POWER
RESOURCES

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August 4, 2006

ATTN: Document Control Desk
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Fuel Cycle Facilities Branch,
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Two White Flint North
Rockville, MD 20852-2738

RE: Smith Ranch-Highland Uranium Project
NRC License SUA-1548, Docket No. 40-8964
Semi-Annual Effluent and Environmental Monitoring Report, January 1 – June 30, 2006

Dear Mr. Janosko:

In accordance with 10 CFR 40.65 and License Condition No. 12.2 of License SUA-1548, please find enclosed the Semi-Annual Effluent and Environmental Monitoring Report for the Smith Ranch-Highland Uranium Project. This report covers the period January 1 – June 30, 2006. A copy of this report is also being forwarded to Mr. Paul Michalak, USNRC Headquarters, and Mr. Leonard Wert, Director DRSS, Region IV.

As discussed in Section 7.0 of this report, corrected tables for the monitoring period July 1 through December 31, 2005 are included in Attachment C.

If you have any questions regarding the report, please contact me at (307) 358-6541, ext. 46.

Sincerely,

John McCarthy
Manager-Health, Safety
& Environmental Affairs

JM/bj

Enclosure

cc: Mr. Paul Michalak, USNRC Headquarters
Mr. Leonard Wert, Director DRSS, Region IV, USNRC
S.P. Collings w/o atta C. Foldenauer w/o atta File SR 4.6.4.1
Arlene Crook, RSO w/attachment

POWER RESOURCES, INC.

SMITH RANCH - HIGHLAND URANIUM PROJECT

SEMI-ANNUAL EFFLUENT AND ENVIRONMENTAL MONITORING REPORT

FOR THE PERIOD

JANUARY 1 THROUGH JULY 31, 2006

USNRC SOURCE MATERIAL LICENSE NO. SUA-1548

DOCKET NO. 40-8964

TABLE OF CONTENTS

1.0 RESULTS FROM EMPLOYEE URINALYSES IF AN EXPOSURE EXCEEDS ACTION LEVELS DESCRIBED IN THE OPERATIONS PLAN OF THE APPROVED LICENSE APPLICATION

During the period January 1, through June 30, 2006 one bioassay had a uranium level of 39 µg/L which exceeded the action level of 15 µg/L uranium. The exposure caused by failure to follow established procedures. The sample was re-analyzed and verified. The employee was re-sampled and results of that sample were non detectible. The employee was provided additional training to ensure that proper procedure is followed in the future.

2.0 INJECTION RATES, RECOVERY RATES, AND INJECTION TRUNK-LINE PRESSURES FOR EACH SATELLITE FACILITY

The required information for each Satellite facility for the 1st and 2nd Quarters of 2006 is presented in Tables 1A, 1B, 1C, and 1D included in Attachment A.

2.1 Satellite No. 1

Satellite No. 1 did not operate during the report period since restoration activities in the A and B Wellfield are complete. Therefore, no injection or recovery rates are available for the report period.

2.2 Satellite No. 2, Satellite No. 3, Satellite SR-1, Central Processing Plant

The injection rates, recovery rates, and injection pressure data for Satellite No. 2, Satellite No. 3, Satellite SR-1, and the Central Processing Plant (CPP) are contained in Table 1B, 1C, and 1D. The injection rates represent the total recovery rates minus the purge (clean-out circuit) flow. The purge from Satellite No. 2 and No. 3 is treated for uranium and radium removal and pumped to the Satellite No. 2 Purge Storage Reservoir prior to disposal by irrigation at the Satellite No. 2 Land Application Facility. Purge from Satellite SR-1 and the CPP is disposed by deep injection through permitted waste disposal wells.

3.0 RESULTS OF EFFLUENT AND ENVIRONMENTAL MONITORING INCLUDING WATER QUALITY ANALYSES AND MONITORING REQUIRED BY THE WDEQ PERMIT FOR THE OPERATING IRRIGATION SYSTEMS

3.1 Stack Emission Surveys

When the Central Processing Facility (CPF) at the Highland Uranium Project is operational, PRI monitors the Yellowcake Dryer and Packaging scrubber exhaust stacks to determine the emission rate of particulates, uranium, radium, and thorium. During the report period, the Highland CPF remained on standby status as all yellowcake processing activities (elution, precipitation, drying, and packaging) were conducted at

the Smith Ranch Central Processing Plant. The dryers at the Smith Ranch Central Processing Plant are zero emission vacuum dryers that do not require emission stack testing. Therefore, no stack tests were conducted during the report period. It is anticipated that the CPF at Highland will remain on standby status during several upcoming report periods.

3.2 Air Particulate, Radon, and Gamma Radiation Monitoring

PRI maintains five Air Monitoring Stations at various locations on and around the licensed area. Two of these stations are used to monitor downwind conditions of the Highland CPF, and monitoring is not required unless the CPF is in operation. The Air Monitoring Stations are used to monitor air particulates, radon, and gamma radiation. The stations are located as follows:

- AS-1 (Dave's Water Well): This station monitors background conditions, upwind of both the Smith Ranch and HUP wellfields and yellowcake processing facilities.

- AS-2 (Smith Ranch Restricted Area): This station monitors conditions downwind of the Smith Ranch CPP Restricted Area Boundary.

- AS-3 (Vollman Ranch): This station monitors the nearest downwind resident to the Smith Ranch CPP Restricted Area.

- AS-4 (HUP Restricted Area): This station monitors conditions downwind of the HUP CPF Restricted Area Boundary (when the HUP CPF is operating).

- AS-5 (Fowler Ranch): This station monitors the nearest downwind resident to the HUP CPF Restricted Area (when the HUP CPF is operating).

Monitoring at AS-4 and AS-5 was not conducted during the reporting period since the Highland CPF remains on standby status. It is anticipated that the Highland CPF will remain in standby status for several upcoming reporting periods and monitoring of downwind air stations will only resume if the Highland CPF becomes operational.

Table 2 shows the air particulate and radon data collected at these sites during the report period. Review of data collected during the report period shows that the concentrations of all parameters are significantly less than the 10 CFR 20, Appendix B.

Gamma radiation data for the report period are provided in Table 3. 10 CFR 20 Appendix B contains no Effluent Concentration Limit for gamma radiation for comparison. However, gamma results for the report period are within normal background conditions and show no discernable trends with previous data.

3.3 Water Sampling Data

3.3.1 *Groundwater and Surface Water Monitoring Stations*

During the report period, monitoring was completed at nine water wells and five stock ponds throughout the permit area. Water samples are collected from the water wells and stock ponds on a quarterly basis for analysis of uranium and radium-226. Table 4 provides the analytical data for samples collected during the report period. A review of data collected during the report period shows that five stock ponds (Stations SW- 2, 3, 4, 5 and 10) remained dry during the report period and six water wells (GW-5, 6, 8, 9, 11, and 12) did not run during the report period. A review of data collected from the nine water wells and five stock ponds show that the concentrations of uranium and radium-226 are well below the 10 CFR 20, Appendix B, Effluent Concentration Limits of 3.0E-07 µCi/mL and 6.0E-08 µCi/mL, respectively.

3.4 Wastewater Land Application Facilities Monitoring

3.4.1 *Soil and Vegetation Sampling*

In accordance with the approved license application and the WDEQ permits for the Satellite No. 1 and Satellite No. 2 Wastewater Land Application Facilities, soil and vegetation sampling of the irrigation areas is conducted in late summer of each year. The soil and vegetation data are collected to monitor and evaluate any adverse effects to the irrigation areas. The 2006 soil and vegetation sampling at the irrigation areas will be conducted in August 2006.

3.4.2 *Irrigation Fluid*

In accordance with the approved license application and the WDEQ Wastewater Land Application permits, PRI monitors the treated irrigation fluid that is disposed of at both irrigation facilities. Grab samples are collected at the irrigator pivot during each month of operation and analyzed for various parameters. As noted in Table 8 and Table 9, only Irrigator 2 operated during the report period.

Irrigation fluid data collected at Satellite No. 2 is provided in Table 9. A review of the data indicates that the concentration of uranium in the monthly grab samples was below the 10 CFR 20, Appendix B, Effluent Concentration Limit of 3.0 E-7 µCi/ml, and were less than the estimate provided in the original license application for the facility (1.4E-6 µCi/ml) The samples contained radium-226 concentrations below the 10 CFR 20, Appendix B, Effluent Concentration Limit of 6.0E-08 µCi/ml and below the estimate provided in the original license application for the facility (3.0E-9 µCi/ml)

3.4.3 *Radium Treatment Systems*

PRI collects grab samples each month to ensure that the radium-226 treatment systems are adequately treating wastewater from Satellites No. 2 and No. 3 prior to discharge into the Purge Storage Reservoir. No samples were collected from the Satellite No. 1 radium treatment system since Satellite No. 1 did not operate during the report period. The monthly radium-226 grab samples for Satellite No. 2 and No. 3 are collected at the discharge points of the radium treatment system at each facility. The results of this monitoring are included in Table 10A, and 10B. Review of the monitoring data shows that all radium-226 concentrations were below the 10 CFR 20, Appendix B, Effluent Concentration Limit of 6.0E-8 μCi/ml (60 pCi/L) at both Satellite No. 2 and Satellite No. 3 during the report period

3.4.4 *Soil Water*

In accordance with the approved license application and the WDEQ Wastewater Land Application Facility permits, PRI collects soil water samples at the irrigation areas in June of each year and analyzes them for various parameters, including uranium and radium-226. Sampling was conducted on June 27, 2006, but due to drought conditions and the relatively limited amount of irrigation, there was insufficient soil water available to produce a sample at any of the sample locations for the Satellite No. 1 and Satellite No. 2 irrigation areas.

3.4.5 *Satellite No. 1 Purge Storage Reservoir Monitor Well*

A shallow monitor well, located southwest of the Satellite No. 1 Purge Storage Reservoir is monitored at least weekly for potential seepage from the reservoir. There was no evidence of seepage during the report period. PSR-1 was dry for the entire period and it is not anticipated that water will be diverted to PSR-1 in the near future. Therefore, it is unlikely there will be any seepage from PSR-1 in the following report periods.

3.4.6 *Satellite No. 2 Purge Storage Reservoir Shallow Wells*

In accordance with the approved license application, water levels are measured on a quarterly basis and ground water samples are required on a semi-annual basis from the two shallow monitoring wells located adjacent to the Satellite No. 2 Purge Storage Reservoir (PSR-2). PRI conducts quarterly sampling of these two wells. Shallow Wells No. 1 and No. 2 are located adjacent to the south and east sides of the reservoir, respectively. During the report period, monitoring was conducted on July 20 and November 1, 2006. Shallow Well No. 1 contained insufficient water to sample on both occasions and as a result, there is no data available for the report period. Table 12 contains the applicable data for Shallow Well No. 2.

Comparison of the uranium and radium-226 data from Shallow Well No. 2 does not indicate any significant trends or changes from previous report periods. Comparison of water level data

collected during the report period with previous data continues to show a trend of higher water levels during the spring-summer months and lower water levels during the fall-winter months.

4.0 SAFETY AND ENVIRONMENTAL EVALUATIONS

All safety and environmental evaluations made by the Safety and Environmental Review Panel (SERP) and resulting changed pages to the Operations Plan and Reclamation Plan of the approved license must be submitted on an annual basis. During the period January 1 through June 30, 2006, PRI initiated three SERPS, but they were not finalized before the end of the reporting period. Following finalization, these SERPS will be included in attachment B of the July 1-December 31, 2006 semi-annual report..

5.0 RUTH ISL PROJECT

The Ruth Project is licensed for commercial ISL uranium activities, however none has been initiated. The existing buildings and evaporation ponds, along with a few remaining wells, are left from research and development testing conducted by Uranerz, USA, one of the previous licensees. The facilities at the project are non-operational and on stand-by status. Therefore, radiation and effluent monitoring was not conducted and is not required by the NRC or the Wyoming Department of Environmental Quality. The quantity of radionuclides released to unrestricted areas in liquid and in gaseous effluents is considered negligible and is not applicable at this time.

Activities conducted during the report period consisted of quarterly inspections of the existing facilities. Inspection of the perimeter fence, pond embankments, and pond liners yielded no deficiencies during the report period.

6.0 NORTH BUTTE ISL PROJECT

The North Butte Project is also licensed for commercial ISL uranium operations; however, construction of facilities has not commenced and is currently on hold. Since there are no radioactive materials present on site, no radionuclides were released to unrestricted areas in liquid or in gaseous effluents.

License Condition 9.5 requires PRI to submit, for the NRC and WDEQ-LQD approval, an itemized cost estimate for implementation of the NRC-approved decommissioning/restoration plan prior to commencement of construction of a commercial facility at the North Butte/Ruth sites. Currently, PRI is in the process of updating the Operations and Reclamation Plan for the North Butte ISL Project in pursuit of approval to commence construction activities at the North Butte site.

7.0 NRC ANNUAL INSPECTION

During the week of July 11-13 the NRC conducted their annual site inspection. As a result, there were two errors discovered in the semi-annual report for the monitoring period July 1 through December 31, 2005.

The first error occurred when data was incorrectly entered in Table 3 – Gamma for both the 3rd and 4th quarters of 2005. A corrected copy of Table 3 is included in Attachment C.

An error was also noted in Table 2 – Air. There were 2 causes for this error, the first of which was due to incorrect air volumes reported to the lab, causing their calculations to be off by a factor of 10. The second occurred when the lab mis-calculated the air volumes, and did not notify PRI of their correction. A copy of the corrected Table 2 – Air is also included in Attachment C.

ATTACHMENT A

DATA TABLES 1-12

TABLE 1A
SATELLITE NO. 1 INJECTION RATES, RECOVERY RATES, INJECTION PRESSURES

MONTH	Injection Pressure (PSI) RO #1	RO #2	RO #3	Grounwate Sweep GPM	Radium Ponds GPM	RO Feed GPM	Injection GPM	RO Concentrat GPM	Purge Flow GPM
Jan-06	0	0	0	0	0	0	0	0	0
Feb-06	0	0	0	0	0	0	0	0	0
Mar-06	0	0	0	0	0	0	0	0	0
Apr-06	0	0	0	0	0	0	0	0	0
May-06	0	0	0	0	0	0	0	0	0
Jun-06	0	0	0	0	0	0	0	0	0

TABLE 1B
AVERAGE INJECTION RATES (GPM)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	entral Processing Pla
Jan-06	2,539	1,296	3,542	4,043
Feb-06	2,531	1,298	3,468	4,007
Mar-06	2,498	1,277	3,712	3,831
Apr-06	2,441	1,261	3,809	4,007
May-06	2,373	1,338	3,852	3,997
Jun-06	2,354	2,327	3,869	3,950

TABLE 1C
AVERAGE RECOVERY RATES (GPM)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	entral Processing Pla
Jan-06	2,563	1,402	3,542	4,085
Feb-06	2,554	1,363	3,468	4,044
Mar-06	2,523	1,343	3,712	3,867
Apr-06	2,465	1,318	3,809	4,049
May-06	2,399	1,389	3,852	4,037
Jun-06	2,378	2,395	3,869	3,988

TABLE 1D
INJECTION TRUNK LINE PRESSURES (PSI)

MONTH	Satellite No. 2	Satellite No. 3	Satellite SR-1	entral Processing Pla
Jan-06	89	71	104	179
Feb-06	88	68	107	181
Mar-06	85	70	86	162
Apr-06	71	71	74	154
May-06	87	61	72	154
Jun-06	99	90	60	146

TABLE 2

AIR SAMPLING DATA - 2006
ENVIRONMENTAL MONITORING SITES
1st & 2nd QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	RADIONUCLIDE (µCi/ml)	CONCENTRATION (µCi/ml)	ERROR EST. +/- (µCi/ml)	L.L.D. (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT %
FENCE LINE	1st	U-Nat	5.54E-16	N/A	1.00E-16	9.00E-14	0.6
Air Station	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
Restricted Area		Ra-226	<1.00E-16	N/A	1.00E-16	9.00E-13	< 1.0
Boundary		Pb-210	1.14E-14	9.38E-16	2.00E-15	6.00E-13	1.9
		Rn-222			3.00E-10	1.00E-08	0.0
	2nd	U-Nat	3.40E-16	N/A	1.00E-16	9.00E-14	0.4
	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1.00E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	1.23E-14	7.68E-16	2.00E-15	6.00E-13	2.1
		Rn-222	1.40E-09	5.80E-09	3.00E-10	1.00E-08	14.0
VOLLMAN RANCH	1st	U-Nat	2.15E-16	N/A	1.00E-16	9.00E-14	0.2
Air Station	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
Downwind Nearest		Ra-226	1.23E-16	1.08E-16	1.00E-16	9.00E-13	< 1.0
Residence		Pb-210	2.48E-14	1.35E-15	2.00E-15	6.00E-13	4.1
		Rn-222			3.00E-10	1.00E-08	0.0
	2nd	U-Nat	1.48E-16	N/A	1.00E-16	9.00E-14	0.2
	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1.00E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	1.04E-14	7.09E-16	2.00E-15	6.00E-13	1.7
		Rn-222	1.10E-09	6.30E-09	3.00E-10	1.00E-08	11.0
DAVE'S WATER WELL	1st	U-Nat	1.64E-16	N/A	1.00E-16	9.00E-14	0.2
Air Station	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
Background		Ra-226	<1.00E-16	N/A	1.00E-16	9.00E-13	< 1.0
Site		Pb-210	2.35E-14	1.44E-15	2.00E-15	6.00E-13	3.9
		Rn-222			3.00E-10	1.00E-08	0.0
	2nd	U-Nat	1.03E-16	N/A	1.00E-16	9.00E-14	0.1
	Quarter	Th-230	<1.00E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	1.48E-16	7.39E-17	1.00E-16	9.00E-13	< 1.0
		Pb-210	9.32E-15	6.79E-16	2.00E-15	6.00E-13	1.6
		Rn-222	8.00E-10	7.20E-09	3.00E-10	1.00E-08	8.0

TABLE 3

DIRECT RADIATION (GAMMA) MEASUREMENT DATA - 2006
ENVIRONMENTAL MONITORING SITES
1st & 2nd QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	EXPOSURE RATE (mR/qtr)	ERROR ESTIMATE (mR/qtr)
FENCE LINE			
Air Station	1st Quarter	41	
Restricted Area			
Boundary	2nd Quarter	41	
VOLLMAN'S RANCH			
Air Station	1st Quarter	36	
Downwind			
Nearest Residence	2nd Quarter	33	
DAVE'S WATER WELL			
Air Station	1st Quarter	38	
Background			
Site	2nd Quarter	37	

TABLE 4

WATER SAMPLING DATA - 2006
ENVIRONMENTAL MONITORING SITES
1st & 2nd QUARTERS

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
SW-1 Stock Pond Section 3 T35N, R74W	1st Quarter	U-Nat	0.269			1.8E-07	3.0E-07	60.7
		Ra-226		ND			6.0E-08	
	2nd Quarter	U-Nat	0.0231			1.6E-05	3.0E-07	
		Ra-226		ND			6.0E-08	
SW-2 Stock Pond Section 2 T35N, R74W	1st Quarter	U-Nat	ND				3.0E-07	
		Ra-226		ND			6.0E-08	
	2nd Quarter	U-Nat	DRY				3.0E-07	
		Ra-226					6.0E-08	
SW-3 Stock Pond Section 35 T36N, R74W	1st Quarter	U-Nat	ND				3.0E-07	
		Ra-226		0.6	3.00E-01		6.0E-08	
	2nd Quarter	U-Nat	DRY				3.0E-07	
		Ra-226					6.0E-08	
SW-4 Stock Pond Section 36 T36N, R74W	1st Quarter	U-Nat	ND				3.0E-07	
		Ra-226		ND			6.0E-08	
	2nd Quarter	U-Nat	DRY				3.0E-07	
		Ra-226					6.0E-08	
SW-5 Stock Pond Section 21 T36N, R73W	1st Quarter	U-Nat	ND				3.0E-07	
		Ra-226		ND			6.0E-08	
	2nd Quarter	U-Nat	DRY				3.0E-07	
		Ra-226					6.0E-08	
SW-6 Stock Pond Section 22 T36N, R73W	1st Quarter	U-Nat	ND				3.0E-07	0.0
		Ra-226		ND			6.0E-08	0.0
	2nd Quarter	U-Nat	0.0003			2.0E-07	3.0E-07	67.7
		Ra-226		ND			6.0E-08	0.0

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
SW-7	1st Quarter	U-Nat	ND				3.0E-07	0.0
Stock Pond		Ra-226		ND			6.0E-08	0.0
Section 22								
T36N, R73W	2nd Quarter	U-Nat	0.0003			2.0E-07	3.0E-07	67.7
		Ra-226		ND			6.0E-08	0.0
SW-8	1st Quarter	U-Nat	ND				3.0E-07	0.0
Stock Pond		Ra-226		0.5	3.00E-01	5.0E-10	6.0E-08	0.0
Section 18								
T36N, R72W	2nd Quarter	U-Nat	0.0041			2.8E-09	3.0E-07	0.9
		Ra-226		ND			6.0E-08	0.0
SW-9	1st Quarter	U-Nat	0.0010			6.8E-10	3.0E-07	
Stock Pond		Ra-226		ND			6.0E-08	
Section 18								
T36N, R72W	2nd Quarter	U-Nat	0.001				3.0E-07	
		Ra-226		ND			6.0E-08	
SW-10	1st Quarter	U-Nat	ND				3.0E-07	0.0
Stock Pond		Ra-226		0.6	4.00E-01		6.0E-08	0.0
Section 19								
T36N, R72W	2nd Quarter	U-Nat	DRY				3.0E-07	
		Ra-226				0.0E+00	6.0E-08	
GW-1	1st Quarter	U-Nat	0.165			1.1E-07	3.0E-07	
Windmill		Ra-226		0.8		8.0E-10	6.0E-08	
Section 1								
T35N, R74W	2nd Quarter	U-Nat	0.028			1.9E-08	3.0E-07	6.3
		Ra-226		1	3.00E-01	1.0E-09	6.0E-08	1.7
GW-2	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
Water Well		Ra-226				0.0E+00	6.0E-08	0.0
Section 35								
T36N, R74W	2nd Quarter	U-Nat	0.0368			2.5E-08	3.0E-07	8.3
		Ra-226		0.7	3.00E-01	7.0E-10	6.0E-08	0.0

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
GW-3 Windmill Section 27 T36N, R74W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226				0.0E+00	6.0E-08	
	2nd Quarter	U-Nat	0.117			7.9E-08	3.0E-07	26.4
		Ra-226		0.5		5.0E-10	6.0E-08	0.8
GW-4 Windmill Section 23 T36N, R74W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226					6.0E-08	
	2nd Quarter	U-Nat	0.0724			4.9E-08	3.0E-07	16.3
		Ra-226		7.3		7.3E-09	6.0E-08	12.2
GW-5 Windmill Section 30 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226					6.0E-08	0.0
GW-6 Windmill Section 28 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226					6.0E-08	0.0
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	
GW-7 Water Well Section 27 T36N, R73W	1st Quarter	U-Nat	0.051			3.5E-08	3.0E-07	11.5
		Ra-226		1.0		1.0E-09	6.0E-08	1.7
	2nd Quarter	U-Nat	0.0294			2.0E-08	3.0E-07	6.6
		Ra-226		ND			6.0E-08	0.0
GW-8 Windmill Section 23 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	

TABLE 4 (Continued)

SAMPLE LOCATION	SAMPLE DATE	RADIONUCLIDE	CONCENTRATION (mg/L)	CONCENTRATION (pCi/L)	ERROR EST. +/- (pCi/L)	CONCENTRATION (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT
GW-9 Windmill Section 14 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	
GW-10 Water Well Section 14 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226				0.0E+00	6.0E-08	
	2nd Quarter	U-Nat	0.0023			1.6E-09	3.0E-07	
		Ra-226		ND			6.0E-08	
GW-11 Water Well Section 11 T36N, R73W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226				0.0E+00	6.0E-08	0.0
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226					6.0E-08	0.0
GW-12 Water Well Section 7 T36N, R72W	1st Quarter	U-Nat	NOT RUNNING				3.0E-07	0.0
		Ra-226				0.0E+00	6.0E-08	0.0
	2nd Quarter	U-Nat	NOT RUNNING				3.0E-07	
		Ra-226					6.0E-08	

TABLE 8

SATELLITE NO. 1 LAND APPLICATION FACILITY (IRRIGATOR NO. 1)
MONTHLY IRRIGATION FLUID DATA

IRRIGATION CYCLE		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06
VOLUME (AF)							
MAJOR IONS (mg/L)	REP. LIMIT						
Ca	1.0						
Mg	1.0	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did
Na	1.0	Not Operate	Not Operate	Not Operate	Not Operate	Not Operate	Not Operate
K	1.0						
HCO_3	1.0						
SO_4	1.0						
Cl	1.0						
NON-METALS							
TDS @ 180° C (mg/L)	10.0						
pH (standard units)	0.010						
SAR	0.01						
TRACE METALS (mg/L)							
As	0.001						
Ba	0.10						
B	0.10						
Se	0.001						
RADIOMETRIC							
U-nat (uCi/mL)	2.03E-10						
Ra-226 (uCi/mL)	2.00E-10						
Ra Err. Est. +/-							

TABLE 9

SATELLITE NO. 2 LAND APPLICATION FACILITY (IRRIGATOR NO. 2)
MONTHLY IRRIGATION FLUID DATA

IRRIGATION CYCLE		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06
VOLUME (AF)						20	38.1
MAJOR IONS (mg/L)	REP. LIMIT						
Ca	1.0					317	370
Mg	1.0	Irrigator Did	Irrigator Did	Irrigator Did	Irrigator Did	106	132
Na	1.0	Not Operate	Not Operate	Not Operate	Not Operate	105	111
K	1.0					25.0	30.5
HCO_3	1.0					202	171
SO_4	1.0					750	770
Cl	1.0					441	454
NON-METALS							
TDS @ 180° C (mg/L)	10.0					2160	2140
pH (standard units)	0.010					8.94	8.12
SAR	0.01					1.3	1.26
TRACE METALS (mg/L)							
As	0.001					0.002	0.003
Ba	0.1					ND	ND
B	0.10					0.10	0.2
Se	0.001					0.53	0.578
RADIOMETRIC							
U-nat (uCi/mL)	2.03E-10					1.2	1.1
Ra-226 (uCi/mL)	2.00E-10					ND	1.7E-09
Ra Err. Est. +/-							0.4

TABLE 10A

MONTHLY RADIUM GRAB SAMPLES
AT THE DISCHARGE FROM THE RADIUM TREATMENT SYSTEM
SATELLITE NO. 2

SAMPLE DATE		3-Jan-06	6-Feb-06	1-Mar-06	10-Apr-06	11-May-06	27-Jun-06
RADIOMETRIC	Rep. Limit						
Ra-226 (uCi/mL)	2.00E-10	1.80E-09	1.56E-08	1.28E-08	5.80E-09	2.90E-09	3.79E-09
Ra Err. Est.+/-		5.00E-10	1.20E-09	1.30E-09	9.00E-10	6.00E-10	6.00E-10

TABLE 10B

MONTHLY RADIUM GRAB SAMPLES
AT THE DISCHARGE FROM THE RADIUM TREATMENT SYSTEM
SATELLITE NO. 3

SAMPLE DATE		3-Jan-06	6-Feb-06	1-Mar-06	10-Apr-06	11-May-06	27-Jun-06
RADIOMETRIC	Rep. Limit						
Ra-226 (uCi/mL)	2.00E-10	1.40E-09	4.90E-09	8.00E-10	4.00E-10	9.00E-10	5.80E-09
Ra Err. Est.+/-		4.00E-10	7.00E-10	4.00E-10	2.00E-10	3.00E-10	7.00E-10

TABLE 11A

SATELLITE NO. 1 LAND APPLICATION FACILITY (IRRIGATOR NO. 1)
ANNUAL SOIL WATER DATA

SAMPLE SITE		2' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite	4' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite	6' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite
SAMPLE DATE				
MAJOR IONS (mg/L)	REP. LIMIT			
HCO_3	1.0			
SO_4	1.0	INSUFFICIANT WATER FOR SAMPLING		
Cl	1.0			
NON-METALS				
Cond (umho/cm)	1.0			
pH (standard units)	0.010			
TRACE METALS (mg/L)				
B	0.10			
Se	0.001			
RADIOMETRIC				
U-nat: (mg/L)	0.0003			
Ra-226: (pCi/L)	0.2			
Ra Err. Est. +/-				
U-nat: (uCi/mL)	2.03E-10			
Ra-226: (uCi/mL)	2.00E-10			
Ra Err. Est. +/-				

TABLE 11B

SATELLITE NO. 2 LAND APPLICATION FACILITY (IRRIGATOR NO. 2)
ANNUAL SOIL WATER DATA

SAMPLE SITE		2' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite	4' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite	6' NW¼ NE¼ SW¼ SE¼ Lysimeter Composite
SAMPLE DATE				
MAJOR IONS (mg/L)	REP. LIMIT			
HCO_3	1.0			
SO_4	1.0	INSUFFICIANT WATER FOR SAMPLING		
Cl	1.0			
NON-METALS				
Cond (umho/cm)	1.0			
pH (standard units)	0.010			
TRACE METALS (mg/L)				
B	0.10			
Se	0.001			
RADIOMETRIC				
U-nat: (mg/L)	0.0003			
Ra-226: (pCi/L)	0.2			
Ra Err. Est. +/-				
U-nat: (uCi/mL)	2.03E-10			
Ra-226: (uCi/mL)	2.00E-10			
Ra Err. Est. +/-				

TABLE 12

SATELLITE NO. 2 PURGE STORAGE RESERVOIR
SHALLOW MONITORING WELLS
QUARTERLY WATER LEVEL DATA
SEMI-ANNUAL WATER QUALITY DATA

SAMPLE SITE		Shallow Well No. 1 (South)		Shallow Well No. 2 (East)	
SAMPLE DATE		3-Feb-06	16-May-06	3-Feb-06	16-May-06
WATER LEVEL (DTW)		16.6	13.4	11.29	10.2
MAJOR IONS (mg/L)	Rep. Limit	Insufficient Water			
HCO_3	1.0	For Sampling		177	169
SO_4	1.0			2490	2460
Cl	1.0			260	250
NON-METALS					
Cond (µmho/cm)	1.0			4860	4790
pH (standard units)	0.01			7.72	7.02
TRACE METALS (mg/L)					
Ba	0.001			ND	ND
Se	0.0025			0.07	0.082
RADIOMETRIC					
U-nat (uCi/mL)	6.77E-10			2.30E-08	1.51E-05
Ra-226 (uCi/mL)	2.00E-10			1.90E-09	5.42E-04
Ra-226 Err. Est. +/- (uCi/mL)					

ATTACHMENT B

SAFETY AND ENVIRONMENTAL EVALUATIONS COMPLETED IN 2006

ATTACHMENT C

CORRECTED DATA TABLES FOR MONITORING PERIOD JULY 1 THROUGH DECEMBER 31, 2005

TABLE 3

DIRECT RADIATION (GAMMA) MEASUREMENT DATA - 2005
ENVIRONMENTAL MONITORING SITES
3rd & 4th QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	EXPOSURE RATE (mR/qtr)	ERROR ESTIMATE (mR/qtr)
FENCE LINE			
Air Station	3rd Quarter	32	1.1
Restricted Area Boundary	4th Quarter	35	2.4
VOLLMAN'S RANCH			
Air Station	3rd Quarter	24	2.9
Downwind Nearest Residence	4th Quarter	33	9.9
DAVE'S WATER WELL			
Air Station	3rd Quarter	26	2.1
Background Site	4th Quarter	30	1.2

TABLE 2

AIR SAMPLING DATA - 2005
ENVIRONMENTAL MONITORING SITES
3rd & 4th QUARTERS

SAMPLE LOCATION	SAMPLE PERIOD	RADIONUCLIDE (µCi/ml)	CONCENTRATION (µCi/ml)	ERROR EST. +/- (µCi/ml)	L.L.D. (µCi/ml)	EFF. CONC. LIMIT (µCi/ml)	% EFF. CONC. LIMIT %
FENCE LINE	3rd	U-Nat	3.98E-16	N/A	1.00E-16	9.00E-14	0.4
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Restricted Area		Ra-226	1.84E-16	1.42E-16	1.00E-16	9.00E-13	< 1.0
Boundary		Pb-210	1.99E-14	2.13E-15	2.00E-15	6.00E-13	3.3
		Rn-222			3.00E-10	1.00E-08	
	4th	U-Nat	2.81E-16	N/A	1.00E-16	9.00E-14	0.3
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	2.05E-14	1.53E-15	2.00E-15	6.00E-13	3.4
		Rn-222	1.30E-09	NA	3.00E-10	1.00E-08	13.0
VOLLMAN RANCH	3rd	U-Nat	4.36E-16	N/A	1.00E-16	9.00E-14	0.5
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Downwind Nearest		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
Residence		Pb-210	2.49E-14	2.17E-15	2.00E-15	6.00E-13	4.2
		Rn-222			3.00E-10	1.00E-08	0.0
	4th	U-Nat	1.96E-16	N/A	1.00E-16	9.00E-14	0.2
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	3.54E-14	2.85E-15	2.00E-15	6.00E-13	5.9
		Rn-222			3.00E-10	1.00E-08	
DAVE'S WATER WELL	3rd	U-Nat	1.31E-16	N/A	1.00E-16	9.00E-14	0.1
Air Station	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
Background		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
Site		Pb-210	2.51E-14	2.32E-15	2.00E-15	6.00E-13	4.2
		Rn-222	1.70E-09	N/A	3.00E-10	1.00E-08	0.0
	4th	U-Nat	1.44E-16	N/A	1.00E-16	9.00E-14	0.2
	Quarter	Th-230	<1E-16	N/A	1.00E-16	3.00E-14	< 1.0
		Ra-226	<1E-16	N/A	1.00E-16	9.00E-13	< 1.0
		Pb-210	2.51E-14	1.56E-15	2.00E-15	6.00E-13	4.2
		Rn-222	1.30E-09	N/A	3.00E-10	1.00E-08	13.0