TETRA TECH

August 27, 2007

Gary Janosko, Deputy Director,
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington DC 20555

RE: Groundwater Monitoring Results; First Half 2007
Docket No. 40-8102
License No. SUA-1139
Highland Reclamation Project

Dear Mr. Janosko:

Pursuant to the semiannual reporting requirements of Materials License No. SUA-1139, Conditions 22 and 33, attached are the semiannual environmental monitoring results covering the Highland Reclamation Project for the period January 1, 2007 through June 30, 2007.

This report was prepared on behalf of ExxonMobil by Tetra Tech.

A summary of the groundwater elevation data is found in Attachment 1. Summaries of the water quality data are found in Attachment 2. Monitoring locations are shown on the map in Figure 1. Sampling of environmental media other than groundwater is not required by the Materials License and was not performed as part of this report.

Static groundwater levels (Attachment 1) show no significant changes in groundwater elevations over the course of the first half of the calendar year 2007. Groundwater quality data (Attachment 2) show no significant changes in concentrations of monitored parameters over the course of the first half of the calendar year 2007.

Monitored parameters in the Tailings Dam Sandstone (TDSS) groundwater compliance wells were within groundwater protection standards during the first half of 2007. The groundwater protection standards are defined by Condition 33 of the Materials License which was modified in 2006, via license amendment 58.

If there are any questions or comments regarding the groundwater monitoring results, please contact me at (970) 223-9600 or Dan Burnham with ExxonMobil at (703) 846-3272.

Sincerely,

Mahesh Vidyasagar
Senior Geotechnical Engineer

cc: Dan Burnham – ExxonMobil
Dave Roberson – demaximis, Inc.
Rebecca Lindeman – Arcadis, Inc.

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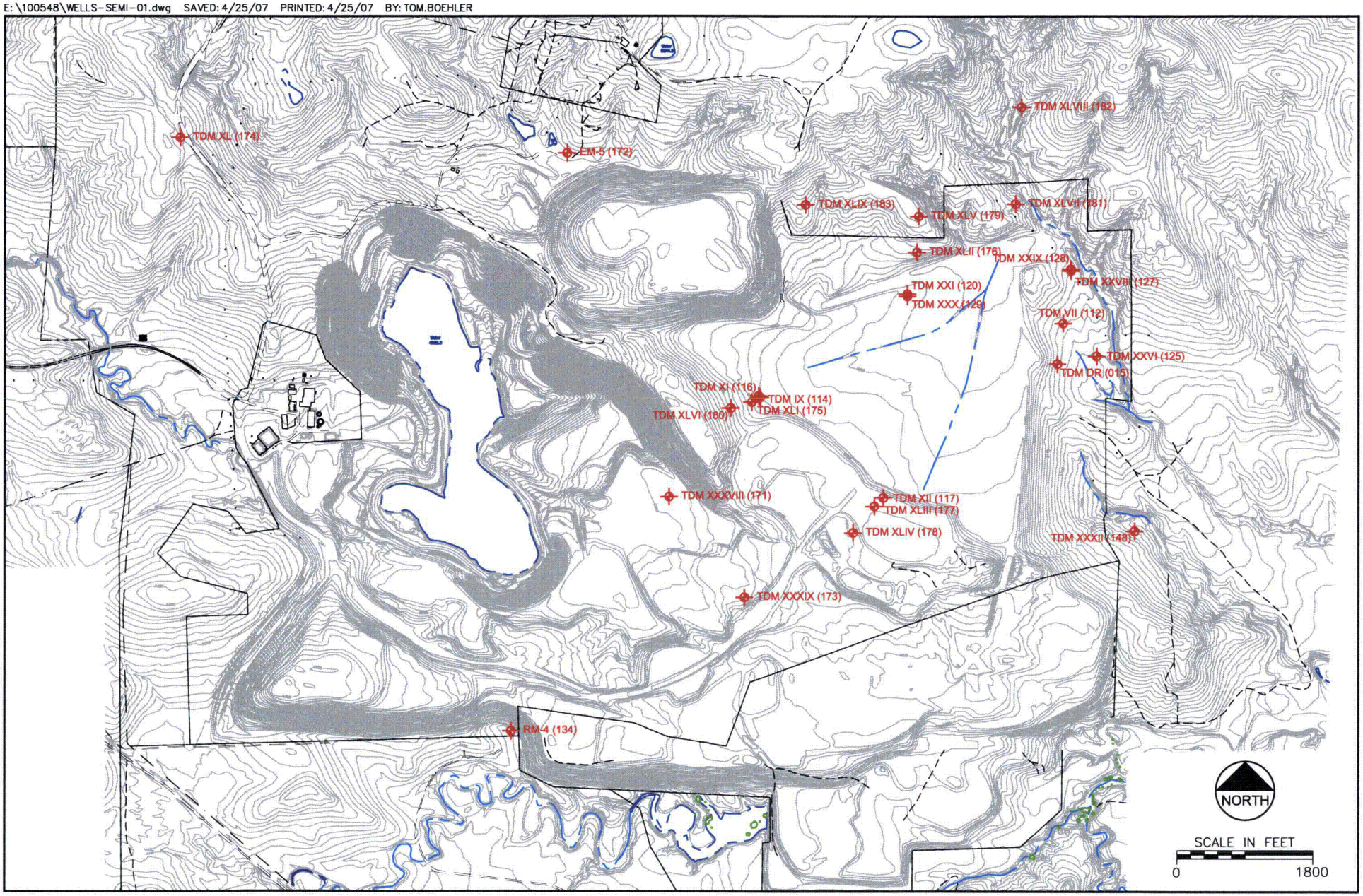

Project No. 180549

April 2007

FIGURE 1
SEMI ANNUAL MONITORING REPORT
MONITORING WELL LOCATION MAP

Attachment 1
Water Level Data * - 2007

Well Numbe	Well Name	Datum (ft)	02/2007	03/2007	05/2007	06/2007
015	TDM DR			Dry		Dry
112	TDM VII	5188.8	5,121.80		5,120.53	
114	TDM IX	5243.53	5,098.83		5,100.63	
116	TDM XI	5243.41	5,052.51		5,054.41	
117	TDM XII	5265.35				Dry
120	TDM XXI	5224.82	5,113.72		5,113.36	
125	TDM XXVI	5171.3		5,121.20	5,122.21	
127	TDM XXVIII	5203.6		Dry		Dry
128	TDM XXIX	5203.8		5,069.60	5,069.33	
129	TDM XXX	5226.36		5,062.63	5,062.92	
134	RM-4	5158.7		5,123.70	5,124.90	
148	TDM XXXII			Dry		
148	TDM XXXII	5112.9		Dry		
171	TDM XXXVIII	5205.3		5,048.85	5,049.17	
172	EM-5	5272.09		5,080.56	5,080.66	
173	TDM XXXIX	5241.09		5,064.68	5,064.89	
174	TDM XL	5380.39		5,083.44	5,083.59	
175	TDM XLI	5259.6		5,105.94	5,106.27	
176	TDM XLII	5452.5		5,310.62	5,310.75	
177	TDM XLIII			Dry		
177	TDM XLIII	5264.19		Dry		
178	TDM XLIV	5277.14		5,113.14	5,113.54	
179	TDM XLV	5295.7		5,113.22	5,112.96	
180	TDM XLVI	5324.39		Dry		Dry
181	TDM XLVII	5237.7		5,116.80	5,116.70	
182	TDM XLVIII	5240.4		5,112.83	5,112.85	
183	TDM XLIX	5301.4		5,104.80	5,104.73	

* Static water levels shown as elevations in feet.

Attachment 2
Water Quality Data - 2007

		As mg/l	Cd mg/l	Cl mg/l	Cr mg/l	Grs Alpha pCi/L	Na mg/l	Ni mg/l	NO2+NO3 mg/l	Pb mg/l	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/l	SO4 mg/l	TDS mg/l	Th230 pCi/L	U-Nat mg/L
Backfill Monitor																			
171	TDM XXXVIII																		
	3/19/2007	<0.00067	<0.000099	34	0.00048	<1.0	97.9	0.0069	<0.04	<0.000047	6.85	<0.2	<1.2	<1.0	0.00081	534	848	<0.2	0.0013
	5/28/2007			31.9			106		<0.04		6.85					501	823		
173	TDM XXXIX																		
	3/19/2007	0.0011	<0.000099	92.6	0.00054	1.6+/-0.5	84.9	0.0051	<0.04	<0.000047	7.72	0.7+/-0.3	<1.7	<1.0	0.001	428	857	<0.2	0.0031
	5/25/2007			94.4			105		<0.04		7.63					419	854		
180	TDM XLVI																		
	3/27/2007				Dry														
	6/5/2007				Dry														
OSS Monitor																			
116	TDM XI																		
	2/28/2007	<0.00067	<0.000099	64.3	<0.00026	1.5+/-0.5	101	0.0076	<0.04	<0.000047	7.2	1.1+/-0.3	3.0+/-1.04	1.9+/-1.0	<0.0005	614	1280	<0.2	0.0124
	5/21/2007			68.8			98.8		<0.04		7.3					707	1340		
128	TDM XXIX																		
	3/2/2007	<0.00067	<0.000099	12.1	0.00054	<1.0	99.6	0.0059	<0.04	0.001	6.98	<0.2	<1.2	<1.0	0.00062	169	533	<0.2	0.0052
	5/22/2007			12.4			103		<0.04		7.36					157	516		
129	TDM XXX																		
	3/2/2007	<0.00067	<0.000099	49	0.001	1.3+/-0.6	153	0.0053	0.043	<0.000047	7.24	0.4+/-0.2	<1.4	1.0+/-1.0	0.0028	385	868	<0.2	0.0007
	5/22/2007			17.5			195		8.1		7.3					1480	2210		
148	TDM XXXII																		
	3/22/2007				Dry														
	6/5/2007				Dry														

Attachment 2
Water Quality Data - 2007

		As mg/l	Cd mg/l	Cl mg/l	Cr mg/l	Grs Alpha pCi/L	Na mg/l	Ni mg/l	NO2+NO3 mg/l	Pb mg/l	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/l	SO4 mg/l	TDS mg/l	Th230 pCi/L	U-Nat mg/L
TDSS Background																			
134	RM-4																		
	3/12/2007	<0.00067	<0.000099	16.4	0.0004	1.0+/-0.5	203	0.0032	<0.04	<0.000047	7.54	0.2+/-0.2	<1.2	1.0+/-1.0	0.00069	641	1120	<0.2	0.0011
	5/25/2007			17.1			200		<0.04		7.48					486	1110		
172	EM-5																		
	3/26/2007	<0.00067	<0.000099	10.3	0.00028	1.5+/-0.5	125	0.0019	<0.04	<0.000047	7.79	1.6+/-0.5	<2.6	<1.0	<0.0005	356	640	<0.2	0.0003
	5/23/2007			10.1			123		<0.04		7.54					339	627		
174	TDM XL																		
	3/5/2007	<0.00067	<0.000099	5.2	0.0004	<1.0	65.5	0.001	<0.04	<0.000047	7.7	<0.2	<1.2	1.0+/-1.0	<0.0005	95.4	312	<0.2	<0.0003
	5/23/2007			5.6			65.9		<0.04		7.71					78	306		
182	TDM XLVIII																		
	3/12/2007	<0.00067	<0.000099	10.5	0.00036	<1.0	115	0.00076	<0.04	<0.000047	7.95	0.6+/-0.3	<1.6	1.0+/-1.0	<0.0005	297	411	<0.2	<0.0003
	5/29/2007			11.3			108		<0.04		8.06					191	436		
TDSS Compliance Monitor Well																			
125	TDM XXVI																		
	3/2/2007	<0.00067	<0.000099	19.1	0.00086	2.4+/-0.6	92	0.007	<0.04	<0.000047	7.14	0.6+/-0.2	<1.6	1.0+/-1.0	0.0039	491	978	0.7+/-0.4	0.0201
	5/22/2007			18.7			94.7		0.084		7.03					471	961		
175	TDM XLI																		
	3/15/2007	<0.0067	<0.000099	271	<0.0026	3.5+/-0.9	286	0.883	<0.04	<0.000047	6.29	0.8+/-0.3	7.0+/-1.04	6.2+/-1.0	0.0068	3590	4750	<0.2	0.0224
	5/23/2007			288			254		<0.04		6.37					3410	4890		
176	TDM XLII																		
	3/19/2007	<0.00067	<0.000099	267	0.00047	2.5+/-0.8	208	0.0227	<0.04	<0.000047	6.98	0.8+/-0.3	3.2+/-1.04	2.4+/-1.0	0.0017	2410	3960	<0.2	<0.0003
	5/28/2007			238			234		<0.04		6.95					2250	3960		
177	TDM XLIII																		
	3/27/2007				Dry														
	6/5/2007				Dry														
Ground Water Protection Standards:		0.05	0.01	--	0.1	15	--	0.1	--	0.05	--	--	5	--	0.05	--	--	0.55	0.03

Note: Alternate Concentration Limits (ACL) apply:
Well 125 U-nat = 0.089 mg/L
Well 175 Ni = 1.8 mg/L and Ra226+Ra228 = 25 pCi/L
Well 177 U-Nat = 0.11 mg/L

Attachment 2
Water Quality Data - 2007

		As mg/l	Cd mg/l	Cl mg/l	Cr mg/l	Grs Alpha pCi/L	Na mg/l	Ni mg/l	NO2+NO3 mg/l	Pb mg/l	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/l	SO4 mg/l	TDS mg/l	Th230 pCi/L	U-Nat mg/L
TDSS Monitor																			
015	TDM DR																		
	3/27/2007				Dry														
	6/5/2007				Dry														
112	TDM VII																		
	2/26/2007	<0.00067	<0.000099	154	0.00039	<1.0	245	0.024	<0.04	<0.000047	7.04	<0.2	<2.2	2.0+/-1.0	0.0013	1840	3180	<0.2	0.0435
	5/21/2007			141			225		<0.04		7.06					1800	3480		
114	TDM IX																		
	2/28/2007	<0.0034	0.0001	288	<0.0013	1.8+/-0.6	294	0.677	<0.04	<0.000047	5.82	0.6+/-0.2	6.8+/-1.12	6.2+/-1.1	<0.0025	3890	5100	<0.2	<0.0003
	5/21/2007			303			281		0.11		5.78					3770	5490		
117	TDM XII																		
	3/27/2007			No Sample, not enough water															
	6/5/2007				Dry														
120	TDM XXI																		
	2/28/2007	<0.00067	<0.000099	419	0.00057	1.5+/-0.5	281	0.0263	<0.04	<0.000047	6.59	0.4+/-0.2	<1.4	1.0+/-1.0	0.0025	1810	3980	<0.2	0.0006
	5/22/2007			469			253		<0.04		6.61					1900	4090		
127	TDM XXVIII																		
	3/27/2007				Dry														
	6/5/2007				Dry														
178	TDM XLIV																		
	3/15/2007	<0.00067	0.00096	259	0.00045	<1.0	258	0.211	1.8	0.00034	7.1	<0.2	<2.0	1.8+/-1.0	0.0018	2590	3940	<0.2	0.0018
	5/25/2007			255			275		1.7		7.49					2320	4310		
179	TDM XLV																		
	3/19/2007	<0.00067	<0.000099	170	0.00053	2.8+/-0.8	<8.66	0.0116	<0.04	<0.000047	7.29	0.7+/-0.3	<1.7	1.0+/-1.0	0.0015	1590	2450	<0.2	<0.0003
	5/28/2007			182			273		<0.04		7.47					1340	2390		
181	TDM XLVII																		
	3/12/2007	<0.00067	<0.000099	53.6	0.00043	<1.0	221	0.0052	<0.04	<0.000047	7.24	<0.2	<1.2	1.0+/-1.0	0.00068	672	1300	<0.2	<0.0003
	5/29/2007			55			245		<0.04		7.32					626	1330		
183	TDM XLIX																		
	3/26/2007	0.00074	<0.000099	129	0.00032	1.9+/-0.7	228	0.0074	<0.04	<0.000047	7.45	0.8+/-0.4	3.9+/-1.08	3.1+/-1.0	0.00064	1110	1950	<0.2	<0.0003
	5/29/2007			135			219		<0.04		7.41					972	1970		