

July 24, 2014

Mr. Dorran Lerner  
Department of Environmental Quality – Land Quality Division  
2100 West 5<sup>th</sup> Street  
Sheridan, WY 82801

Re: Unplanned Release Report, Permit to Mine No. 778, Uranerz Energy Corporation

Dear Mr. Lerner,

In accordance with the Permit to Mine No. 778, Volume VIII Mine Plan, Section 3.19.2, Uranerz Energy Corporation (Uranerz) notified the Wyoming Department of Environmental Quality (WDEQ) and the Nuclear Regulatory Commission (NRC) of an unplanned release which was discovered on July 17, 2014 at Nichols Ranch. A verbal report of the incident was provided on July 18, 2014 to Dorran Lerner, WDEQ/LQD and Ron Linton, NRC. Subsequent to the verbal notifications, a follow-up email was provided on July 18, 2014 to the WDEQ/LQD and NRC, as well as to Joe Hunter, WDEQ/WQD. Additionally, Uranerz completed the online WDEQ/WQD spill report.

On July 17, 2014 an unplanned release was observed in Production Area #1 of the Nichols Ranch Unit. The release originated from recovery well N1A-002 near Header House 2. The recovery well is located in Township 43 N, Range 76W, Section 7, SESE. The unplanned release did, as reported, enter a draw. It was initially reported that approximately 3,505 gallons of production solution was released based on the affected spill area calculation; however, further investigation indicated that the total volume released was 20,219 gallons and is discussed below. A major rain event that occurred the day before created saturated ground conditions allowing the release to exit the wellfield area and flow outside the permit boundary.

Uranerz investigation into the cause of the unplanned release indicates the pipeline connecting the wellhead and the header house was over pressurized by dead-heading the line, resulting in a pipeline break underground. Because the pipeline break occurred underground no internal systems were alarmed. During the investigation and in order to verify the volume released, further evaluation of the well's operational history was done showing that the last time flow was recorded was May 19, 2014. Based on these findings, Uranerz reviewed the data to determine if there had been flow between May 19, 2014 and the date the unplanned release was observed on July 17, 2014. The data shows that the well operated off and on for a time period equivalent to approximately 6 days between May 19 and July 17, 2014, with a calculated volume yielding 20,219 gallons of production solution. Uranerz discovered two main causes that affected the false no flow readings. The first cause was found in the system programming, which was originally set to automatically shut down wells displaying zero flow. The programmed flow set points had been altered such that the computer system was not triggered to shut down the well when there was no flow, thus it continued to operate. The second cause was due to numerous maintenance activities with the well. Uranerz operators had on several occasions noted the well

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flow was zero and worked to correct what was thought to be flow issues at the wellhead and not a leak in the pipeline.

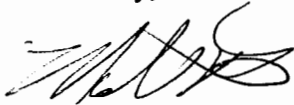
Based on the investigation Uranerz maintains that 3,505 gallons of production solution affected the draw area and the remaining released amount, approximately 16,714 gallons, was released underground along the pipeline corridor between the wellhead and the header house. Fourteen soil samples were taken, eight in the spill area and six surrounding background samples. Three water and two radon samples were collected from the unplanned release area in the draw. A separate background radon sample was taken upwind and off site for comparison. The sampling locations are depicted on the attached map. Initial results for radon showed all measurements were less than detectable limits. Several dose rates were also collected. A dose rate was taken at the initial release point and was 0.150 mR/hr. Background levels in the wellfield were 0.020 mR/hr. Another dose rate was taken at the end of the release in the draw and was 0.010 mR/hr. Additionally, a sample of the water was analyzed at the on-site laboratory for U3O8 which measured at 33 ppm. All of the other samples were taken to a third party laboratory for analysis. It will take approximately 30 days for results from the laboratory. Uranerz will review the laboratory results and develop appropriate cleanup actions based on the analysis and in accordance with NRC regulation for clean-up and decommissioning.

Immediate corrective actions to prevent future releases of this nature is to re-apply the zero flow time set point to automatically shut off wells that show no flow within a certain time period. Uranerz also went through the remaining well inventory and confirmed no other wells have had issues. Further investigation is underway analyzing the cause of the incident. Additional corrective actions may result.

Records pertaining to unplanned releases, including this report, are maintained on site and are available for review upon request. Uranerz will include this release in the Annual Report to the WDEQ/LQD.

If you have any questions regarding the provided information, please contact me at 307-265-8900 or by email at [mthomas@uranerz.com](mailto:mthomas@uranerz.com).

Sincerely,



Michael P. Thomas  
Vice President, Regulatory and Public Affairs  
Uranerz Energy Corporation

MT/al

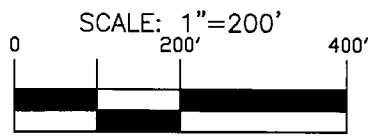
Attachments: Release Location Map for N1A-002

cc: Ron Linton, NRC Project Manager (3 copies),  
Joe Hunter, WDEQ/WQD

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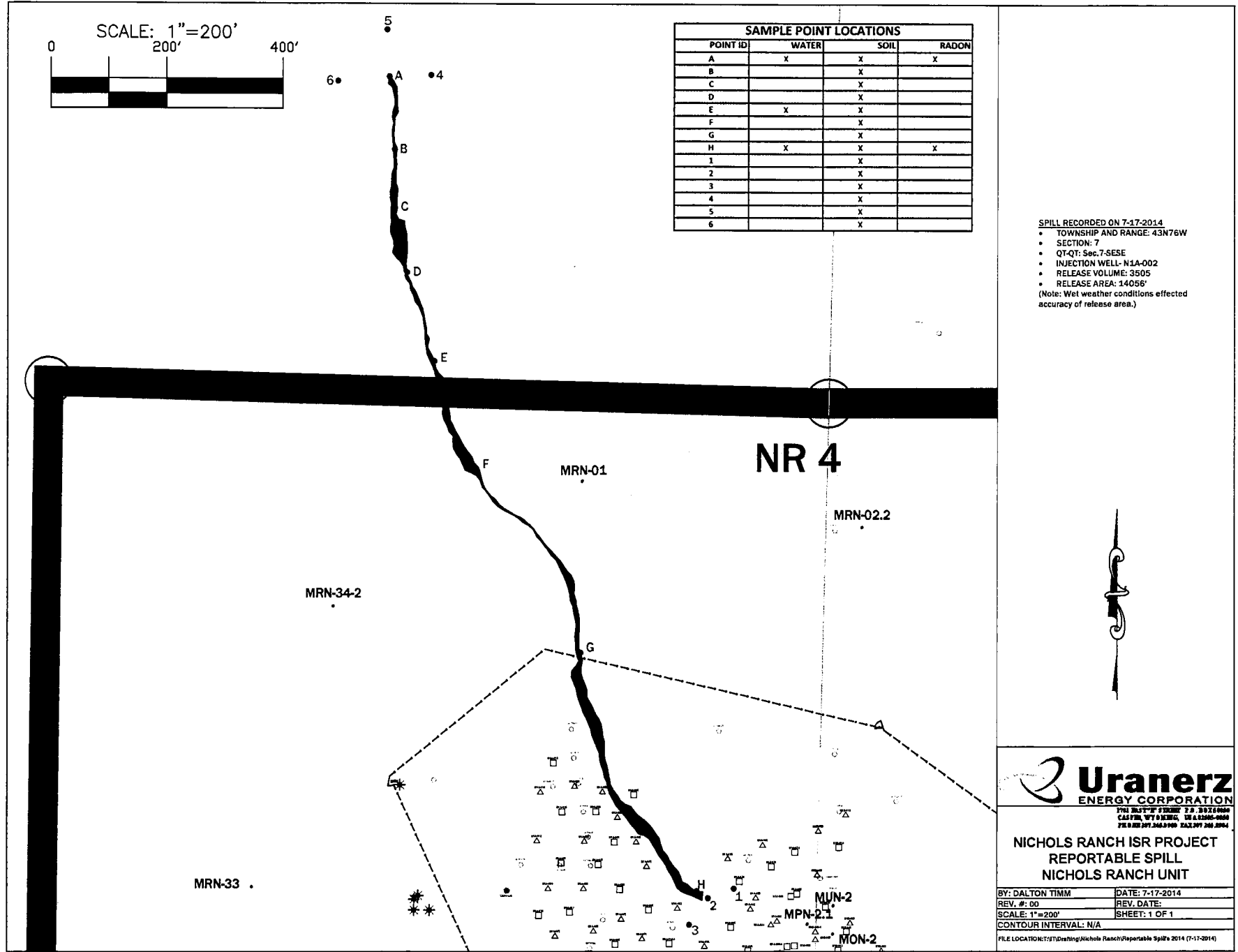


SAMPLE POINT LOCATIONS			
POINT ID	WATER	SOIL	RADON
A	X	X	X
B		X	
C		X	
D		X	
E	X	X	
F		X	
G		X	
H	X	X	X
1	X	X	
2		X	
3		X	
4		X	
5		X	
6		X	

SPILL RECORDED ON 7-17-2014

- TOWNSHIP AND RANGE: 43N76W
- SECTION: 7
- QT-QT: Sec.7-SESE
- INJECTION WELL: N1A-002
- RELEASE VOLUME: 3505
- RELEASE AREA: 14056'

(Note: Wet weather conditions effected accuracy of release area.)



**NICHOLS RANCH ISR PROJECT  
REPORTABLE SPILL  
NICHOLS RANCH UNIT**

BY: DALTON TIMM	DATE: 7-17-2014
REV: # 00	REV. DATE:
SCALE: 1"=200'	SHEET: 1 OF 1
CONTOUR INTERVAL: N/A	
FILE LOCATION: T:\Mining\Nichols Ranch\Reportable Spill's 2014 (7-17-2014)	