

October 22, 2012

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Deputy Director, Drew Persinko
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 Revisions to Second Quarter Report

Dear Mr. Persinko,

Uranerz Energy Corporation (Uranerz) submitted a revised Second Quarter 2012 Report to WDEQ-LQD under cover letter dated October 11, 2012. The purpose of this letter is to copy the NRC on that revision. Uranerz revised the Second Quarter 2012 Report per request from WDEQ-LQD to clarify information pertaining to the Permit to Mine No. 778.

Revisions consisted of a change to the narrative in the Well Installation section of the report and column additions in Appendices A and B. A column titled "Duration" was added to Appendix A to account for the duration of a MIT. Two columns were added to Appendix B including "Well Diameter" and "Casing Volume". Under the Well Installation section the narrative was revised to include the following:

- Discussion that well completion details are available at the mine site and will be provided in the upcoming annual report.
- A statement that the MIT procedure is followed per Section 3.6 of Mine Plan Volume V.
- A statement that results of the MITs are maintained on site and include the signature of the individual responsible for conducting the test.
- The passing criteria for MIT.

FSME 21

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** 

MT/dk

Attachments

WDEQ-LQD Cover Letter and 2<sup>nd</sup> Quarter 2012 Report (Revised)

cc: WDEQ-LQD District 3, Sheridan Wyoming WDEQ-LQD District 1, Cheyenne Wyoming NRC Ron Linton, Project Manager



October 11, 2012

Mr. Mark Taylor
Program Principle
Department of Environmental Quality – Land Quality Division
2100 West 5<sup>th</sup> Street
Sheridan, WY 82801

Re: Uranerz Energy Corporation Nichols Ranch ISR Project, WDEQ-LQD Permit to Mine No. 778 Revisions to Second Quarter Report

Dear Mr. Taylor,

Uranerz Energy Corporation (Uranerz) submitted Second Quarter 2012 Reports to WDEQ-LQD under coverletter dated July 20, 2012. Uranerz has revised the Second Quarter Reports 2012 per discussion with WDEQ-LQD. The attached revised Second Quarter 2012 Report supercedes the July 20, 2012 report in its entirety.

If you have any questions regarding the provided information, please contact me at 307-265-8900 or by email at <a href="mailto:mthomas@uranerz.com">mthomas@uranerz.com</a>.

Sincerely,

Michael P. Thomas

Vice President Environmental, Safety, and Health

**Uranerz Energy Corporation** 

MT/dk

Attachments

2<sup>nd</sup> Quarter 2012 Report (Revised)

Cc: WDEQ-LQD District 1, Cheyenne Wyoming



# 2nd Quarter 2012 Report — Nichols Ranch ISR Project WDEQ-LQD Permit to Mine No. 778 and NRC License SUA-1597

#### Introduction

Uranerz Energy Corporation (Uranerz) received its Wyoming Department of Environmental Quality – Land Quality Division Permit to Mine No. 778 on December 29, 2010. On July 19, 2011 Source Material License SUA-1597 was issued to Uranerz by the NRC. Construction of the Nichols Ranch CPP and Production Area #1 commenced August 2, 2011.

The following highlights activities that occurred at the Nichols Ranch Unit during the quarter:

- The concrete, building and site earthwork is complete for the main facilities. Major construction in the maintenance and office buildings is complete enabling Uranerz to move in office equipment and other internal items. A majority of the equipment, pumps, valves, tanks, vessels, pipe, fittings, electrical equipment, and instrumentation has been delivered to site. The structural piping supports are being installed and the plant process piping is scheduled to begin in July.
- In the wellfield, fusing of the wellfield trunkline commenced and two header house structures were erected.
- Interim reclamation activities began this quarter with the area around the main facility and the pipeline between the central plant and the staging area being seeded. Two topsoil stockpiles were also seeded. This will also be reported WDEQ-LQD Annual Report.
- Baseline sampling for Production Area #1 (PA#1) continued during the report period with an anticipated completion expected during the 3<sup>rd</sup> Quarter. For your planning purposes, once completed, the Upper Control Limits (UCLs) and Restoration Target Values (RTVs) will be calculated and submitted to the WDEQ-LQD and NRC.
- Well installation continued in PA#1 and is discussed below.
- Uranerz met with WDEQ-LQD in March and NRC in May to discuss the Jane Dough amendment area.
- Uranerz re-evaluated the access road between the cement silo and the first cattle guard into the PA#1 wellfield area and has elected to postpone installation until such time that it will be needed. This area will be used by light duty vehicles to perform required monitor well sampling. Uranerz will notify WDEQ-LQD if activity needs change prior to commencing as requested by WDEQ-LQD in comments to the 1st Quarter 2012 report.
- The WDEQ Water Quality Division (WDEQ-WQD) submitted the Deep Disposal Well proposal out to public comment and the EPA in May 2012. The EPA has requested additional information and the WDEQ-WQD will be responding as necessary.
- No activities took place at the Hank Unit.

#### MONITORING

Uranerz previously reported that baseline sampling for PA#1 began during the 1<sup>st</sup> Quarter 2012. Baseline sampling of the wellfield is performed in accordance with the WDEQ-LQD permit and NRC License Condition 11.3 and 11.4. It is anticipated that the baseline sampling will be completed during the 3<sup>rd</sup> Quarter 2012. Upon receipt of sampling results, UCLs and RTVs will be calculated and submitted to the WDEQ-LQD and NRC.

#### **Excursion Parameters, Corrective Actions, Well Status**

There was no injection of fluids in the 2<sup>nd</sup> Quarter of 2012, hence there was no excursion monitoring and there are no excursions to report for the period.

#### WELL INSTALLATION

Fifty-seven (57) Class III wells were drilled and completed. Well completion details are available at the mine site and will be provided in the upcoming annual report.

#### **Mechanical Integrity Testing**

The WDEQ-LQD Permit to Mine No. 778 requires mechanical integrity test (MIT) results for wells 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 and will therefore just be a more frequent reporting than required. The MIT procedure is followed pursuant to Section 3.6 of Mine Plan, Volume V. Results of the MITs are maintained on site and include the signature of the individual responsible for conducting the test.

Ninety-five (95) Class III wells were tested during the report period at the Nichols Ranch Unit. MIT results are attached as Appendix A. All wells at or below 10% pass MIT. The Appendix format of column designations was established based on WDEQ-LQD criteria. The first column in Appendix A is a simple line designation for eas in review. Also, in Appendix A the column titled Lower\_Pckr\_Depth, the "Pckr" is an abbreviation for Packer which is an expandable plug used to isolate section in a well. Two (2) wells failed MIT during the quarter and are discussed in the following section.

#### Defective Wells and Well Repair

As mentioned above, two production wells failed initial MIT during the report period (Wells 1-A15 and 1-B9) and were abandoned. The well status is attached in Appendix B.

Wells MRN-2, MRN-3, and MRN-34 that had been scheduled for abandonment in the quarter were completed. Plug and abandonment of wells is performed in accordance Permit to Mine No. 778, Volume V, Mine Plan Section 3.8. Abandonment reports will be submitted in the WDEQ-LQD Annual Report as required by Permit to Mine No. 778.

#### **APPENDICES**

Appendix A – MITs for Nichols Ranch Production Appendix B - Well Status

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** 

WDEQ - Quarterly Report/2nd QTR 2012 -MITs for Nichols Ranch Production

# Appendix A



	<u> </u>	· · · · · · · · · · · · · · · · · · ·	T		Duration	Lower_Pckr_				······································	]
#	Well Name	Date Tested	Casing Type	<b>Bottom Casing</b>	(Minutes)	Depth	Initial_Pressure	Final_Pressure	Pressure_Loss	Next Test Date	Pass-Fail
1	1A-47	5/15/2012	PVC	431	10	570	180	163	17	5/14/2017	PASS
2	1A-63	4/13/2012	PVC	460	10	540	180	180	Ö	4/12/2017	PASS
3	1A-48	4/5/2012	PVC	461	10	550	180	178	2	4/4/2017	PASS
4	1A-43	4/9/2012	PVC	462	10	550	180	163	17	4/8/2017	PASS
5	1A-42	4/9/2012	PVC	463	10	540	180	169	11	4/8/2017	PASS
6	1A-52	4/5/2012	PVC	464	10	550	180	176	4	4/4/2017	PASS
7	1A-46	4/5/2012	PVC	465	10	550	180	178	2	4/4/2017	PASS
8	1A-69	5/14/2012	PVC	433	10	590	180	166	14	5/13/2017	PASS
9	1A-8.1	5/4/2012	PVC	438	10	540	180	164	16	5/3/2017	PASS
10	1A-36	5/14/2012	PVC	432	10	590	180	168	12	5/13/2017	PASS
11	1A-65	4/20/2012	PVC	457	10	550	180	172	8	4/19/2017	PASS
12	1A-76	5/15/2012	PVC	430	10	530	180	165	15	5/14/2017	PASS
13	1A-92	6/25/2012	PVC	517	10	510	180	165	15	6/24/2017	PASS
14	1Ã-73	6/15/2012	PVC	472	10	590	180	165	15	6/14/2017	PASS
15	1A-20	5/14/2012	PVC	429	10	590	180	170	10	5/13/2017	PASS
16	1A-75	6/13/2012	PVC	474	10	590	180	168	12	6/12/2017	PASS
17	1A-94	6/13/2012	PVC	475	10	580	180	166	14	6/12/2017	PASS
18	1A-74	6/13/2012	PVC	476	10	580	180	163	17	6/12/2017	PASS
19	1A-108	6/25/2012	PVC	467	10	520	180	164	16	6/24/2017	PASS
20	1A-59	5/1/2012	PVC	449	<u>10</u>	540	180	167	13	4/30/2017	PASS
21	1A-57	5/7/2012	PVČ	440	10	550	180	170	10	5/6/2017	PASS
22	1A-84	5/7/2012	PVC	441	10	550	180	174	6	5/6/2017	PASS
22 23	1A-55	5/7/2012	PVC	442	10	540	180	165	15	5/6/2017	PASS
24	1A-50	5/7/2012	PVC	443	10	530	180	162	18	5/6/2017	PASS
25	1A-27	5/7/2012	PVC	444	10	590	180	165	15	5/6/2017	PASS
26	1A-23	5/8/2012	PVC	445	10	550	180	177	3	5/7/2017	PASS
27	1A-10	5/8/2012	PVC	446	10	580	180	171	10	5/7/2017	PASS
28	1A-80	5/9/2012	PVC	434	10	540	180	166	14	5/8/2017	PASS
29	1A-58	5/8/2012	PVC	448	10	540	180	163	17	5/7/2017	PASS
30	1A-62	4/17/2012	PVC	458	10	560	180	170	10	4/16/2017	PASS
31	1A-19	5/5/2012	PVC	437	10	580	180	163	17	5/4/2017	PASS
32	1A-79	5/5/2012	PVC	436	10	530	180	169	11	5/4/2017 •	PASS
33	1A-88	5/9/2012	PVC	435	10	590	180	165	15	5/8/2017	PASS
34	1A-71	4/27/2012	PVC	453	10	530	180	166	14	4/26/2017	PASS
35	1A-68	4/26/2012	PVC	454	10	540	180	165	15	4/25/2017	PASS
36	1A-54	4/26/2012	PVC	455	10	540	180	177	3	4/25/2017	PASS
37	1A-51	4/20/2012	PVC	456	10	530	180	178	2	4/19/2017	PASS
38	1A-96	6/12/2012	PVC	479	10	520	180	17	0	6/11/2017	PASS
39	1A-66	5/8/2012	PVC	447	10	560	180	166	14	5/7/2017	PASS

WDEQ - Quarterly Report/2nd QTR 2012 -MITs for Nichols Ranch Production

# Appendix A



	1		1		Duration	Lower_Pckr_			i	·	
#	Well Name	Date Tested	Casing Type	Bottom Casing	(Minutes)	Depth	Initial_Pressure	Final_Pressure	Pressure_Loss	Next Test Date	Pass-Fail
40	1A-56	5/16/2012	PVC	509	10	550	180	175	5	5/15/2017	PASS
41	1A-64	5/17/2012	PVC	611	10	600	180	166	14	5/16/2017	PASS
42	1A-60	6/1/2012	PVC	501	10	520	180	162	18	5/31/2017	PASS
43	1A-25	5/23/2012	PVC	502	10	530	180	170	10	5/22/2017	PASS
44	1A-109	5/25/2012	PVC	503	10	540	180	164	16	5/24/2017	PASS
45	1A-9	5/24/2012	PVC	504	10	560	180	163	17	5/23/2017	PASS
46	1A-61	5/16/2012	PVC	•	10	550	180	176	4	5/15/2017	PASS
47	1A-61	5/16/2012	PVC	505 506	10	550	180	176	4	5/15/2017	PASS
48	1A-110	5/29/2012	PVC	498	10	550	180	176	4	5/28/2017	PASS
49 49	1A-90	5/22/2012	PVC	508	10	560	180	175	5	5/21/2017	PASS
	1A-30	5/29/2012	PVC	497	10	610	180	180	Ö	5/28/2017	PASS
50 51	1A-100	5/16/2012	PVC	510	10	580	180	167	13	5/15/2017	PASS
	1A-33	5/16/2012	PVC	511	10	540	180	178	2	5/15/2017	PASS
52 52	1A-72 1A-33	5/22/2012	PVC	512	10	530	180	166	14	5/21/2017	PASS
53	1A-33	5/23/2012	PVC	513	10	530	180	166	14	5/22/2017	PASS
54 55	1A-97	5/18/2012	PVC	564	10	550	180	170	10	5/17/2017	PASS
56	1 1	5/2/2012	PVC	515	0	540	180	180	Ó	5/1/2017	FAIL
57	1A-15	6/1/2012	PVC	516	10	560	180	166	14	5/31/2017	PASS
	1A-41	5/21/2012	PVC	507	10	530	180	166	14	5/20/2017	PASS
58	1A-89	6/6/2012	PVC	489	10	580	180	170	10	6/5/2017	PASS
59	1A-21		PVC	480	10	540	180	165	15	6/7/2017	PASS
60	1A-91	6/8/2012		540	10	530	180	164	16	5/16/2017	PASS
61	1A-78	5/17/2012	PVC	547	10	530	180	171	10	5/16/2017	PASS
62	1A-83	5/17/2012	PVC	483	10	540	180	166	14	6/21/2017	PASS
63	1A-107	6/22/2012	PVC	484	10	540	180	162	18	6/21/2017	PASS
64	1A-104	6/22/2012	PVC PVC		10	540	180	164	16	6/21/2017	PASS
65	1A-111	6/22/2012	1 · 1	485 486	10	540		163	17	6/21/2017	PASS
66	1A-100	6/22/2012	PVC		10	580	180 180	174	6	5/28/2017	PASS
67	1A-93	5/29/2012	PVC	499 497	10	540	180	180	0	6/5/2017	PASS
68	1A-105	6/6/2012	PVC	488		590	180	167	13	6/11/2017	PASS
69	1A-67	6/12/2012	PVC	478 490	10		180	166	14	6/6/2017	PASS
70	1A-101	6/7/2012	PVC	. m.es ***		570	180	163	17	6/6/2017	PASS
71	1A-87	6/7/2012	PVC	491	10	510	180	166	14	6/4/2017	PASS
72	1A-102	6/5/2012	PVC	492	10	520	180	166	14	6/3/2017	PASS
73	1A-11	6/4/2012	PVC	493 404		590	180	164	16	6/3/2017	PASS
74	1A-103	6/4/2012	PVC	494	10	600	180	174	6	5/31/2017	PASS
75	1A-15.1	6/1/2012	PVC	495	10	540	180	178	ž	5/29/2017	PASS
76	1A-77	5/30/2012	PVC	496	10	560		164	16	6/21/2017	PASS
77	1A-112	6/22/2012	PVC	487	A	540	180	165	15	5/17/2017	PASS
78	1B-22	5/18/2012	PVC	544	10	520	180	100	10	3,11,2011	

WDEQ - Quarterly Report/2nd QTR 2012 -MITs for Nichols Ranch Production

# Appendix A



					Duration	Lower_Pckr_	,				
#	Well Name	Date Tested	Casing Type	<b>Bottom Casing</b>	(Minutes)	Depth	Initial_Pressure	Final_Pressure	Pressure_Loss	Next Test Date	
79	1B-42	6/26/2012	PVC	471	10	570	180	164	16	6/25/2017	PASS
80	1B-36	6/26/2012	PVC	470	10	550	180	167	13	6/25/2017	PASS
81	1B-9	4/4/2012	PVC	514	Ô	610	180	155	25	4/3/2017	FAIL
82	1B-28	6/27/2012	PVC	500	10	550	180	179	1	6/26/2017	PASS
83	1B-22	6/15/2012	PVC	482	10	610	180	162	18	6/14/2017	PASS
84	1B-25	6/26/2012	PVC	481	10	540	180	163	17	6/25/2017	PASS
85	1B-23	6/14/2012	PVC	477	10	610	180	170	10	6/13/2017	PASS
86	1B-19	6/25/2012	PVC	469	10	560	180	168	12	6/24/2017	PASS
87	1B-21	6/15/2012	PVC	473	10	550	180	168	12	6/14/2017	PASS
88	1B-26	6/25/2012	PVC	468	10	540	180	166	18	6/24/2017	PASS
89	1B-16	4/4/2012	PVC	466	10	620	180	171	9	4/3/2017	PASS
90	1B-13	4/13/2012	PVC	459	10	550	180	167	13	4/12/2017	PASS
91	A 98	5/18/2012	PVC	558	10	550	180	168	12	5/17/2017	PASS
92	B-12	5/3/2012	PVĊ	451	10	550	180	170	10	5/2/2017	PASS
93	B-18	5/3/2012	PVC	450	10	570	180	171	9	5/2/2017	PASS
94	B-3	5/3/2012	PVC	452	10	590	180	164	16	5/2/2017	PASS
95	B-6.1	5/4/2012	PVC	439	10	550 S	180	173	7	5/3/2017	PASS

## Nichols Ranch ISR Project -2nd Quarter 2012 M I T - Well Status Monitor and Production Wells

### Appendix B



#	Well Name	Date Tested	Well Status	Action Date	Well Depth (FT)	Well Diameter (Inches)	Casing Volume (Gallons)	Cement Volume Gallons	Comments	· · · · · · · · · · · · · · · · · · ·
1	MRN-02	12/15/2011	Abandoned	4/3/12	530	5	554	567		
2	MRN-03	12/16/2011	Abandoned	4/4/12	565	5	519	607		
3	MRN-34	12/28/2011	Abandoned	4/3/12	507	5	497	547		
4	1A-15	5/2/2012	Abandoned	5/10/2012	590	5	578	627		
5	1B-9	4/4/2012	Abandoned	5/24/12	680	5	666	726		