUN-01.1	2/2/2012	658	650	180	173	1/31/2017	PASS			
21	MUN-02	1/12/2012	673	660	180	167	1/10/2017	PASS			
22	MUN-03	1/13/2012	734	710	180	162	1/11/2017	PASS			
23	MUN-04	1/10/2012	722	710	180	160	1/8/2017	PASS			
24	MUN-05	1/17/2012	690	680	180	130	1/15/2017	FAIL	-		
25	MUN-05.1	2/10/2012	595	580	180	145	2/8/2017	PASS			
26	MUN-06	1/30/2012	691	680	180	171	1/28/2017	PASS			

#	Well Name	Date Tested	Top of Completion	Lower_Pckr_Depth	Initial Pressure	Final Pressure	Next Test Date	Pass-Fail	Comments
27	MUN-07	1/19/2012	706	690	180	165	1/17/2017	PASS	
28	. 1A-1	2/7/2012	556	540	180	171	2/5/2017	PASS	
29	1A-12	3/2/2012	558	540	180	172	3/1/2017	PASS	
30	1A-13	3/1/2012	554	540	180	162	2/28/2017	PASS	
31	1A-14	3/2/2012	557	540	180	168	3/1/2017	PASS	
32	1A-17	2/7/2012	561	550	180	172	2/5/2017	PASS	
33	1A-18	3/1/2012	551	540	180	176	2/28/2017	PASS	
34	1A-2	3/20/2012	546	530	180	162	3/19/2017	PASS	
35	1A-24	3/2/2012	563-571	550	180	170	3/1/2017	PASS	
36	1A-26	3/1/2012	620	610	180	174	2/28/2017	PASS	•
37	1A-28	3/19/2012	551	540	180	166	3/18/2017	PASS	
38	1A-29	3/2/2012	557	540	180	179	3/1/2017	PASS	
39	1A-3	2/7/2012	558	550	180	178	2/5/2017	PASS	
40	1A-30	3/20/2012	547	530	180	170	3/19/2017	PASS	
41	1A-31	3/2/2012	539	530	180	162	3/1/2017	PASS	
42	1A-32	3/21/2012	565	550	180	162	3/20/2017	PASS	
43	1A-34	3/5/2012	570	560	180	162	3/4/2017	PASS	
44	1A-37	3/20/2012	552	540	180	165	3/19/2017	PASS	
45	1A-38	3/21/2012	554	540	180	162	3/20/2017	PASS	
46	1A-39	3/21/2012	558	550	180	162	3/20/2017	PASS	
47	1A-4	2/7/2012	554	540	180	175	2/5/2017	PASS	
48	1A-40	3/21/2012	565	550	180	162	3/20/2017	PASS	
49	1A-44	2/6/2012	559	550	180	165	2/4/2017	PASS	
50	1A-49	3/22/2012	558	550	180	162	3/21/2017	PASS	
51	1A-6	3/21/2012	542	530	180	162	3/20/2017	PASS	
52	1A-6	1/23/2012	581	570	180	162	1/21/2017	PASS	
. 53	1A-7	3/20/2012	555	540	180	170	3/19/2017	PASS	
54	1A-8	1/23/2012	575	560	180		1/21/2017	FAIL	
55	1B-1	1/7/2012	600	600	180	164	1/5/2017	PASS	
56	1B-11	1/20/2012	620	610	180	180	1/18/2017	PASS	

# V	Vell Name	Date Tested	Top of Completion	Lower_Pckr_Depth	Initial Pressure	Final Pressure	Next Test Date	Pass-Fail	Comments	
 57	1B-14	3/5/2012	571-579	560	180	165	3/4/2017	PASS		
58	1B-17	1/20/2012	557	540	180	173	1/18/2017	PASS		
59	1B-4	1/7/2012	591	600	180	174	1/5/2017	PASS		
60	1B-5	1/7/2012	623	570	180	167	1/5/2017	PASS		
61	1B-7	1/20/2012	559	550	180	163	1/18/2017	PASS		
62	1B-8	1/19/2012	556	540	180	170	1/17/2017	PASS		

Nichols Ranch ISR Project -1st Quarter 2012 Mechanical Integrity Testing Monitor and Production Wells

Appendix B



 # .	Well Name	Date Tested	Well Status	Action Date	Well Depth	Cement Volume Gallons	Comments
1	MPN-01	1/4/2012	Retested	2/6/2012			Passed MIT - allocated as production well 1A-44 (See Appendix B)
2	MPN-02	1/12/2012	Abandoned	2/7/2012	635	390	
3	MUN-01	1/4/2012	Retested	2/3/2012			Passed MIT - allocated to production well 1A-45 - addtl work pending
4	MUN-05	1/17/2012	NA				Abandonment to be scheduled pending evaluation
5	1A-8	1/23/2012	Abandoned	03/07/2012	635	390	