



August 26, 2015

Attention: Document Control Desk,
U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001

Attention: Deputy Director, Division of Decommissioning, Uranium Recovery and Waste Programs, Office
of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike, Rockville, MD 20852-2738

Re: Strata Energy, Inc., Ross In Situ Recovery Project
Source Materials License SUA-1601, Docket No. 040-09091
January 1st – June 30th 2015 Semi-Annual Report

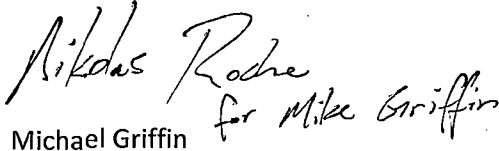
To Whom It May Concern:

Strata Energy Inc. (Strata) hereby submits a Semi-Annual Report for the period of January 1, 2015 through June 30, 2015. This report satisfies the requirements of 10 CFR 40.65 and the applicable license conditions of Source Material License SUA-1601.

Please contact me if you have any questions regarding this report. You can reach me at (307) 686-4066 or mgriffin@stratawyo.com.

Sincerely,

Strata Energy, Inc.


Michael Griffin *for Mike Griffin*

Vice President of Permitting, Regulatory and Environmental Compliance

cc: John Saxton, NRC Project Manager
Dave Schellinger, WDEQ-LQD

NM5501



Strata Energy, Inc.

Ross ISR Project

Source Material License Number SUA-1601

Docket Number 040-09091

Semi-Annual Report

January 1st, 2015 – June 30th, 2015

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1 INTRODUCTION

Pursuant to 10 CFR 40.65 and Source Material License SUA-1601, Strata Energy, Inc. (Strata) has prepared a Semi-Annual Report which summarizes the operational and environmental activities at the Ross Project. The report includes that information required by License Conditions 11.1 and 11.2, as applicable. License Conditions 11.1(A) and 11.1(B) describe reports to be submitted quarterly, and License Conditions 11.1(E), 11.1(F), and 11.2 describe reports to be submitted annually. When applicable, those reports are incorporated in this Semi-Annual Report. The information required to be reported annually will be submitted with the Semi-Annual Report covering the reporting period of July – December, and the information required to be reported quarterly will be the information from the quarter directly preceding the report submittal (i.e. the Quarterly Report for the reporting period April – June will be submitted with the Semi-Annual Report for the reporting period of January - June). The information from the first and third quarters will be submitted in separate Quarterly Reports. This report covers the time period of January 1st – June 30th, 2015.

1.1 ACTIVITIES SUMMARY

Major construction activities commenced at the Ross Project in late February, 2015. As such, the operational effluent and environmental monitoring program began at that time. Many of the activities which were undertaken for the preoperational environmental monitoring program continued into the operational monitoring period. The monitoring for air particulates, direct radiation, and radon resumed at the environmental monitoring stations. Surface water sampling continued at the three surface water monitoring stations and at applicable reservoirs. Groundwater monitoring which was required as part of the preoperational monitoring program continued for the wells specified in SUA-1601.

2 LICENSE CONDITION 11.1(A) – WELLS ON EXCURSION

2.1 EXCURSION INDICATOR PARAMETER CONCENTRATION SUMMARY

No production activities have commenced at the Ross Project, and there are no excursion indicator parameter concentrations to report.

2.2 CORRECTIVE ACTIONS

No production activities have commenced at the Ross Project, and there are no corrective actions to report.

2.3 RESULTS FROM WELLS ON EXCURSION STATUS

No production activities have commenced at the Ross Project, and there are no wells on excursion to report.

3 LICENSE CONDITION 11.1(B) – DAILY FLOW RATES AND PRESSURES FOR INJECTION MANIFOLDS

3.1 DAILY FLOW RATES AND PRESSURES FOR INJECTION MANIFOLDS

No production activities have commenced at the Ross Project, and there are no flow rates or pressures for injection manifolds to report.

4 LICENSE CONDITION 11.1(C) – OPERATIONAL MONITORING

4.1 STATUS OF WELLFIELDS IN OPERATION

There are currently no wellfields in operation at the Ross Project.

4.2 PROGRESS OF WELLFIELDS IN RESTORATION

There are no wellfields in restoration at the Ross Project.

4.3 STATUS OF LONG TERM EXCURSIONS

No excursions have occurred at the Ross Project to date.

4.4 SUMMARY OF UNPLANNED RELEASES

No unplanned releases of production fluid have occurred to date at the Ross Project.

4.5 SUMMARY OF MECHANICAL INTEGRITY TESTS

During the reporting period, Mechanical Integrity Tests (MIT) were performed on 80 wells. One of those wells, MU1-OZ05, failed the MIT and was abandoned. The tested wells consist of baseline and monitor wells in the DM, SM, and OZ zones. Of the 80 wells which were tested, 78 were in Mine Unit 1, and 2 were in Mine Unit 2. The well which failed the MIT was in Mine Unit 1.

5 LICENSE CONDITION 11.1(D) – OPERATIONAL EFFLUENT AND ENVIRONMENTAL MONITORING

Sections 5.7.7 and 5.7.8 of the Technical Report (TR) of the License Application delineate the operational effluent and environmental monitoring which will occur at the Ross Project. This information is formalized into procedures in Strata's Environmental Management Program (EMP). The EMP is conducted according to the TR and Regulatory Guide 4.14.

Strata currently has six environmental monitoring stations. The monitoring stations have a continuous air sampler for measuring the concentration of air particulates, a dosimeter to measure direct radiation, and a detector for measuring radon gas in air. The locations of the monitoring stations are consistent with the recommendation set forth in Regulatory Guide 8.30 and are discussed in detail in the TR Section 2.9.2.4.

On June 4th, 2015, a Safety and Environmental Review Panel (SERP) met to discuss proposed minor changes to the locations of the environmental monitoring stations for two of the six sites. The changes in locations were proposed as the landowner was concerned with the amount of noise that the air samplers were generating. The SERP determined that the changes in locations were minor, namely moving the stations 200 - 300 feet for noise concerns. Additionally, the sites would be moved closer to the operations and thus would result in a more conservative estimate for impacts to air quality, and the proposed new locations would remain in the predominant wind direction as the existing locations. The SERP concluded that the proposed change could be implemented without obtaining a NRC license amendment. The SERP was designated as SERP 15-17 and is available for inspection. The environmental monitoring station names and descriptions are as follows:

- "Oshoto" – This location is Northeast and downwind of the facility. It is near a private residence;
- "Met Station" – This location is Northwest of the facility and is located at the site of the meteorological station.
- "Southwest" – This location is Southwest and upwind of the facility;
- "East" – This location is East of the facility;
- "South" – This location is South and upwind of the facility. Consistent with the TR and the evaluation of the wind rose, this location has been designated as the "background" location; and
- "North" – This location is North and downwind of the facility. The MILDOS-AREA computer model results show that this location is the "maximally exposed member of the public".

5.1 AIR PARTICULATES

Strata conducts continuous air sampling to sample for particulates in the air. The air particulate sampling is conducted according to Strata's EMP Section B.2. The samples are collected weekly, or more often as required by dust loading, and composited for analysis on a quarterly basis. The samples are sent to an accredited contract laboratory for analysis for total uranium, Ra-226, Th-230, and Pb-210. The air sampling is currently conducted at the six environmental monitoring stations discussed above.

The operational air particulate sampling for five of the sites for the reporting period began on 3/11/2015. Sampling at the sixth site, "Oshoto", did not begin until April 22nd, 2015 due to landowner issues and the requirement to obtain a sampler that would operate on solar power. As the sampling began late in the first quarter, all acquired data has been assigned to the second quarter. The results from the air particulate sampling are summarized in Appendix A, Table 1. The appropriate values from 10 CFR 20 Appendix B Effluent Concentration Limits for comparison and the appropriate Lower Limits of Detection (LLD) are also included in Appendix A, Table 1. The lower limits of detection are those specified in Regulatory Guide 4.14. The 10 CFR 20 Appendix B Table 2 values associated with class "W" were used for Natural Uranium and Th-230.

5.2 DIRECT RADIATION

Strata conducts a direct radiation monitoring program to monitor the direct radiation levels at the six environmental monitoring stations discussed above. The direct radiation levels are measured using environmental low level thermoluminescent dosimeters (TLDs). The TLDs are exchanged quarterly and sent to Landauer, a NVLAP-accredited company, for analysis. The direct radiation monitoring program is conducted according to Strata's EMP Section B.3. The dosimeters were deployed from January 29th to April 22nd for the first quarter and from April 22nd to July 8th for the second quarter. A dosimeter was not placed at the monitoring site labeled "Oshoto" during the first quarter as landowner consent was not yet granted.

A summary of the data obtained from the radiation monitoring program for the reporting period is included in Appendix A, Table 2. Data is presented as net readings as the reading from the control dosimeter has been subtracted. The values assigned to the control dosimeters for the first and second quarter are also included in Table 2 for informational purposes.

As this is the first period of operational monitoring, no trends could be analyzed. However, the results are consistent with results obtained during the preoperational monitoring period.

5.3 RADON

Strata conducts continuous monitoring for radon gas in accordance with Strata's EMP Section B.2.4. The radon gas is measured using Landauer's high sensitivity environmental radon Trak-Etch detectors. The detectors are exchanged quarterly and sent to Landauer for analysis. The detectors are placed at the six environmental monitoring stations described above. The detectors were deployed from January 29th to April 22nd for the first quarter and from April 22nd to July 8th for the second quarter. A summary of the data obtained from the radon gas monitoring is included in Appendix A, Table 3. The 10 CFR 20 Appendix B Table 2 effluent concentration value of 1.00E-10 uCi/mL for radon with daughters present is also included in Table 3 for comparison.

A detector was not placed at the monitoring site labeled "Oshoto" for the first quarter as landowner consent was not yet granted for that location. Additionally, the results included in this report for the first quarter of the reporting period are corrected results provided by Landauer. The initial results as reported by Landauer were unusually low, with all five sites yielding concentrations below the detectable limit. Landauer issued a letter on July 7th, 2015, stating that a routine internal audit had discovered that the background level assigned to a specific group of material was slightly overstated. The letter from Landauer is included in Appendix B. The revised results are generally not consistent with expected values, with three of the five sites yielding concentrations below the detectable limit, and the site labeled "Met Station" is one quarter of the value compared to the result from the second quarter. Although the revised values have been included in the report and are shown in Table 3, the data from the first quarter of 2015 will not be incorporated into future analyses as it is not deemed representative of actual conditions.

As this is the first period of operational monitoring, no trends could be analyzed. However, the results from the second quarter are consistent with results obtained during the preoperational monitoring period.

5.4 SOIL

Strata conducts soil sampling on an annual basis at the sites of the six environmental monitoring locations. The soil samples are collected according to the procedures outlined in Strata's Environmental Management Program Section B.4. The samples are analyzed for total uranium, Ra-226, Pb-210, and gross alpha. The results from the soil samples will be included in the Semi-Annual Report for the reporting period of July – December.

5.5 SEDIMENT

Strata conducts sediment sampling on an annual basis at the three surface water monitoring stations and at applicable reservoirs within the project area. The sediment samples are collected according to the procedures outlined in Strata's Environmental Management Program Section B.4. The samples are analyzed for total uranium, Th-230, Ra-226, Pb-210, and gross alpha. The results from the soil samples will be included in the Semi-Annual Report for the reporting period of July – December.

5.6 GROUNDWATER

On June 19th, 2015, Strata self-identified a potential violation of a NRC license condition. During the second quarter of 2015, Strata personnel began performing groundwater monitoring activities. Up to this point, contractors had performed the water monitoring program. Upon reviewing Strata's EMP, Strata personnel noticed a discrepancy regarding the sampling parameter suite being used for the operational water monitoring program, namely that the water samples were only being analyzed for dissolved uranium and Ra-226. A document outlining the self-identified violation and corrective actions is available for inspection.

5.6.1 Private Water Supply Wells

Strata conducts monitoring of private water supply wells in accordance with the EMP Section B.1.5. All wells within 2 kilometers of the monitor well ring which are currently in use for domestic, agricultural and livestock purposes are sampled quarterly and sent to an accredited contract laboratory for analysis for dissolved and suspended uranium, Ra-226, Th-230, Pb-210, Po-210, gross alpha, and gross beta.

Nine private water supply wells were sampled during the reporting period. Four of those wells, CSWELL 01, HBWELL05, P50883W, and TWWELL03 were not sampled during the first quarter either due to access issues, the well not functioning, or the well being shut in for the winter. Two wells, HBWELL05 and P50883W, were not sampled in the second quarter as the wells were either not functioning or were still shut-in. The samples were obtained on 2/24/2015 and 5/21/2015. As discussed above, the private water supply well samples were only analyzed for dissolved uranium and Ra-226. A summary of the results from the monitoring for the reporting period are included in Appendix A, Table 4. The lower

limits of detection and the 10 CFR 20 Appendix B Table 2 values for each radionuclide of interest are included in Appendix A, Table 7.

5.6.2 Industrial Wells

Strata conducts monitoring of industrial wells used for oil field water flood purposes in accordance with the EMP Section B.1.5. The industrial wells are sampled on a monthly basis when those wells are near active wellfields, and the samples are sent to an accredited contract laboratory for analysis for dissolved and suspended uranium, Ra-226, Th-230, Pb-210, Po-210, gross alpha, and gross beta. Two industrial wells were sampled during the reporting period, wells 19XX18 and 22X-19. As discussed above, the analysis from the first four months only included dissolved uranium and Ra-226. The incorrect parameter suite was identified prior to the analysis for the fifth month, and thus the samples were analyzed for the full parameter suite for the month of June. A summary of the results from the monitoring for the reporting period are included in Appendix A, Table 5. The lower limits of detection and the 10 CFR 20 Appendix B Table 2 values for each radionuclide of interest are included in Appendix A, Table 7.

Upon reviewing the data for industrial well 19XX18, the concentration values for Ra-226 (dissolved) and Pb-210 (dissolved) appear elevated, with the Pb-210 (dissolved) value being 125% of the limit listed in 10 CFR 20 Appendix B, Table 2. The same radionuclides are not elevated in the industrial well 22X-19, with the Pb-210 (dissolved) value being 17% of the limit listed in 10 CFR 20 Appendix B, Table 2. The data obtained during the preoperational monitoring period is consistent with the data obtained for this well during the reporting period for Ra-226. The average value for Ra-226 (dissolved) during the preoperational monitoring period was 3.96E-08 uCi/mL, while the average concentration for the reporting period was 3.54E-08 uCi/mL. The preoperational average value for Pb-210 (dissolved) was 4.85E-09 uCi/mL. As the samples from the first four months were not analyzed for Pb-210, only the sample from June was analyzed for Pb-210. The yielded value, 1.25E-08 uCi/mL, is an order of magnitude higher than the average preoperational value. However, the sample obtained from this well on 9/7/2011 was 1.34E-08 uCi/mL, the same magnitude as the June 2015 sample. As no production activities have commenced at the site, the elevated Pb-210 concentration levels cannot feasibly be attributed to activities undertaken by Strata. However, Strata will continue to closely monitor the Pb-210 concentration at this well to ascertain any increasing trends.

5.7 SURFACE WATER

Strata conducts monitoring of surface waters in accordance with the EMP Section B.1.6. All surface water features that lie within license boundary and may be impacted by operations are sampled and analyzed for dissolved and suspended uranium, Ra-226, Th-230, Pb-210, Po-210, gross alpha, and gross beta. The samples are collected quarterly, when available. For the reporting period, the site labeled "Oshoto Reservoir" was the only site which was potentially impacted by operations. The samples were obtained on 2/24/2015 and 6/17/2015. As discussed above, the sample for the first quarter was only analyzed for dissolved uranium and Ra-226. The sample for the second quarter was analyzed for the full parameter suite. A summary of the results from the monitoring for the reporting period are included in Appendix A, Table 6. The lower limits of detection and the 10 CFR 20 Appendix B Table 2 values for each radionuclide of interest are included in Appendix A, Table 7.

Strata additionally has three ISCO flowmeters/samplers located along waterways which collect samples of surface water when a pre-identified flow rate of the waterway is attained. The samplers are run from April through October. No samples were obtained from the ISCO samplers during the reporting period. The ISCO samplers are programmed to self-sample the surface water when a predetermined flow rate is achieved. The employee who went to collect the samples from the ISCO samplers stated that one of the samplers wasn't functioning properly and the other two had small technical malfunctions. Thus Strata is not certain if samples were not taken due to the flow rate not reaching the specified level or due to the technical difficulties with the samplers. The samplers have since been repaired and are fully functioning.

6 LICENSE CONDITION 11.1(E) – REVIEW OF SERPS

6.1 ANNUAL REVIEW OF SERPS

Per License Condition 9.4(E), a summary of the changes deemed appropriate by Strata's Safety and Environmental Review Panel will be included in the Semi-Annual Report submitted for the reporting period of July - December.

6.2 PAGE CHANGES

Page changes required by License Condition 9.4(E) will be included in the Semi-Annual Report submitted for the reporting period of July - December.

7 LICENSE CONDITION 11.1(F) – MODIFICATIONS TO INVENTORY OF WATER SUPPLY WELLS AND LAND-USE SURVEY

7.1 INVENTORY OF NEARBY WATER SUPPLY WELLS

Modifications to the inventory of nearby water supply wells will be included in the Semi-Annual Report submitted for the reporting period of July – December.

7.2 LAND-USE SURVEY

The results from the land-use survey will be included in the Semi-Annual Report submitted for the reporting period of July - December.

8 LICENSE CONDITION 11.2 – ANNUAL REVIEW OF RADIATION PROTECTION PROGRAM

8.1 ANNUAL REVIEW OF RADIATION PROTECTION PROGRAM

Per License Condition 11.2, the results from the annual review of the Radiation Protection Program will be included in the Semi-Annual Report submitted for the reporting period of July - December.

8.2 PUBLIC DOSE

Per License Condition 11.2 and consistent with 10 CFR 20.1301 and 10 CFR 20.1302, an analysis of dose to individual members of the public will be included in the Semi-Annual Report submitted for the reporting period of July - December.

8.3 SUMMARY OF EMPLOYEE URINALYSIS RESULTS

Baseline urinalysis (bioassay) samples will be collected for all regular, full time employees at the Ross Project. Samples will also be collected from employees during operations to ensure proper radiological controls are in place to prevent any potential uptake of radionuclides. The analysis is performed by an outside laboratory. The bioassay results are summarized annually, pursuant to 10 CFR Part 20, Subpart M and will be included in the Semi-Annual Report submitted for the reporting period of July - December.

Appendix A

**ENVIRONMENTAL MONITORING DATA
JANUARY 1ST – JUNE 30TH, 2015**

Table 1 - Environmental Air Particulates Monitoring, 1Q and 2Q 2015

Location	Sample Period	Radionuclide	Concentration (uCi/mL)	Error ±(uCi/mL)	LLD (uCi/mL)	10CFR20 APP B Table 2 Values (uCi/mL)	Percent Concentration (%)
Oshoto							
	1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A
		Th-230	N/A	N/A	N/A	2E-14	N/A
		Ra-226	N/A	N/A	N/A	9E-13	N/A
		Pb-210	N/A	N/A	N/A	6E-13	N/A
	2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A
		Th-230	ND	N/A	1E-16	2E-14	N/A
		Ra-226	ND	N/A	1E-16	9E-13	N/A
		Pb-210	1.4E-14	1.2E-15	2E-15	6E-13	2.3
North (maximally exposed member of the public)							
	1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A
		Th-230	N/A	N/A	N/A	2E-14	N/A
		Ra-226	N/A	N/A	N/A	9E-13	N/A
		Pb-210	N/A	N/A	N/A	6E-13	N/A
	2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A
		Th-230	1.0E-16	4.7E-17	1E-16	2E-14	0.5
		Ra-226	ND	N/A	1E-16	9E-13	N/A
		Pb-210	1.1E-14	7.5E-16	2E-15	6E-13	1.8

Location	Sample Period	Radionuclide	Concentration (uCi/mL)	Error ±(uCi/mL)	LLD (uCi/mL)	10CFR20 APP B Table 2 Values (uCi/mL)	Percent Concentration (%)
Met Station							
	1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A
		Th-230	N/A	N/A	N/A	2E-14	N/A
		Ra-226	N/A	N/A	N/A	9E-13	N/A
		Pb-210	N/A	N/A	N/A	6E-13	N/A
	2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A
		Th-230	ND	N/A	1E-16	2E-14	N/A
		Ra-226	ND	N/A	1E-16	9E-13	N/A
		Pb-210	1.3E-14	1.1E-15	2E-15	6E-13	2.2
Southwest							
	1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A
		Th-230	N/A	N/A	N/A	2E-14	N/A
		Ra-226	N/A	N/A	N/A	9E-13	N/A
		Pb-210	N/A	N/A	N/A	6E-13	N/A
	2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A
		Th-230	ND	N/A	1E-16	2E-14	N/A
		Ra-226	ND	N/A	1E-16	9E-13	N/A
		Pb-210	1.3E-14	8.8E-16	2E-15	6E-13	2.2

N/A = Not Applicable, ND = Non-Detect

Location	Sample Period	Radionuclide	Concentration (uCi/mL)	Error ±(uCi/mL)	LLD (uCi/mL)	10CFR20 APP B Table 2 Values (uCi/mL)	Percent Concentration (%)
East	1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A
		Th-230	N/A	N/A	N/A	2E-14	N/A
		Ra-226	N/A	N/A	N/A	9E-13	N/A
		Pb-210	N/A	N/A	N/A	6E-13	N/A
	2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A
		Th-230	ND	N/A	1E-16	2E-14	N/A
		Ra-226	ND	N/A	1E-16	9E-13	N/A
		Pb-210	1.1E-14	7.7E-16	2E-15	6E-13	1.8
South (Background)							
1st Quarter	U-Nat	N/A	N/A	N/A	9E-13	N/A	
	Th-230	N/A	N/A	N/A	2E-14	N/A	
	Ra-226	N/A	N/A	N/A	9E-13	N/A	
	Pb-210	N/A	N/A	N/A	6E-13	N/A	
2nd Quarter	U-Nat	ND	N/A	1E-16	9E-13	N/A	
	Th-230	ND	N/A	1E-16	2E-14	N/A	
	Ra-226	ND	N/A	1E-16	9E-13	N/A	
	Pb-210	9.0E-15	7.4E-16	2E-15	6E-13	1.5	

N/A = Not Applicable, ND = Non-Detect

Table 2 - Environmental Direct Radiation Monitoring, 1Q and 2Q 2015

Location	1st Quarter Net mrem/quarter	2nd Quarter Net mrem/quarter	Location Average to Date Net mrem/quarter	Year to Date Total Net mrem/quarter
Oshoto	*	6.3	6.3	N/A
North (maximally exposed member of the public)	4.9	6.6	5.8	11.5
Met Station	10.1	7.9	9.0	18.0
Southwest	8.7	6.9	7.8	15.6
East	4.2	5.1	4.7	9.3
South (Background)	4.9	4.3	4.6	9.2

* Landowner consent was not yet given for this location

N/A = Not Applicable

Control (mrem/quarter)	16.5	27.1
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Table 3 - Environmental Radon in Air, 1Q and 2Q 2015

Location	1st Quarter (uCi/mL)	Uncertainty ±(uCi/mL)	2nd Quarter (uCi/mL)	Uncertainty ±(uCi/mL)	Location Average to Date (uCi/mL)	10CFR20 APP B Table 2 Value (uCi/mL)
Oshoto	*	*	6.0E-10	5.0E-11	N/A	1E-10
North (maximally exposed member of the public)	ND	1.0E-11	5.0E-10	5.0E-11	N/A	1E-10
Met Station	1.0E-10	1.0E-11	4.0E-10	4.0E-11	2.5E-10	1E-10
Southwest	ND	1.0E-11	7.0E-10	6.0E-11	N/A	1E-10
East	ND	1.0E-11	6.0E-10	5.0E-11	N/A	1E-10
South (Background)	3.0E-10	3.0E-11	5.0E-10	5.0E-11	4.0E-10	1E-10

* Landowner consent not yet granted for this location

N/A = Not Applicable, ND = Non-Detect

LLD = 0.33 pCi/L based on 90 days

Table 4 – Private Supply Wells Monitoring, 1Q and 2Q 2015

Sample Location	CSWELL01					
	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	1.4E-08	N/A	4.8	2.8E-08	N/A	9.2
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	2.0E-09	2.0E-10	3.3	7.0E-10	1.0E-10	1.2
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

Sample Location	DWWELL01					
	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	3.9E-09	N/A	1.3	3.8E-09	N/A	1.3
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	4.5E-09	3.0E-10	7.5	3.2E-09	3.0E-10	5.3
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Sample Location	HBWELL03					
<i>Parameter</i>	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	1.2E-09	N/A	0.4	1.5E-09	N/A	0.5
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	3.8E-09	2.0E-10	6.3	5.0E-10	1.0E-10	0.8
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

Sample Location	HBWELL04					
<i>Parameter</i>	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	2.2E-08	N/A	7.4	2.1E-08	N/A	7.0
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	1.0E-09	1.0E-10	1.7	3.0E-10	1.0E-10	0.5
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Sample Location	TW01					
<i>Parameter</i>	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	ND	N/A	N/A	ND	N/A	N/A
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	4.0E-10	1.0E-10	0.7	ND	N/A	N/A
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

Sample Location	TW02					
<i>Parameter</i>	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	3.4E-10	N/A	0.1	6.1E-10	N/A	0.2
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	5.0E-10	1.0E-10	0.8	5.0E-10	1.0E-10	0.8
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Sample Location	TWWELL03					
<i>Parameter</i>	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	N/A	N/A	N/A	ND	N/A	N/A
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Ra-226 (dissolved)	N/A	N/A	N/A	2.0E-10	1.0E-10	0.3
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Table 5 – Industrial Wells Monitoring, 1Q and 2Q 2015

Location: 19XX18

Sample Date	2/24/2015		3/31/2015		4/29/2015		5/21/2015		6/17/2015		Avg. Conc. (uCi/mL)	% Eff. Conc.
Parameter	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)		
Uranium (dissolved)	6.1E-08	N/A	5.1E-08	N/A	4.8E-08	N/A	5.7E-08	N/A	5.7E-08	N/A	5.5E-08	18.2
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Ra-226 (dissolved)	3.8E-08	7.0E-10	3.5E-08	7.0E-10	3.5E-08	7.0E-10	3.5E-08	8.0E-10	3.4E-08	8.0E-10	3.5E-08	59.0
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.3E-08	1.2E-09	1.3E-08	125.0
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.3E-09	6.0E-10	3.3E-09	33.0
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.6E-09	7.0E-10	3.6E-09	9.0
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.4E-08	1.4E-09	1.4E-08	33.8
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.2E-07	1.5E-08	2.2E-07	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.5E-08	8.7E-09	9.5E-08	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Location: 22X-19

Sample Date	2/24/2015		3/31/2015		4/29/2015		5/21/2015		6/17/2015		Avg. Conc. (uCi/mL)	% Eff. Conc.
Parameter	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)	Conc. (uCi/mL)	Uncertainty ±(uCi/mL)		
Uranium (dissolved)	1.5E-08	N/A	1.4E-08	N/A	1.4E-08	N/A	1.6E-08	N/A	1.5E-08	N/A	1.5E-08	4.9
Uranium (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Ra-226 (dissolved)	4.9E-09	3.0E-10	3.8E-09	3.0E-10	2.8E-09	2.0E-10	3.0E-09	2.0E-10	2.9E-09	2.0E-10	3.5E-09	5.8
Ra-226 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.7E-09	5.0E-10	1.7E-09	17.0
Pb-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.4E-09	5.0E-10	1.4E-09	14.0
Po-210 (dissolved)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.5E-09	5.0E-10	1.5E-09	3.8
Gross alpha	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.7E-08	6.4E-09	3.7E-08	N/A
Gross beta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.2E-08	5.9E-09	1.2E-08	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

Table 6 - Surface Water Monitoring, 1Q and 2Q 2015

Sample Location	Oshoto Reservoir					
	1st Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*	2nd Quarter (uCi/mL)	Uncertainty (uCi/mL)	% Eff. Conc.*
Uranium (dissolved)	N/A	N/A	N/A	6.3E-09	N/A	2.1
Uranium (suspended)	N/A	N/A	N/A	ND	N/A	N/A
Ra-226 (dissolved)	N/A	N/A	N/A	ND	N/A	N/A
Ra-226 (suspended)	N/A	N/A	N/A	ND	N/A	N/A
Th-230 (dissolved)	N/A	N/A	N/A	ND	N/A	N/A
Th-230 (suspended)	N/A	N/A	N/A	ND	N/A	N/A
Pb-210 (dissolved)	N/A	N/A	N/A	1.2E-09	7.0E-10	12.0
Pb-210 (suspended)	N/A	N/A	N/A	ND	N/A	N/A
Po-210 (dissolved)	N/A	N/A	N/A	ND	N/A	N/A
Po-210 (suspended)	N/A	N/A	N/A	ND	N/A	N/A
Gross alpha	N/A	N/A	N/A	4.9E-09	2.1E-09	N/A
Gross beta	N/A	N/A	N/A	1.1E-08	3.1E-09	N/A

* Lower Limits of Detection and Effluent Concentration values from 10 CFR 20 Appendix B Table 2 are listed in Table 7

N/A = Not Applicable; ND = Non Detectable

**Table 7 - Water Sample Lower Limits of Detection
and Effluent Concentration Values**

Radionuclide	LLD (uCi/mL)	10CFR20 APP B Table 2 Effluent Conc. Water (uCi/mL)
Natural Uranium	2E-10	3E-7
Thorium-230	2E-10	1E-7
Radium-226	2E-10	6E-8
Polonium-210	1E-9	4E-8
Lead-210	1E-9	1E-8

Appendix B

July 7, 2015

Dear Valued Customer,

Please find enclosed a Corrected Report of your recently reported radon values. During a routine audit it was determined that the background level assigned to a specific group of material was slightly overstated, resulting in a modest impact on the net total radon concentration reported. The material background factor is routinely assessed and subtracted from the total radon concentration to obtain the net exposed radon concentration.

While the impact on the reported total concentration was minimal, as your laboratory we feel it is imperative that you are provided with the most accurate radon value possible. The detector(s) on your attached report that were corrected are noted with a "CV" code, for Corrected Value.

We apologize for any inconvenience this may have caused. If you have any questions please do not hesitate to contact us.

Sincerely,

Mark Salasky, CHP
Radon Laboratory Measurement Specialist
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