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ENVIRONMENT DEPARTMENT

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February 8, 2008

Gayle Dye, Ph.D., POC
U.S. Department of Energy
P.O Box 5400
Albuquerque, New Mexico 87185-5400

RE: 2007 NMED/DOE-Oversight Bureau Data Submittal Results from Lurance Canyon/Burn Site Groundwater Monitoring at Sandia National Laboratories

Dear Dr. Dye

The DOE Oversight Bureau, Sandia Oversight Section (DOE-OB/SOS) of the New Mexico Environment Department (NMED) has compiled the Bureau's groundwater data from FFY 2007. During the 2nd, 3rd, and 4th quarters, the DOE-OB/SOS split groundwater samples with Sandia National Laboratories, New Mexico (SNL/NM) at Lurance Canyon/Burn Site monitoring wells: CYN-MW3, MW4, MW6, MW7, MW8, and MW1D. The DOE-OB/SOS samples were submitted to Pinnacle Laboratories for organics, radiological, metals and general chemistry analyses.

Data Assessment

DOE-OB/SOS data results are compared to applicable Maximum Allowable Concentration (MAC) from the New Mexico Water Quality Control Commission (WQCC) (20.6.2.3103A NMAC Human Health Standards) and Maximum Contaminant Level (MCL) from the EPA National Primary Drinking Water Regulations (40 CFR 141).

Table-1 compares Target Analyte List (TAL) metals results to applicable MCLs. Samples were analyzed for total TAL metals plus uranium using analytical method SW846 3005/6020 and SW846 7470A. No metal concentrations were detected above established MCLs.

Table-2 compares gross alpha/beta results to applicable standards. Analyses were performed for gross alpha/beta using EPA method 900.0. Uncorrected gross alpha activity exceeded the MCL standard of 15 pCi/L at four Burn Site monitoring wells. Activity ranged from 15.2 ± 4.75 pCi/L at CYN-MW6 to 54.3 ± 11.1 pCi/L at CYN-MW4.

Table-3 displays DOE-OB/SOS High Explosives (HE) results. HE compounds were analyzed using method SW846 8321A Modified by LC-MS/MS. RDX and O-Nitrotoluene were detected above the Method Detection Limit (MDL) at CYN-MW3. O-Nitrotoluene was also detected above the MDL at CYN-MW6. These analytical values were 'J" qualified, indicating the concentrations were detected above the MDL, but not in a sufficient amount to be quantified reliable. CYN-MW3 was re-sampled for HE during 4th quarter and both RDX and O-Nitrotoluene were non-detects. CYN-MW6 was also re-sampled during 3rd and 4th quarter for HE and no compounds were detected above the MDL. MCLs have not been established for HE compounds.

Table-4 compares non-metal inorganic analyses results to applicable MCLs and MACs. Inorganic chemical analyses were performed for nitrate plus nitrite (NPN) using EPA method 353.2 and major anions using EPA method 300.0. NPN concentrations exceeded the MCL of 10 mg/L at monitoring well CYN-MW6 during both sampling events. The highest result came during 3rd quarter at a concentration of 23.3 mg/L. NPN was also detected above the MCL at monitoring well CYN-MW3 at a concentration of 12.2 mg/L. In addition, fluoride exceeded the MAC of 1.6 mg/L from a sample collected at monitoring well CYN-MW1D including the duplicate sample. The results from these samples were 1.80 mg/L and 1.83 mg/L respectively.

Table-5 compares perchlorate results collected by DOE-OB/SOS and SNL/NM. During the 3rd quarter, a spilt sample was collected from monitoring well CYN-MW6. Perchlorate results were compared to the SNL/NM action level of 4 µg/L established by the Compliance Order on Consent (COOC). DOE-OB/SOS used EPA method 6850 Modified by LC-MS/MS, which resulted in a concentration of 5.54 µg/L. SNL/NM used EPA method 314.0 and EPA method 6850. Results were 6.57 µg/L and 5.94 µg/L, respectively.

Organic analyses were performed for Diesel Range Organics (DRO) and Gasoline Range Organics using EPA methods 8021 and 8015. Volatile Organic Compounds (VOCs) were also analyzed using EPA method 8260. No organic compounds were detected above MDLs in any of the wells sampled at Burn Site.

Conclusions

TAL metals results from all samples collected at Lurance Canyon/ Burn Site monitoring wells were all below established MCLs.

Uncorrected gross alpha was detected above the MCL of 15 pCi/L at monitoring wells: CYN-MW4, -MW6, -MW7 and -MW8. Uncorrected gross alpha activity ranged from 15.2 ± 4.75 pCi/L at CYN-MW6 to 54.3 ± 11.1 pCi/L at CYN-MW4. Unfortunately, these well samples were not analyzed for isotopic uranium. Thus, the corrected gross alpha values were not determined. This omission will be corrected in the request for analyses for the FFY 2008, 2nd quarter sampling. The DOE-OB/SOS plans to compare those corrected and uncorrected results with the results from FFY 2007 quarterly analyses. Trending analysis done by SNL/NM on CYN-MW4 indicates that corrected gross alpha has consistently exceeded the MCL for drinking water standards, and it has been slightly increasing over time. DOE-OB/SOS recommends that SNL/NM continue to sample these wells for gross alpha.

RDX and O-Nitrotoluene were detected above the Method Detection Limit (MDL) at CYN-MW3. O-Nitrotoluene was also detected above the MDL at CYN-MW6. These analytical values were 'J" qualified, indicating the concentrations were detected above the MDL, but not in a sufficient amount to be quantified reliable. CYN-MW3 was re-sampled for HE during 4th quarter and both RDX and O-Nitrotoluene were non-detects. CYN-MW6 was also re-sampled during 3rd and 4th quarter for HE and no compounds were detected above the MDL.

NPN concentrations exceeded the MCL of 10 mg/L at monitoring wells CYN-MW3 and CYN-MW6. CYN-MW3 had a concentration of 12.2 mg/L when sampled during 4th quarter. CYN-MW6 had a concentration of 21.4 mg/L during 3rd quarter and 23.3 mg/L during 4th quarter. Results are comparable to past sampling events. Trending analysis performed by SNL/NM indicates that NPN concentrations at CYN-MW6 have continually exceeded the MCL and have been stable to slightly decreasing over time. In addition, trending analysis at CYN-MW3 demonstrates that NPN concentrations have been slightly decreasing over time. Fluoride was detected above the MAC of 1.6 mg/L at monitoring well CYN-MW1D. DOE-OB/SOS recommends that SNL/NM continue to sample these wells for NPN and major anions.

No organic compounds were detected above detection limits in any of the monitoring wells sampled at Burn Site.

Perchlorate samples collected by DOE-OB/SOS and SNL/NM at monitoring well CYN-MW6 were above the SNL/NM screening level of 4 µg/L. Results were comparable using EPA method 6850 Modified by LC-MS/MS and EPA method 314.0. In addition, perchlorate results compared well to previous sampling SNL/NM has performed at CYN-MW6. Trending analysis conducted by SNL/NM indicates that perchlorate levels at CYN-MW6 have been stable to slightly increasing over time. DOE-OB/SOS recommends that SNL/NM continue to sample this well for perchlorate, and it is understood that SNL/NM staff is negotiating the frequency of sampling with NMED/HWB in compliance with the COOC, April 29, 2004.

The monitoring results will be provided to DOE for review and comment prior to their release as final to other State of New Mexico and federal agencies, the Pueblos, our website and interested members of the public. If you have any questions, or if you would like copies of the complete data set, please contact Chris Armijo at (505)845-5824 or contact me at (505)845-5933.

Sincerely,

Barry S. Birch
Program Manager
Sandia Oversight Section

BSB:ca

Enclosure: (1) Table-1 Target Analyte List (TAL) Metals Results
(2) Table-2 Gross Alpha/Beta Results
(3) Table-3 High Explosives (HE) Results

(4) Table-4 General Chemistry Results
(5) Table-5 Perchlorate Results

cc: Karen Agogino, DOE/SSO, MS 0184
John Gould, DOE/SSO, MS 0184
Michael Skelly, SNL/NM ER Groundwater, MS 1089
w/o encl: Thomas Skibitski, Bureau Chief, NMED/DOE-OB

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
TAL Metals Results

Sample ID	Collection Date	Aluminum				Antimony				Arsenic			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.005	0.005	U	-	0.0005	0.0005	U	0.006	0.0022	0.0015	J	0.01
CYN-MW6-09.12.07	9/12/2007	0.00645	0.005	J	-	0.0005	0.0005	U	0.006	0.00277	0.0015	J	0.01
CYN-MW3-09.14.07	9/14/2007	0.0127	0.005	J	-	0.0005	0.0005	U	0.006	0.0015	0.0015	U	0.01
CYN-MW7-09.17.07	9/17/2007	0.194	0.005		-	0.000598	0.0005	J	0.006	0.00338	0.0015	J	0.01
CYN-MW8-09.18.07	9/18/2007	0.0102	0.005	J	-	0.0005	0.0005	U	0.006	0.00218	0.0015	J	0.01
CYN-MWID-09.19.07	9/19/2007	0.0082	0.005	J	-	0.0005	0.0005	U	0.006	0.0015	0.0015	U	0.01
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.0115	0.005	J	-	0.0005	0.0005	U	0.006	0.0015	0.0015	U	0.01

Sample ID	Collection Date	Barium				Beryllium				Cadmium			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.0518	0.0005		2	0.0001	0.0001	U	0.004	0.00011	0.00011	U	0.005
CYN-MW6-09.12.07	9/12/2007	0.069	0.0005		2	0.0001	0.0001	U	0.004	0.00011	0.00011	U	0.005
CYN-MW3-09.14.07	9/14/2007	0.0508	0.0005		2	0.0001	0.0001	U	0.004	0.00011	0.00011	U	0.005
CYN-MW7-09.17.07	9/17/2007	0.117	0.0005		2	0.0001	0.0001	U	0.004	0.00018	0.00011	J	0.005
CYN-MW8-09.18.07	9/18/2007	0.0635	0.0005		2	0.0001	0.0001	U	0.004	0.000219	0.00011	J	0.005
CYN-MWID-09.19.07	9/19/2007	0.0425	0.0005		2	0.0001	0.0001	U	0.004	0.00011	0.00011	U	0.005
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.0397	0.0005		2	0.0001	0.0001	U	0.004	0.00011	0.00011	U	0.005

J=Value is estimated.
U= Analyte was analyzed for, but not detected above the Method Detection Limit (MDL)
H= Analytical holding time was exceeded
h= Preparation or preservation holding time was exceeded

Table 1

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
TAL Metals Results

Sample ID	Collection Date	Calcium				Chromium				Cobalt			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	68.3	0.1		-	0.001	0.001	U	0.1	0.000226	0.0001	J	-
CYN-MW6-09.12.07	9/12/2007	139	0.1		-	0.001	0.001	U	0.1	0.000429	0.0001	J	-
CYN-MW3-09.14.07	9/14/2007	157	0.1		-	0.001	0.001	U	0.1	0.000351	0.0001	J	-
CYN-MW7-09.17.07	9/17/2007	99.7	0.1		-	0.001	0.001	U	0.1	0.000316	0.0001	J	-
CYN-MW8-09.18.07	9/18/2007	118	0.1		-	0.00161	0.001	J	0.1	0.000553	0.0001	J	-
CYN-MWID-09.19.07	9/19/2007	59.4	0.1		-	0.00241	0.001	J	0.1	0.000259	0.0001	J	-
CYN-MW1D-09.19.07 (DUP)	9/19/2007	57	0.1		-	0.00107	0.001	J	0.1	0.000212	0.0001	J	-

Sample ID	Collection Date	Copper				Iron				Lead			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.00111	0.0002		1.3	0.159	0.01		-	0.0005	0.0005	U	0.015
CYN-MW6-09.12.07	9/12/2007	0.00262	0.0002		1.3	0.341	0.01		-	0.0005	0.0005	U	0.015
CYN-MW3-09.14.07	9/14/2007	0.00236	0.0002		1.3	0.483	0.01		-	0.0005	0.0005	U	0.015
CYN-MW7-09.17.07	9/17/2007	0.000938	0.0002	J	1.3	0.33	0.01		-	0.0005	0.0005	U	0.015
CYN-MW8-09.18.07	9/18/2007	0.00158	0.0002		1.3	0.574	0.01		-	0.0005	0.0005	U	0.015
CYN-MWID-09.19.07	9/19/2007	0.000929	0.0002	J	1.3	2.24	0.01		-	0.0005	0.0005	U	0.015
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.00076	0.0002	J	1.3	2.08	0.01		-	0.0005	0.0005	U	0.015

J=Value is estimated.
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Table 1

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
TAL Metals Results

Sample ID	Collection Date	Magnesium				Manganese				Mercury			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	33.2	0.005		-	0.001	0.001	U	0.05	0.00003	3E-05	Huh	0.002
CYN-MW6-09.12.07	9/12/2007	38.2	0.005		-	0.00256	0.001	J	0.05	0.00003	3E-05	Huh	0.002
CYN-MW3-09.14.07	9/14/2007	35.6	0.005		-	0.001	0.001	U	0.05	0.00003	3E-05	U	0.002
CYN-MW7-09.17.07	9/17/2007	18.7	0.005		-	0.0625	0.001		0.05	0.00003	3E-05	U	0.002
CYN-MW8-09.18.07	9/18/2007	24.8	0.005		-	0.0397	0.001		0.05	0.00003	3E-05	U	0.002
CYN-MWID-09.19.07	9/19/2007	12.4	0.005		-	0.0757	0.001		0.05	0.00003	3E-05	U	0.002
CYN-MW1D-09.19.07 (DUP)	9/19/2007	12.7	0.005		-	0.0754	0.001		0.05	0.00003	3E-05	U	0.002

Sample ID	Collection Date	Nickel				Potassium				Selenium			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.0016	0.0005	J	-	5.86	0.08		-	0.0103	0.001		0.05
CYN-MW6-09.12.07	9/12/2007	0.00307	0.0005		-	2.04	0.08		-	0.0143	0.001		0.05
CYN-MW3-09.14.07	9/14/2007	0.00243	0.0005		-	1.92	0.08		-	0.0104	0.001		0.05
CYN-MW7-09.17.07	9/17/2007	0.00382	0.0005		-	2.4	0.08		-	0.00401	0.001	J	0.05
CYN-MW8-09.18.07	9/18/2007	0.00285	0.0005		-	2.35	0.08		-	0.00551	0.001		0.05
CYN-MWID-09.19.07	9/19/2007	0.00137	0.0005	J	-	2.42	0.08		-	0.00101	0.001	J	0.05
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.00146	0.0005	J	-	2.42	0.08		-	0.00108	0.001	J	0.05

J=Value is estimated.
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Table 1

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
TAL Metals Results

Sample ID	Collection Date	Silver				Sodium				Thallium			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.0002	0.0002	U	-	48.3	0.16		-	0.000549	0.0003	J	0.002
CYN-MW6-09.12.07	9/12/2007	0.0002	0.0002	U	-	39.5	0.08		-	0.0003	0.0003	U	0.002
CYN-MW3-09.14.07	9/14/2007	0.0002	0.0002	U	-	41.8	0.08		-	0.000407	0.0003	J	0.002
CYN-MW7-09.17.07	9/17/2007	0.0002	0.0002	U	-	36.5	0.08		-	0.000655	0.0003	J	0.002
CYN-MW8-09.18.07	9/18/2007	0.0002	0.0002	U	-	48.9	0.08		-	0.0003	0.0003	U	0.002
CYN-MWID-09.19.07	9/19/2007	0.0002	0.0002	U	-	28.7	0.08		-	0.000481	0.0003	J	0.002
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.0002	0.0002	U	-	31.1	0.08		-	0.0003	0.0003	U	0.002

Sample ID	Collection Date	Uranium				Vanadium				Zinc			
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)
CYN-MW4-09.11.07	9/11/2007	0.0135	0.00005		0.03	0.003	0.003	U	-	0.00818	0.0026	J	-
CYN-MW6-09.12.07	9/12/2007	0.00965	0.00005		0.03	0.003	0.003	U	-	0.00389	0.0026	J	-
CYN-MW3-09.14.07	9/14/2007	0.00756	0.00005		0.03	0.00547	0.003	J	-	0.0026	0.0026	U	-
CYN-MW7-09.17.07	9/17/2007	0.00711	0.00005		0.03	0.003	0.003	U	-	0.00451	0.0026	J	-
CYN-MW8-09.18.07	9/18/2007	0.00951	0.00005		0.03	0.00649	0.003	J	-	0.00859	0.0026	J	-
CYN-MWID-09.19.07	9/19/2007	0.000718	0.00005		0.03	0.00324	0.003	J	-	0.0026	0.0026	U	-
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.000626	0.00005		0.03	0.003	0.003	U	-	0.0026	0.0026	U	-

J=Value is estimated.
U= Analyte was analyzed for, but not detected above the Method Detection Limit (MDL)
H= Analytical holding time was exceeded
h= Preparation or preservation holding time was exceeded

Table 1

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/Burn Site Groundwater Monitoring
Gross Alpha/Beta Results

Sample ID	Collection Date	Gross Alpha (uncorrected)					Gross Beta				
		Results (pCi/L)	Unc +/- (pCi/L)	MDA (pCi/L)	Lab Flag	EPA MCL (pCi/L)	Results (pCi/L)	Unc +/- (pCi/L)	MDA (pCi/L)	Lab Flag	EPA MCL (mRem/Year)
CYN-MW4-09.11.07	9/11/2007	**54.3**	**11.1**	**6.55**		**15**	13.8	3.75	3.65		4
CYN-MW6-09.12.07	9/12/2007	**15.2**	**4.75**	**4.53**		**15**	4.09	1.85	2.51		4
CYN-MW3-09.14.07	9/14/2007	5.98	3.94	5.24		15	5.89	2.65	3.69		4
CYN-MW7-09.17.07	9/17/2007	**27.8**	**8.01**	**4.50**		**15**	6.28	3.10	4.24		4
CYN-MW8-09.18.07	9/18/2007	**29.8**	**9.63**	**5.20**		**15**	11.8	4.75	5.80		4
CYN-MWID-09.19.07	9/19/2007	3.08	1.55	1.64		15	3.84	1.77	2.71		4
CYN-MWID-09.19.07 (DUP)	9/19/2007	2.00	0.511	0.493		15	3.53	0.605	0.813		4

Table 2

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
High Explosives (HE) Results

Sample ID	Collection Date	Nitrobenzene			m-Dinitrobenzene			1,3,5-Trinitrobenzene			2,4,6-Trinitrotoluene		
		Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag
CYN-MW6-03.14.07	3/14/2007	ND	0.021	U	ND	0.011	U	ND	0.0.10	U	ND	0.022	U
CYN-MW3-03.15.07	3/15/2007	ND	0.021	U	ND	0.011	U	ND	0.0.11	U	ND	0.022	U
CYN-MW8-06-25-07	6/25/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW6-06.27.07	6/27/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW6-06.27.07 (DUP)	6/27/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW4-09.11.07	9/11/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW6-09.12.07	9/12/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW3-09.14.07	9/14/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW7-09.17.07	9/17/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW8-09.18.07	9/18/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW1D-09.19.07	9/19/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U
CYN-MW1D-09.19.07 (DUP)	9/19/2007	ND	0.0649	U	ND	0.0649	U	ND	0.0779	U	ND	0.0649	U

ND= Analyte concentration is not detected above the detection limit.

U= Anlayte was analyzed for, but not detected above the Method Detection Limit (MDL)
J= Value is estimated

Table 3

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
High Explosives (HE) Results

Sample ID	Collection Date	2,4-Dinitrotoluene			2,6-Dinitrotoluene			RDX			4-Amino-2,6-dinitrotoluene		
		Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag
CYN-MW6-03.14.07	3/14/2007	ND	0.019	U	ND	0.022	U	ND	0.121	U	ND	0.019	U
CYN-MW3-03.15.07	3/15/2007	ND	0.019	U	ND	0.022	U	**0.035**	**0.121**	**J**	ND	0.019	U
CYN-MW8-06-25-07	6/25/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW6-06.27.07	6/27/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW6-06.27.07 (DUP)	6/27/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW4-09.11.07	9/11/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW6-09.12.07	9/12/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW3-09.14.07	9/14/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW7-09.17.07	9/17/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW8-09.18.07	9/18/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW1D-09.19.07	9/19/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U
CYN-MW1D-09.19.07 (DUP)	9/19/2007	ND	0.0779	U	ND	0.0649	U	ND	0.0649	U	ND	0.0649	U

ND= Analyte concentration is not detected above the detection limit.

U= Anlayte was analyzed for, but not detected above the Method Detection Limit (MDL)

J= Value is estimated

Table 3

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
High Explosives (HE) Results

Sample ID	Collection Date	2-Amino-4,6-dinitrotoluene			Nitroglycerin			HMX			Tetryl		
		Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag
CYN-MW6-03.14.07	3/14/2007	ND	0.021	U				ND	0.095	U	ND	0.021	U
CYN-MW3-03.15.07	3/15/2007	ND	0.021	U				ND	0.095	U	ND	0.021	U
CYN-MW8-06-25-07	6/25/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW6-06.27.07	6/27/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW6-06.27.07 (DUP)	6/27/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW4-09.11.07	9/11/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW6-09.12.07	9/12/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW3-09.14.07	9/14/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW7-09.17.07	9/17/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW8-09.18.07	9/18/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW1D-09.19.07	9/19/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U
CYN-MW1D-09.19.07 (DUP)	9/19/2007	ND	0.0649	U	ND	0.260	U	ND	0.0844	U	ND	0.162	U

ND= Analyte concentration is not detected above the detection limit.

U= Anlayte was analyzed for, but not detected above the Method Detection Limit (MDL)

J= Value is estimated

Table 3

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
High Explosives (HE) Results

Sample ID	Collection Date	PETN			o-Nitrotoluene			m-Nitrotoluene			p-Nitrotoluene		
		Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag	Result (ug/L)	MDL	Lab Flag
CYN-MW6-03.14.07	3/14/2007				**0.023**	**0.022**	**J**	ND	0.025	U	ND	0.026	U
CYN-MW3-03.15.07	3/15/2007				**0.024**	**0.022**	**J**	ND	0.025	U	ND	0.026	U
CYN-MW8-06-25-07	6/25/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW6-06.27.07	6/27/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW6-06.27.07 (DUP)	6/27/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW4-09.11.07	9/11/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW6-09.12.07	9/12/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW3-09.14.07	9/14/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW7-09.17.07	9/17/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW8-09.18.07	9/18/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW1D-09.19.07	9/19/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U
CYN-MW1D-09.19.07 (DUP)	9/19/2007	ND	0.519	U	ND	0.130	U	ND	0.130	U	ND	0.169	U

ND= Analyte concentration is not detected above the detection limit.

U= Anlayte was analyzed for, but not detected above the Method Detection Limit (MDL)

J= Value is estimated

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/Burn Site Groundwater Monitoring
General Chemistry Results

Sample ID	Collection Date	Bromide					Chloride				
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)
CYN-MW6-06.27.07	6/27/2007										
CYN-MW4-09.11.07	9/11/2007										
CYN-MW6-09.12.07	9/12/2007										
CYN-MW6-09.12.07 (DUP)	9/12/2007										
CYN-MW3-09.14.07	9/14/2007	6.70	1.00		-	-	84	1.00		-	250
CYN-MW7-09.17.07	9/17/2007	0.567	0.066		-	-	39.3	0.660		-	250
CYN-MW8-09.18.07	9/18/2007	0.771	0.066		-	-	61.2	0.660		-	250
CYN-MW1D-09.19.07	9/19/2007	0.458	0.066		-	-	30.2	0.660		-	250
CYN-MW1D-09.19.07 (DUP)	9/19/2007	0.455	0.066		-	-	31.8	0.660		-	250

H= Analytical holding time was exceeded
J= Value is estimated
U= Analyte was analyzed for, but not detected above the Method Detection Limit (MDL)

Table 4

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/Burn Site Groundwater Monitoring
General Chemistry Results

Sample ID	Collection Date	Fluoride					Ortho-phosphate				
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)
CYN-MW6-06.27.07	6/27/2007										
CYN-MW4-09.11.07	9/11/2007										
CYN-MW6-09.12.07	9/12/2007										
CYN-MW6-09.12.07 (DUP)	9/12/2007										
CYN-MW3-09.14.07	9/14/2007	0.5	1.00		4	1.6	0.5	0.1		-	-
CYN-MW7-09.17.07	9/17/2007	1.24	0.033		4	1.6	0.104	0.066	J	-	-
CYN-MW8-09.18.07	9/18/2007	1.31	0.033		4	1.6	0.066	0.066	U	-	-
CYN-MW1D-09.19.07	9/19/2007	**1.80**	0.033		4	**1.6**	0.066	0.066	HU	-	-
CYN-MW1D-09.19.07 (DUP)	9/19/2007	**1.83**	0.033		4	**1.6**	0.066	0.066	HU	-	-

H= Analytical holding time was exceeded
J= Value is estimated
U= Analyte was analyzed for, but not detected above the Method Detection Limit (MDL)

Table 4

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/Burn Site Groundwater Monitoring
General Chemistry Results

Sample ID	Collection Date	Sulfate					NPN				
		Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)	Results (mg/L)	MDL (mg/L)	Lab Flag	EPA MCL (mg/L)	NM MAC (mg/L)
CYN-MW6-06.27.07	6/27/2007						**21.4**	**0.200**		**10**	**10**
CYN-MW4-09.11.07	9/11/2007						0.165	0.05	J	10	10
CYN-MW6-09.12.07	9/12/2007						**23.3**	**0.200**		**10**	**10**
CYN-MW6-09.12.07 (DUP)	9/12/2007						**21.02**	**0.250**		**10**	**10**
CYN-MW3-09.14.07	9/14/2007	180	1.00		-	600	**12.2**	**0.100**		**10**	**10**
CYN-MW7-09.17.07	9/17/2007	79.6	1.00		-	600	1.47	0.010		10	10
CYN-MW8-09.18.07	9/18/2007	122	1.00		-	600	4.98	0.100		10	10
CYN-MW1D-09.19.07	9/19/2007	125	1.00		-	600	5.36	0.100		10	10
CYN-MW1D-09.19.07 (DUP)	9/19/2007	127	1.00		-	600					

H= Analytical holding time was exceeded
J= Value is estimated
U= Analyte was analyzed for, but not detected above the Method Detection Limit (MDL)

Table 4

NMED/DOE-OB/Sandia Oversight Section
FFY 2007 Lurance Canyon/ Burn Site Groundwater Monitoring
Perchlorate Results

Monitoring Well	Collection Date	Perchlorate								
		NMED/DOE-OB Result	SNL/NM Result	EPA Method 314.0	EPA Method 6850 Modified	MDL	Lab Flag	Unit	SNL Perchlorate Screening Level	EPA MCL
CYN-MW6	6/27/2007	5.54			5.54	0.5		ug/L	4	NE
CYN-MW6	6/27/2007		5.94		5.94	0.5		ug/L	4	NE
CYN-MW6	6/27/2007		6.57	6.57		4.0	J	ug/L	4	NE

J= Amount detected is below the practical quantitation limit

NE = Not Established