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Title: Los Alamos National Laboratory Sitewide Monitoring
Program Drinking Water Results for the City of Santa Fe
Buckman Water Supply Wells

Author(s): Robert Beers
ENV-RCRA

Intended for: Mr. Brian Snyder, Director
Sangre de Cristo Water Division
City of Santa Fe
Santa Fe, NM 87504



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DRAFT

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Date:
Refer To: EP2010-XXXX

Mr. Brian Snyder, Water Division Director
Acting Public Utilities Division Director
Sangre de Cristo Water Division
City of Santa Fe
801 West San Mateo
P.O. Box 909
Santa Fe, New Mexico 87504

Subject: Los Alamos National Laboratory Sitewide Monitoring Program Drinking Water Results for the City of Santa Fe Buckman Water Supply Wells

Dear Mr. Snyder:

This report, prepared by Los Alamos National Laboratory (the Laboratory), provides the analytical results from the from the June 8 and 22, 2010, sampling and analysis of the City of Santa Fe Buckman Water Supply Wells Nos. 1, 6, and 8. All results were below the U.S. Environmental Protection Agency (EPA) primary and secondary drinking water standards.

Routine monitoring of select Buckman water supply wells is conducted in accordance with the April 22, 2010, sampling and analysis plan cooperatively developed between the Laboratory and City of Santa Fe staff. Under this plan, Buckman Wells Nos. 1, 6, and 8 will be sampled quarterly by the Laboratory: twice per year for full-suite analysis (radiologicals [including tritium], general inorganics [including perchlorate], metals [including chromium], and organics); and twice per year for low-level tritium.

The attached CD also contains the following items: (1) General Engineering Laboratories (GEL) data packages; and (2) an Excel file of the analytical results with a glossary of laboratory qualification codes, secondary validation codes, and secondary validation reason codes. The analytical results are as follows.

Radiologicals: Analytical results from sampling Buckman Wells Nos. 1, 6, and 8 for radionuclides are presented in Table 1.0.

- **Americium-241, Cesium-137, Neptunium-237, Plutonium-238, Plutonium-239/240, and Strontium-90:** All results at all locations were nondetect, as indicated by the analytical laboratory qualifier code "U."

- **Gross Alpha:** The gross-alpha activities at Buckman Wells Nos. 1, 6, and 8 were 11.2 pCi/L, 8.50 pCi/L, and 12.9 pCi/L, respectively. All results were below the EPA maximum contaminant level (MCL) for gross alpha in drinking water of 15 pCi/L.
- **Gross Beta:** Gross-beta activities at Buckman Wells Nos. 1, 6, and 8 were 6.29 pCi/L, 5.31 pCi/L, and 5.81 pCi/L, respectively. All results were below the EPA screening level for gross beta in drinking water of 50 pCi/L (40 Code of Federal Regulations [CFR] § 141.26).
- **Combined Radium-226 and Radium-228:** The combined radium-226 and radium-228 activities at Buckman Wells Nos. 1, 6, and 8 ranged from nondetect (lab qualifier code "U") to a maximum value of 2.1 pCi/L. The results at all locations were below the EPA MCL of 5 pCi/L for the combined radium-226 and radium-228 in drinking water.
- **Tritium:** Tritium results were pending at the time this report was prepared.
- **Isotopic Uranium:** Unfiltered samples from Buckman Wells Nos. 1, 6, and 8 were analyzed for isotopic uranium using alpha spectroscopy (alpha spec), an analytical method that indirectly measures the alpha activity in a sample. Using alpha spectroscopy, GEL analyzed the samples for uranium isotopes uranium-234, uranium-235/236, and uranium-238. EPA has not established an activity-based MCL for uranium isotopes in drinking water; the current EPA MCL of 30 µg/L is a mass-based standard.

The mass of total uranium in the sample was calculated using the following formula, which incorporates the specific activities for the isotopes:

$$\text{Total uranium } (\mu\text{g/L}) = ({}^{234}\text{U}/6250) + ({}^{235/236}\text{U}/2.16) + ({}^{238}\text{U}/0.336)$$

The calculated concentrations of total uranium are presented in the table below along with the results obtained from inductively coupled plasma mass spectrometry (ICPMS) analysis (see Table 3.0). All results were below the EPA MCL for uranium in drinking water of 30 µg/L.

Total Uranium Concentrations, Buckman Wells Nos. 1, 6, and 8. June 2010.

All Units: µg/L	Buckman Well No. 1	Buckman Well No. 6	Buckman Well No. 8
Total U: Calculated	15.9	5.2	12.3
Total U: ICPMS	19.1	5.23	12.0

* FD = Field duplicate sample.

General Inorganics: The analytical results from sampling Buckman Wells Nos. 1, 6, and 8 for general inorganics are summarized in Table 2.0.

- **Perchlorate:** Perchlorate concentrations ranged between 0.31 µg/L and 0.39 µg/L. The perchlorate concentration at O-1 was 1.05 µg/L. Currently, neither the federal government nor the State of New Mexico has established a drinking water standard for perchlorate. On January 8, 2009, EPA issued an interim health advisory of 15 µg/L for perchlorate in drinking water, replacing the existing preliminary remediation goal of 24.5 µg/L.

- **Cyanide, Chloride, Fluoride, Nitrate+Nitrite, Sulfate, and Total Dissolved Solids:** Cyanide, chloride, fluoride, nitrate+nitrite (as N), sulfate, and total dissolved solids concentrations at all locations were below the EPA primary and secondary drinking water standards.

Metals: The analytical results from sampling Buckman Wells Nos. 1, 6, and 8 for metals are summarized in Table 3.0.

- **Arsenic:** The unfiltered arsenic concentrations at Buckman Wells Nos. 1, 6, and 8 were 9.1 µg/L, 5.8 µg/L, and 8.9 µg/L, respectively. All results were below the EPA MCL of 10 µg/L for arsenic in drinking water.
- **Chromium:** The filtered and unfiltered chromium concentrations at all locations ranged between nondetect (lab qualifier code “U”) and 10.1 µg/L, well below the EPA MCL of 100 µg/L and the New Mexico groundwater standard of 50 µg/L.

Organics: The analytical results from sampling Buckman Wells Nos. 1, 6, and 8 for organics are summarized in Tables 4.0, 5.0, and 6.0.

- **High Explosives (HE):** No HE compounds were detected at concentrations greater than GEL’s method detection limit (MDL).
- **Polychlorinated Biphenyls (PCBs):** No PCBs were detected at concentrations greater than GEL’s MDL.
- **Volatile Organic Compounds (VOCs):** No VOCs were detected in samples or in field trip blanks at concentrations greater than GEL’s MDL, with the exception of the following:
 - Chloromethane (CAS#74-87-3) was detected at Buckman Well Nos. 1 and 6 at 0.42 µg/L and 0.35 µg/L, respectively. Both results were assigned the lab qualifier code “J” to indicate that the reported value was greater than the MDL but less than the practical quantitation limit (PQL). The EPA has not established an MCL for chloromethane in drinking water.

In summary, all results presented in this report are below EPA MCLs and New Mexico groundwater standards.

If you would like additional information regarding this report, please contact Bob Beers at (505) 667-7969 (bbeers@lanl.gov).

Sincerely,

Michael J. Graham, Associate Director
Environmental Programs
Los Alamos National Laboratory

MG/DM/SV/RB:sm

Attachment: CD with the following items:

- (1) GEL data packages
- (2) Excel file of Tables 1.0–6.0 and glossary of laboratory qualification codes, secondary validation codes, and secondary validation reason codes
(LA-UR-10-**XXXX**)

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Table 1.0
Buckman Water Supply Wells
Radionuclides

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Location Name	Start Date	Analyte	Anyl Meth Code	Fld Prep Code	Std Result	Units	Std Uncertainty (1s)	Std Mda	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 1	6/8/2010	Am-241	HASL-300:AM-241	UF <	0.008	pCi/L	0.004	0.02	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Cs-137	EPA:901.I	UF <	-0.40	pCi/L	1.3	4.2	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Co-60	EPA:901.I	UF <	0.28	pCi/L	1.6	5.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	GROSSA	EPA:900	UF	11.2	pCi/L	2.2	2.7			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	GROSSB	EPA:900	UF	6.29	pCi/L	1.0	2.4			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	GROSSG	EPA:901.I	UF <	5.22	pCi/L	2.0	6.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Np-237	EPA:901.I	UF <	1.19	pCi/L	2.7	9.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Np-237	HASL-300:Np-237	UF <	0.003	pCi/L	0.01	0.02	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Pu-238	HASL-300:ISOPU	UF <	-0.01	pCi/L	0.01	0.03	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Pu-239/240	HASL-300:ISOPU	UF <	-0.004	pCi/L	0.01	0.03	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	K-40	EPA:901.I	UF <	42.6	pCi/L	20	74	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Ra-226	EPA:903.I	UF <	0.75	pCi/L	0.26	0.52		U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Ra-228	EPA:904	UF <	0.287	pCi/L	0.21	0.70	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Na-22	EPA:901.I	UF <	-0.30	pCi/L	1.3	4.3	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Sr-90	EPA:905.0	UF <	0.02	pCi/L	0.12	0.48	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Th-228	HASL-300:ISOTH	UF <	0.01	pCi/L	0.003	0.04	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Th-230	HASL-300:ISOTH	UF <	0.006	pCi/L	0.004	0.04	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Th-232	HASL-300:ISOTH	UF <	0.003	pCi/L	0.003	0.02	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	U-234	HASL-300:ISOU	UF	7.21	pCi/L	0.56	0.08			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	U-235/236	HASL-300:ISOU	UF	0.29	pCi/L	0.04	0.05			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	U-238	HASL-300:ISOU	UF	5.28	pCi/L	0.41	0.06			GELC	Buckman1-10-16990
Buckman 6	6/8/2010	Am-241	HASL-300:AM-241	UF <	0.004	pCi/L	0.003	0.03	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Cs-137	EPA:901.I	UF <	-1.34	pCi/L	2.2	6.9	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Co-60	EPA:901.I	UF <	-3.94	pCi/L	1.9	4.6	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	GROSSA	EPA:900	UF	8.50	pCi/L	1.8	2.6			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	GROSSB	EPA:900	UF	5.31	pCi/L	1.1	2.8			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	GROSSG	EPA:901.I	UF <	8.05	pCi/L	4.5	6.8		U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Np-237	EPA:901.I	UF <	2.08	pCi/L	2.8	9.8	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Np-237	HASL-300:Np-237	UF <	0.0018	pCi/L	0.01	0.01	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Pu-238	HASL-300:ISOPU	UF <	0.0000	pCi/L	0.01	0.03	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Pu-239/240	HASL-300:ISOPU	UF <	-0.0017	pCi/L	0.01	0.02	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	K-40	EPA:901.I	UF <	-52.1	pCi/L	17	29	U	U	GELC	Buckman06-10-16992

Table 1.0
Buckman Water Supply Wells
Radionuclides

Location Name	Start Date	Analyte	AnyL Meth Code	Fld Prep Code	Std Result	Units	Std Uncertainty (1s)	Std Mda	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 6	6/8/2010	Ra-226	EPA:903.1	UF	1.22	pCi/L	0.29	0.48			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Ra-228	EPA:904	UF	< 0.775	pCi/L	0.30	0.82	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Na-22	EPA:901.1	UF	< 0.885	pCi/L	2.20	7.20	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Sr-90	EPA:905.0	UF	< 0.054	pCi/L	0.14	0.49	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Th-228	HASL-300:ISOTH	UF	< 0.004	pCi/L	0.01	0.04	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Th-230	HASL-300:ISOTH	UF	< 0.02	pCi/L	0.01	0.04	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Th-232	HASL-300:ISOTH	UF	< 0.004	pCi/L	0.00	0.02	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	U-234	HASL-300:ISOU	UF	7.53	pCi/L	0.64	0.14		J+	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	U-235/236	HASL-300:ISOU	UF	0.11	pCi/L	0.03	0.09		J+	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	U-238	HASL-300:ISOU	UF	1.74	pCi/L	0.17	0.10		J+	GELC	Buckman06-10-16992
Buckman 8	6/22/2010	Am-241	HASL-300:AM-241	UF	< 0.003	pCi/L	0.01	0.03	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Cs-137	EPA:901.1	UF	< 0.85	pCi/L	1.60	5.60	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Co-60	EPA:901.1	UF	< -1.50	pCi/L	1.50	4.50	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	GROSSA	EPA:900	UF	12.9	pCi/L	2.50	2.90			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	GROSSB	EPA:900	UF	5.81	pCi/L	1.20	3.00			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	GROSSG	EPA:901.1	UF	< 51.1	pCi/L	18.00	57.00	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Np-237	HASL-300:Np-237	UF	< 0.002	pCi/L	0.01	0.01	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Np-237	EPA:901.1	UF	< 3.11	pCi/L	2.90	10.00	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Pu-238	HASL-300:ISOPU	UF	< 0.000	pCi/L	0.00	0.03	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Pu-239/240	HASL-300:ISOPU	UF	< 0.000	pCi/L	0.00	0.03	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	K-40	EPA:901.1	UF	< 35.5	pCi/L	23.00	85.00	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Ra-226	EPA:903.1	UF	0.96	pCi/L	0.26	0.56			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Ra-228	EPA:904	UF	1.16	pCi/L	0.37	0.95			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Na-22	EPA:901.1	UF	< 1.54	pCi/L	1.30	4.90	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Sr-90	EPA:905.0	UF	< -0.35	pCi/L	0.13	0.49	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Th-228	HASL-300:ISOTH	UF	< 0.01	pCi/L	0.01	0.03	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Th-230	HASL-300:ISOTH	UF	< 0.03	pCi/L	0.01	0.04	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Th-232	HASL-300:ISOTH	UF	< 0.01	pCi/L	0.01	0.02	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	U-234	HASL-300:ISOU	UF	6.78	pCi/L	0.48	0.04			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	U-235/236	HASL-300:ISOU	UF	0.43	pCi/L	0.04	0.03			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	U-238	HASL-300:ISOU	UF	4.06	pCi/L	0.29	0.03			GELC	Buckman08-10-16994

Table 2.0
Buckman Water Supply Wells
General Inorganics

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Location Name	Start Date	Analyte	Analyte Desc	Anly Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 1	6/8/2010	ALK-CO3	Alkalinity-CO3	EPA:310.1	UF		4.27	mg/L	0.73			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	ALK-CO3+HCO3	Alkalinity-CO3+HCO3	EPA:310.1	UF		202.00	mg/L	0.73			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Br(-1)	Bromide	EPA:300.0	UF	<	0.2	mg/L	0.07	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	CN(TOTAL)	Cyanide (Total)	EPA:335.4	UF	<	0.005	mg/L	0.00	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Ca	Calcium	SW-846:6010B	UF		7.31	mg/L	0.05			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Cl(-1)	Chloride	EPA:300.0	UF		2.42	mg/L	0.066			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	ClO4	Perchlorate	SW-846:6850	UF		0.31	ug/L	0.05			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	F(-1)	Fluoride	EPA:300.0	UF		0.827	mg/L	0.03			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	HARDNESS	Hardness	SM:A2340B	UF		20	mg/L	0.35			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	K	Potassium	SW-846:6010B	UF		2.15	mg/L	0.05			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Mg	Magnesium	SW-846:6010B	UF		0.42	mg/L	0.09			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	NH3-N	Ammonia as Nitrogen	EPA:350.1	UF	<	0.025	mg/L	0.02	J	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	EPA:353.2	UF		0.975	mg/L	0.05			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Na	Sodium	SW-846:6010B	UF		94	mg/L	0.10			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	PO4-P	Total Phosphate as Phosphorus	EPA:365.4	UF	<	0.029	mg/L	0.02	J	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	SO4(-2)	Sulfate	EPA:300.0	UF		10.8	mg/L	0.1			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	SPEC_CONDC	Specific Conductance	EPA:120.1	UF		427	uS/cm	1.00			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	SPEC_CONDC	Specific Conductance	FIELD CONDUCTIVITY	UF		434	uS/cm				FLD	Buckman1-10-16990
Buckman 1	6/8/2010	TDS	Total Dissolved Solids	EPA:160.1	UF		265	mg/L	2.40			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	TEMP	Temperature	GENERIC FIELD TEMP	UF		22.6	deg C				FLD	Buckman1-10-16990
Buckman 1	6/8/2010	TKN	Total Kjeldahl Nitrogen	EPA:351.2	UF	<	0.065	mg/L	0.03	J	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	TURB	Turbidity	GENERIC FIELD TURB	UF		0.15	NTU				FLD	Buckman1-10-16990
Buckman 1	6/8/2010	pH	pH	EPA:150.1	UF		8.4	SU	0.01	H	J-	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	pH	pH	GENERIC FIELD PH	UF		8.13	SU				FLD	Buckman1-10-16990
Buckman 6	6/8/2010	ALK-CO3	Alkalinity-CO3	EPA:310.1	UF	<	1	mg/L	0.73	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	ALK-CO3+HCO3	Alkalinity-CO3+HCO3	EPA:310.1	UF		285	mg/L	0.73			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Br(-1)	Bromide	EPA:300.0	UF		0.1	mg/L	0.07	J	J	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	CN(TOTAL)	Cyanide (Total)	EPA:335.4	UF	<	0.005	mg/L	0.00	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Ca	Calcium	SW-846:6010B	UF		53.3	mg/L	0.05			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Cl(-1)	Chloride	EPA:300.0	UF		3.57	mg/L	0.07			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	ClO4	Perchlorate	SW-846:6850	UF		0.391	ug/L	0.05			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	F(-1)	Fluoride	EPA:300.0	UF		0.574	mg/L	0.03			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	HARDNESS	Hardness	SM:A2340B	UF		162	mg/L	0.35			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	K	Potassium	SW-846:6010B	UF		4.53	mg/L	0.05			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Mg	Magnesium	SW-846:6010B	UF		7.11	mg/L	0.09			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	NH3-N	Ammonia as Nitrogen	EPA:350.1	UF	<	0.033	mg/L	0.02	J	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	EPA:353.2	UF		1.47	mg/L	0.05			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Na	Sodium	SW-846:6010B	UF		68	mg/L	0.10			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	PO4-P	Total Phosphate as Phosphorus	EPA:365.4	UF	<	0.028	mg/L	0.02	J	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	SO4(-2)	Sulfate	EPA:300.0	UF		18.7	mg/L	0.10			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	SPEC_CONDC	Specific Conductance	FIELD CONDUCTIVITY	UF		615	uS/cm				FLD	Buckman06-10-16992

Table 2.0
Buckman Water Supply Wells
General Inorganics

Location Name	Start Date	Analyte	Analyte Desc	Anly Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 6	6/8/2010	SPEC_CONDC	Specific Conductance	EPA:120.1	UF		604	uS/cm	1.00			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	TDS	Total Dissolved Solids	EPA:160.1	UF		381	mg/L	2.40			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	TEMP	Temperature	GENERIC FIELD TEMP	UF		24.7	deg C				FLD	Buckman06-10-16992
Buckman 6	6/8/2010	TKN	Total Kjeldahl Nitrogen	EPA:351.2	UF	<	0.061	mg/L	0.03	J	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	TURB	Turbidity	GENERIC FIELD TURB	UF		0.07	NTU				FLD	Buckman06-10-16992
Buckman 6	6/8/2010	pH	pH	EPA:150.1	UF		7.65	SU	0.01	H	J-	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	pH	pH	GENERIC FIELD PH	UF		6.9	SU				FLD	Buckman06-10-16992
Buckman 8	6/22/2010	ALK-CO3	Alkalinity-CO3	EPA:310.1	UF	<	1	mg/L	0.73	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	ALK-CO3+HCO3	Alkalinity-CO3+HCO3	EPA:310.1	UF		231	mg/L	0.73			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Br(-I)	Bromide	EPA:300.0	UF	<	0.2	mg/L	0.07	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	CN(TOTAL)	Cyanide (Total)	EPA:335.4	UF	<	0.005	mg/L	0.00	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Ca	Calcium	SW-846:6010B	UF		16.4	mg/L	0.05	N	J-	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Cl(-I)	Chloride	EPA:300.0	UF		2.1	mg/L	0.07			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	ClO4	Perchlorate	SW-846:6850	UF		0.305	ug/L	0.05			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	F(-I)	Fluoride	EPA:300.0	UF		0.584	mg/L	0.03			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	HARDNESS	Hardness	SM:A2340B	UF		51.8	mg/L	0.35			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	K	Potassium	SW-846:6010B	UF		2.78	mg/L	0.05	N	J-	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Mg	Magnesium	SW-846:6010B	UF		2.63	mg/L	0.09	N	J-	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	NH3-N	Ammonia as Nitrogen	EPA:350.1	UF		0.033	mg/L	0.02	J	J-	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	NO3+NO2-N	Nitrate-Nitrite as Nitrogen	EPA:353.2	UF		0.595	mg/L	0.05		J	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Na	Sodium	SW-846:6010B	UF		86.5	mg/L	0.10			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	PO4-P	Total Phosphate as Phosphorus	EPA:365.4	UF	<	0.053	mg/L	0.02		U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	SO4(-2)	Sulfate	EPA:300.0	UF		10.3	mg/L	0.10			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	SPEC_CONDC	Specific Conductance	FIELD CONDUCTIVITY	UF		471	uS/cm				FLD	Buckman08-10-16994
Buckman 8	6/22/2010	SPEC_CONDC	Specific Conductance	EPA:120.1	UF		446	uS/cm	1.00			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	TDS	Total Dissolved Solids	EPA:160.1	UF		346	mg/L	2.40			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	TEMP	Temperature	GENERIC FIELD TEMP	UF		26.7	deg C				FLD	Buckman08-10-16994
Buckman 8	6/22/2010	TKN	Total Kjeldahl Nitrogen	EPA:351.2	UF	<	0.1	mg/L	0.03	U	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	TURB	Turbidity	GENERIC FIELD TURB	UF		0.21	NTU				FLD	Buckman08-10-16994
Buckman 8	6/22/2010	pH	pH	GENERIC FIELD PH	UF		7.83	SU				FLD	Buckman08-10-16994
Buckman 8	6/22/2010	pH	pH	EPA:150.1	UF		8	SU	0.01	H	J-	GELC	Buckman08-10-16994

Table 3.0
Buckman Water Supply Wells
Metals

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Location Name	Start Date	Analyte	Analyte Desc	Anyl Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 1	6/8/2010	Ag	Silver	SW-846:6020	UF	<	1	ug/L	0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Al	Aluminum	SW-846:6010B	UF	<	200	ug/L	68.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	As	Arsenic	SW-846:6020	UF		9.07	ug/L	2			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	B	Boron	SW-846:6010B	UF		115	ug/L	15.0			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Ba	Barium	SW-846:6010B	UF		21.7	ug/L	1.0			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Be	Beryllium	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Cd	Cadmium	SW-846:6020	UF	<	1	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Co	Cobalt	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Cr	Chromium	SW-846:6020	UF	<	11.9	ug/L	2.5		U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Cr	Chromium	SW-846:6020	F	<	11.8	ug/L	2.5		U	GELC	Buckman1-10-16991
Buckman 1	6/8/2010	Cu	Copper	SW-846:6010B	UF	<	10	ug/L	3	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Fe	Iron	SW-846:6010B	UF	<	100	ug/L	30.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Hg	Mercury	EPA:245.2	UF	<	0.2	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Mn	Manganese	SW-846:6010B	UF	<	10	ug/L	2.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Mo	Molybdenum	SW-846:6020	UF		3.19	ug/L	0.1			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Ni	Nickel	SW-846:6020	UF	<	2	ug/L	0.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Pb	Lead	SW-846:6020	UF	<	2	ug/L	0.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Sb	Antimony	SW-846:6020	UF	<	3	ug/L	0.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Se	Selenium	SW-846:6020	UF	<	5	ug/L	1.0	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	SiO2	Silicon Dioxide	SW-846:6010B	UF		39.4	mg/L	0			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Sn	Tin	SW-846:6010B	UF	<	10	ug/L	2.5	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Sr	Strontium	SW-846:6010B	UF		134	ug/L	1.0			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Tl	Thallium	SW-846:6020	UF		0.488	ug/L	0.3	J	J	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	U	Uranium	SW-846:6020	UF		19.1	ug/L	0.1		J	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	V	Vanadium	SW-846:6010B	UF		37.5	ug/L	1.0			GELC	Buckman1-10-16990
Buckman 1	6/8/2010	Zn	Zinc	SW-846:6010B	UF	<	10	ug/L	3.3	U	U	GELC	Buckman1-10-16990
Buckman 6	6/8/2010	Ag	Silver	SW-846:6020	UF	<	1	ug/L	0.2	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Al	Aluminum	SW-846:6010B	UF	<	200	ug/L	68	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	As	Arsenic	SW-846:6020	UF		5.8	ug/L	1.5			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	B	Boron	SW-846:6010B	UF		87.9	ug/L	15			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Ba	Barium	SW-846:6010B	UF		188	ug/L	1.0			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Be	Beryllium	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Cd	Cadmium	SW-846:6020	UF	<	1	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Co	Cobalt	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Cr	Chromium	SW-846:6020	UF	<	7.85	ug/L	2.5	J	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Cr	Chromium	SW-846:6020	F	<	8.35	ug/L	2.5	J	U	GELC	Buckman06-10-16993
Buckman 6	6/8/2010	Cu	Copper	SW-846:6010B	UF	<	10	ug/L	3.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Fe	Iron	SW-846:6010B	UF	<	100	ug/L	30.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Hg	Mercury	EPA:245.2	UF	<	0.2	ug/L	0	U	U	GELC	Buckman06-10-16992

Table 3.0
Buckman Water Supply Wells
Metals

Location Name	Start Date	Analyte	Analyte Desc	Anyl Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 6	6/8/2010	Mn	Manganese	SW-846:6010B	UF	<	10	ug/L	2.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Mo	Molybdenum	SW-846:6020	UF		3.68	ug/L	0.1			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Ni	Nickel	SW-846:6020	UF		1.33	ug/L	1	J	J	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Pb	Lead	SW-846:6020	UF	<	2	ug/L	0.5	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Sb	Antimony	SW-846:6020	UF	<	3	ug/L	1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Se	Selenium	SW-846:6020	UF	<	5	ug/L	1.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	SiO2	Silicon Dioxide	SW-846:6010B	UF		37.2	mg/L	0.1			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Sn	Tin	SW-846:6010B	UF	<	100	ug/L	25.0	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Sr	Strontium	SW-846:6010B	UF		1140	ug/L	1.0			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Tl	Thallium	SW-846:6020	UF	<	1	ug/L	0.3	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	U	Uranium	SW-846:6020	UF		5.23	ug/L	0.1		J	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	V	Vanadium	SW-846:6010B	UF		15.1	ug/L	1.0			GELC	Buckman06-10-16992
Buckman 6	6/8/2010	Zn	Zinc	SW-846:6010B	UF	<	10	ug/L	3	U	U	GELC	Buckman06-10-16992
Buckman 8	6/22/2010	Ag	Silver	SW-846:6020	UF	<	1	ug/L	0.2	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Al	Aluminum	SW-846:6010B	UF	<	200	ug/L	68.0	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	As	Arsenic	SW-846:6020	UF		8.85	ug/L	1.5	N	J+	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	B	Boron	SW-846:6010B	UF		88.4	ug/L	15.0			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Ba	Barium	SW-846:6010B	UF		47.4	ug/L	1.0			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Be	Beryllium	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Cd	Cadmium	SW-846:6020	UF	<	1	ug/L	0.1	UN	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Co	Cobalt	SW-846:6010B	UF	<	5	ug/L	1.0	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Cr	Chromium	SW-846:6020	F		10.1	ug/L	3			GELC	Buckman08-10-16995
Buckman 8	6/22/2010	Cr	Chromium	SW-846:6020	UF		7.76	ug/L	2.5	J	J	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Cu	Copper	SW-846:6010B	UF		15.2	ug/L	3.0			GEIC	Buckman08-10-16994
Buckman 8	6/22/2010	Fe	Iron	SW-846:6010B	UF	<	100	ug/L	30.0	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Hg	Mercury	EPA:245.2	UF	<	0.2	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Mn	Manganese	SW-846:6010B	UF	<	10	ug/L	2.0	U	U	GEIC	Buckman08-10-16994
Buckman 8	6/22/2010	Mo	Molybdenum	SW-846:6020	UF		3.18	ug/L	0.1			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Ni	Nickel	SW-846:6020	UF		0.573	ug/L	0.5	J	J	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Pb	Lead	SW-846:6020	UF		1.2	ug/L	0.5	J	J	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Sb	Antimony	SW-846:6020	UF	<	3	ug/L	1	UN	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Se	Selenium	SW-846:6020	UF		1.7	ug/L	1.0	JN	J+	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	SiO2	Silicon Dioxide	SW-846:6010B	UF		37.7	mg/L	0.1	N	J-	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Sn	Tin	SW-846:6010B	UF	<	10	ug/L	2.5	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Sr	Strontium	SW-846:6010B	UF		423	ug/L	1.0	N	J-	GEIC	Buckman08-10-16994
Buckman 8	6/22/2010	Tl	Thallium	SW-846:6020	UF	<	0.363	ug/L	0.3	J	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	U	Uranium	SW-846:6020	UF		12.0	ug/L	0.1			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	V	Vanadium	SW-846:6010B	UF		39	ug/L	1.0			GELC	Buckman08-10-16994
Buckman 8	6/22/2010	Zn	Zinc	SW-846:6010B	UF	<	10	ug/L	3.3	U	U	GELC	Buckman08-10-16994

Table 4.0
Buckman Water Supply Wells
High Explosives (HE)

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Location Name	Start Date	Analyte	Analyte Desc	Anyl Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 1	6/8/2010	118-96-7	Trinitrotoluene[2,4,6-]	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	121-14-2	Dinitrotoluene[2,4-]	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	121-82-4	RDX	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	19406-51-0	Amino-2,6-dinitrotoluene[4-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	2691-41-0	HMX	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	3058-38-6	TATB	SW-846:8321A_MOD	UF	<	1.30	ug/L	0.39	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	35572-78-2	Amino-4,6-dinitrotoluene[2-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	479-45-8	Tetryl	SW-846:8321A_MOD	UF	<	0.65	ug/L	0.13	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	59229-75-3	2,6-Diamino-4-nitrotoluene	SW-846:8321A_MOD	UF	<	1.3	ug/L	0.39	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	606-20-2	Dinitrotoluene[2,6-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.078	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	618-87-1	3,5-Dinitroaniline	SW-846:8321A_MOD	UF	<	1.3	ug/L	0.39	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	6629-29-4	2,4-Diamino-6-nitrotoluene	SW-846:8321A_MOD	UF	<	1.3	ug/L	0.39	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	78-11-5	PETN	SW-846:8321A_MOD	UF	<	1.30	ug/L	0.13	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	78-30-8	Tris (o-cresyl) phosphate	SW-846:8321A_MOD	UF	<	1.30	ug/L	0.39	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	88-72-2	Nitrotoluene[2-]	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	UJ	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	98-95-3	Nitrobenzene	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	99-08-1	Nitrotoluene[3-]	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	R	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	99-35-4	Trinitrobenzene[1,3,5-]	SW-846:8321A_MOD	UF	<	0.33	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	99-65-0	Dinitrobenzene[1,3-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	99-99-0	Nitrotoluene[4-]	SW-846:8321A_MOD	UF	<	0.649	ug/L	0.1	U	R	GELC	Buckman1-10-16990
Buckman 6	6/8/2010	118-96-7	Trinitrotoluene[2,4,6-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	121-14-2	Dinitrotoluene[2,4-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	121-82-4	RDX	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	19406-51-0	Amino-2,6-dinitrotoluene[4-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	2691-41-0	HMX	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	3058-38-6	TATB	SW-846:8321A_MOD	UF	<	1.3	ug/L	0.39	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	35572-78-2	Amino-4,6-dinitrotoluene[2-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.1	U	UJ	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	479-45-8	Tetryl	SW-846:8321A_MOD	UF	<	0.649	ug/L	0.13	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	59229-75-3	2,6-Diamino-4-nitrotoluene	SW-846:8321A_MOD	UF	<	1.3	ug/L	0.39	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	606-20-2	Dinitrotoluene[2,6-]	SW-846:8321A_MOD	UF	<	0.325	ug/L	0.078	U	U	GELC	Buckman06-10-16992

Table 4.0
Buckman Water Supply Wells
High Explosives (HE)

Location Name	Start Date	Analyte	Analyte Desc	Anal Meth Code	Fld Prep Code	Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 6	6/8/2010	618-87-1	3,5-Dinitroaniline	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	6629-29-4	2,4-Diamino-6-nitrotoluene	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	78-11-5	PETN	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.13	U	UJ	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	78-30-8	Tris (o-cresyl) phosphate	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	88-72-2	Nitrotoluene[2-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	UJ	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	98-95-3	Nitrobenzene	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	99-08-1	Nitrotoluene[3-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	R	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	99-35-4	Trinitrobenzene[1,3,5-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	99-65-0	Dinitrobenzene[1,3-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	99-99-0	Nitrotoluene[4-]	SW-846:8321A_MOD	UF	< 0.649	ug/L	0.1	U	R	GELC	Buckman06-10-16992
Buckman 8	6/22/2010	118-96-7	Trinitrotoluene[2,4,6-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	121-14-2	Dinitrotoluene[2,4-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	121-82-4	RDX	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	19406-51-0	Amino-2,6-dinitrotoluene[4-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	2691-41-0	HMX	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GFLC	Buckman08-10-16994
Buckman 8	6/22/2010	3058-38-6	TATB	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	35572-78-2	Amino-4,6-dinitrotoluene[2-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	479-45-8	Tetryl	SW-846:8321A_MOD	UF	< 0.649	ug/L	0.13	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	59229-75-3	2,6-Diamino-4-nitrotoluene	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	606-20-2	Dinitrotoluene[2,6-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.078	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	618-87-1	3,5-Dinitroaniline	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	6629-29-4	2,4-Diamino-6-nitrotoluene	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	78-11-5	PETN	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.13	U	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	78-30-8	Tris (o-cresyl) phosphate	SW-846:8321A_MOD	UF	< 1.3	ug/L	0.39	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	88-72-2	Nitrotoluene[2-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	98-95-3	Nitrobenzene	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	99-08-1	Nitrotoluene[3-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	UJ	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	99-35-4	Trinitrobenzene[1,3,5-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	99-65-0	Dinitrobenzene[1,3-]	SW-846:8321A_MOD	UF	< 0.325	ug/L	0.1	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	99-99-0	Nitrotoluene[4-]	SW-846:8321A_MOD	UF	< 0.649	ug/L	0.1	U	R	GELC	Buckman08-10-16994

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Table 5.0
 Buckman Water Supply Wells
 PCBs

Location Name	Start Date	Analyte	Analyte Desc	Anyl Meth Code	Fld Prep Code		Result	Units	Std Mdl	Lab Qual Code	Concat Flag Code	Lab Code	Sample Id
Buckman 1	6/8/2010	11096-82-5	Aroclor-1260	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	11097-69-1	Aroclor-1254	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	11104-28-2	Aroclor-1221	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	11141-16-5	Aroclor-1232	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	12672-29-6	Aroclor-1248	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	12674-11-2	Aroclor-1016	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	37324-23-5	Aroclor-1262	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 1	6/8/2010	53469-21-9	Aroclor-1242	SW-846:8082	UF	<	0.11	ug/L	0.035	U	U	GELC	Buckman1-10-16990
Buckman 6	6/8/2010	11096-82-5	Aroclor-1260	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	11097-69-1	Aroclor-1254	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	11104-28-2	Aroclor-1221	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	11141-16-5	Aroclor-1232	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	12672-29-6	Aroclor-1248	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	12674-11-2	Aroclor-1016	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	37324-23-5	Aroclor-1262	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 6	6/8/2010	53469-21-9	Aroclor-1242	SW-846:8082	UF	<	0.11	ug/L	0.036	U	U	GELC	Buckman06-10-16992
Buckman 8	6/22/2010	11096-82-5	Aroclor-1260	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	11097-69-1	Aroclor-1254	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	11104-28-2	Aroclor-1221	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	11141-16-5	Aroclor-1232	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	12672-29-6	Aroclor-1248	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	12674-11-2	Aroclor-1016	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	37324-23-5	Aroclor-1262	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994
Buckman 8	6/22/2010	53469-21-9	Aroclor-1242	SW-846:8082	UF	<	0.10	ug/L	0.033	U	U	GELC	Buckman08-10-16994

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Table 6.0
 Buckman Water Supply Wells
 Volatile Organic Compounds (VOCs)

Location Name	Start Date	Analytical Suite	Anyl Meth Code	Fld Prep Code	Result	Units	Analyte	Analyte Description	Fld Qc Type Code	Lab Code	Sample ID
Buckman 1	6/8/2010	VOC	SW-846:8260B	UF	0.42J	ug/L	74-87-3	Chloromethane		GELC	Buckman1-10-16990
Buckman 1	6/8/2010	VOC	SW-846:8260B	UF	U ¹	ug/L			FTB	GELC	Buckman1-10-16996
Buckman 6	6/8/2010	VOC	SW-846:8260B	UF	0.35J	ug/L	74-87-3	Chloromethane		GELC	Buckman06-10-16992
Buckman 8	6/22/2010	VOC	SW-846:8260B	UF	U ¹	ug/L				GELC	Buckman08-10-16994
Buckman 8	6/22/2010	VOC	SW-846:8260B	UF	U ¹	ug/L			FTB	GELC	Buckman08-10-16997

Notes:

¹U means that all 80 analytes in the VOC suite were not detected at concentrations greater than GEL's Method Detection Limit (MDL).

²All 80 analytes in the VOC suite were not detected at concentrations greater than GEL's MDL with the exception of the compound listed.