ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-001
Client Sample ID: DewBurd BLK01

Report Date: 04/14/09
Collection Date: 02/24/09 18:00
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	03/03/09 14:18/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:18/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	03/03/09 14:18/mb
Calcium	ND	mg/L	D	1		1	E200.7	03/06/09 21:14/eli-c
Chloride	ND	mg/L		1		1	E300.0	02/25/09 23:17/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	02/25/09 23:17/jmh
Magnesium	ND	mg/L		0.5		1	E200.7	03/06/09 21:14/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 16:14/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/25/09 23:17/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/25/09 23:17/jmh
Potassium	ND	mg/L		0.5		1	E200.7	03/06/09 21:14/eli-c
Sodium	ND	mg/L		0.5		1	E200.7	03/06/09 21:14/eli-c
Sulfate	ND	mg/L		1		1	E300.0	02/25/09 23:17/jmh
Silica	ND	mg/L		0.2		1	E200.7	03/06/09 21:14/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	ND	umhos/cm		5.0		1	A2510 B	02/27/09 12:41/tb
Oxidation-Reduction Potential	240	mV				1	A2580 B	03/02/09 11:00/jmh
pH	5.58	s.u.		0.01		1	A4500-H B	02/27/09 10:47/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	10	mg/L		5		1	A2540 C	03/02/09 09:56/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 19:38/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 19:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 19:38/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/06/09 21:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 19:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 19:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 19:38/eli-c
Iron	ND	mg/L		0.03		1	E200.7	03/06/09 21:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 19:38/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	03/04/09 19:38/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 19:38/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 19:38/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 19:38/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:35/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 19:38/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 19:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/04/09 19:38/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-001
Client Sample ID: DewBurd BLK01

Report Date: 04/14/09
Collection Date: 02/24/09 18:00
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 19:38/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 19:38/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 02:55/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 13:45/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	0.6	pCi/L	U			1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	0.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	1.1	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	-2	pCi/L	U			1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	1.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	2.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	-0.4	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.054	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.43	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	0.2	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	0.06	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-4	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.3	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.14	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.66	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-001
Client Sample ID: DewBurd BLK01

Report Date: 04/14/09
Collection Date: 02/24/09 18:00
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	141	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	64.2	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/09/09 13:54/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/09/09 13:54/eli-c
Barium	ND	mg/L		0.1		1	E200.7	03/06/09 21:32/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/09/09 13:54/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/06/09 21:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/09/09 13:54/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/09/09 13:54/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/09/09 13:54/eli-c
Iron	ND	mg/L		0.03		1	E200.7	03/06/09 21:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/09/09 13:54/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	03/06/09 02:56/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:03/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/09/09 13:54/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/09/09 13:54/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/09/09 13:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/09/09 13:54/eli-c
Strontium	ND	mg/L		0.1		1	E200.7	03/06/09 21:32/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/09/09 13:54/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	03/09/09 13:54/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/09/09 13:54/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-002
Client Sample ID: DewBurd GW704

Report Date: 04/14/09
Collection Date: 02/24/09 09:40
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	03/03/09 14:20/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:20/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	03/03/09 14:20/mb
Calcium	55	mg/L	D	6		5	E200.7	03/06/09 21:37/eli-c
Chloride	10	mg/L		1		1	E300.0	02/25/09 23:50/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	02/25/09 23:50/jmh
Magnesium	18.6	mg/L		0.5		5	E200.7	03/06/09 21:37/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	02/27/09 16:16/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/25/09 23:50/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/25/09 23:50/jmh
Potassium	9.3	mg/L		0.5		5	E200.7	03/06/09 21:37/eli-c
Sodium	205	mg/L		0.5		5	E200.7	03/06/09 21:37/eli-c
Sulfate	487	mg/L	D	3		50	E300.0	02/25/09 23:34/jmh
Silica	7.1	mg/L		0.2		5	E200.7	03/06/09 21:37/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm		5.0		1	A2510 B	02/27/09 12:42/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.78	s.u.		0.01		1	A4500-H B	02/27/09 10:49/tb
Sodium Adsorption Ratio (SAR)	6.1	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	890	mg/L		5		1	A2540 C	03/02/09 09:56/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 19:45/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 19:45/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 19:45/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 21:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 19:45/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 19:45/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 19:45/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 21:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 19:45/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	03/04/09 19:45/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 19:45/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 19:45/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 19:45/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:42/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 19:45/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 19:45/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/04/09 19:45/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-002
Client Sample ID: DewBurd GW704

Report Date: 04/14/09
Collection Date: 02/24/09 09:40
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 19:45/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 19:45/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 02:59/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 13:53/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	2.5	pCi/L	U			1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	3.0	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	4.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	8.8	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	3.5	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	5.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.15	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.55	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	1.6	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	0.04	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-0.2	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.068	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.34	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.72	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-002
Client Sample ID: DewBurd GW704

Report Date: 04/14/09
Collection Date: 02/24/09 09:40
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.03	pCi/L	U			1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	-0.007	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	200	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	69.5	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/09/09 14:01/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/09/09 14:01/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 21:41/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/09/09 14:01/eli-c
Boron	ND	mg/L		0.1		1	E200.8	03/09/09 14:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/09/09 14:01/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/09/09 14:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/09/09 14:01/eli-c
Iron	1.55	mg/L		0.03		1	E200.8	03/09/09 14:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/09/09 14:01/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	03/06/09 03:29/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:10/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/09/09 14:01/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/09/09 14:01/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/09/09 14:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/09/09 14:01/eli-c
Strontium	1.0	mg/L		0.1		1	E200.8	03/09/09 14:01/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/09/09 14:01/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/09/09 14:01/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/09/09 14:01/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.29	%				1	A1030 E	04/14/09 00:00/ADM
Anions	13.8	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	13.4	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	905	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-002
Client Sample ID: DewBurd GW704

Report Date: 04/14/09
Collection Date: 02/24/09 09:40
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-003
Client Sample ID: DewBurd GW3026

Report Date: 04/14/09
Collection Date: 02/24/09 11:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	176	mg/L		5		1	A2320 B	03/03/09 14:22/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:22/mb
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	03/03/09 14:22/mb
Calcium	334	mg/L	D	6		5	E200.7	03/06/09 21:46/eli-c
Chloride	16	mg/L		1		1	E300.0	02/26/09 00:56/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	02/26/09 00:56/jmh
Magnesium	108	mg/L		0.5		5	E200.7	03/06/09 21:46/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 00:56/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 00:56/jmh
Potassium	17.5	mg/L		0.5		5	E200.7	03/06/09 21:46/eli-c
Sodium	147	mg/L		0.5		5	E200.7	03/06/09 21:46/eli-c
Sulfate	1390	mg/L	D	3		50	E300.0	02/26/09 00:06/jmh
Silica	8.1	mg/L		0.2		5	E200.7	03/06/09 21:46/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2510	umhos/cm		5.0		1	A2510 B	02/27/09 12:44/tb
Oxidation-Reduction Potential	170	mV				1	A2580 B	03/02/09 11:00/jmh
pH	6.63	s.u.		0.01		1	A4500-H B	02/27/09 10:50/tb
Sodium Adsorption Ratio (SAR)	1.8	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	03/02/09 09:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 19:52/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/04/09 19:52/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 19:52/eli-c
Boron	0.2	mg/L		0.1		5	E200.7	03/06/09 21:46/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 19:52/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 19:52/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 19:52/eli-c
Iron	2.98	mg/L		0.03		5	E200.7	03/06/09 21:46/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 19:52/eli-c
Manganese	1.10	mg/L		0.01		1	E200.8	03/04/09 19:52/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 19:52/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 19:52/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 19:52/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:44/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 19:52/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 19:52/eli-c
Uranium	0.0022	mg/L		0.0003		1	E200.8	03/04/09 19:52/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-003
Client Sample ID: DewBurd GW3026

Report Date: 04/14/09
Collection Date: 02/24/09 11:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 19:52/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 19:52/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:20/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 13:55/eli-cε
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-cε
RADIONUCLIDES - DISSOLVED								
Gross Alpha	15.4	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Gross Alpha precision (±)	6.6	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Gross Alpha MDC	9.2	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Gross Beta	18.1	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Gross Beta precision (±)	6.0	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Gross Beta MDC	9.6	pCi/L				1	E900.0	03/11/09 22:56/eli-cε
Lead 210	0.4	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.14	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.65	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	2.9	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	2.9	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.098	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.34	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.68	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-003
Client Sample ID: DewBurd GW3026

Report Date: 04/14/09
Collection Date: 02/24/09 11:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	0.1	pCi/L	U			1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	-0.07	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	484	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	72.4	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/09/09 14:07/eli-c
Arsenic	0.006	mg/L		0.001		1	E200.8	03/09/09 14:07/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 21:50/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/09/09 14:07/eli-c
Boron	0.2	mg/L		0.1		1	E200.8	03/09/09 14:07/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/09/09 14:07/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/09/09 14:07/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/09/09 14:07/eli-c
Iron	15.1	mg/L		0.03		1	E200.8	03/09/09 14:07/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/09/09 14:07/eli-c
Manganese	1.35	mg/L		0.01		1	E200.8	03/06/09 03:35/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:12/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/09/09 14:07/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/09/09 14:07/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/09/09 14:07/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/09/09 14:07/eli-c
Strontium	5.8	mg/L		0.1		1	E200.8	03/09/09 14:07/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/09/09 14:07/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	03/09/09 14:07/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/09/09 14:07/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.590	%				1	A1030 E	04/14/09 00:00/ADM
Anions	33.0	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	32.6	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	2140	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-003
Client Sample ID: DewBurd GW3026

Report Date: 04/14/09
Collection Date: 02/24/09 11:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.05					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-004
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:10
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	110	mg/L		5		1	A2320 B	03/03/09 14:24/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:24/mb
Bicarbonate as HCO3	134	mg/L		5		1	A2320 B	03/03/09 14:24/mb
Calcium	357	mg/L	D	6		5	E200.7	03/06/09 21:54/eli-c
Chloride	9	mg/L		1		1	E300.0	02/26/09 02:01/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	02/26/09 02:01/jmh
Magnesium	131	mg/L		0.5		5	E200.7	03/06/09 21:54/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 02:01/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 02:01/jmh
Potassium	15.5	mg/L		0.5		5	E200.7	03/06/09 21:54/eli-c
Sodium	86.5	mg/L		0.5		5	E200.7	03/06/09 21:54/eli-c
Sulfate	1240	mg/L	D	3		50	E300.0	02/26/09 01:12/jmh
Silica	10.2	mg/L		0.2		5	E200.7	03/06/09 21:54/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2360	umhos/cm		5.0		1	A2510 B	02/27/09 12:46/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	03/02/09 11:00/jmh
pH	6.82	s.u.		0.01		1	A4500-H B	02/27/09 10:54/tb
Sodium Adsorption Ratio (SAR)	0.99	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	03/02/09 09:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 19:59/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 19:59/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 19:59/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 21:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 19:59/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 19:59/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 19:59/eli-c
Iron	2.03	mg/L		0.03		5	E200.7	03/06/09 21:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 19:59/eli-c
Manganese	2.45	mg/L		0.01		1	E200.8	03/04/09 19:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 19:59/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 19:59/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 19:59/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:47/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 19:59/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 19:59/eli-c
Uranium	0.108	mg/L		0.0003		1	E200.8	03/04/09 19:59/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-004
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:10
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 19:59/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 19:59/eli-c
METALS - SUSPENDED								
Uranium	0.0050	mg/L		0.0003		1	E200.8	03/10/09 03:24/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:00/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1270	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	35.4	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	9.5	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	357	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	10.4	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	9.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	1.5	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.40	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.51	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.45	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	355	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	3.1	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	0.03	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	420	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	56	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	4.5	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.78	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.62	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.61	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-004
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:10
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	11.0	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.9	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	1	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.5	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	38400	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	279	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 04:18/eli-c
Arsenic	0.003	mg/L	L	0.002		1	E200.8	03/10/09 04:18/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/10/09 04:18/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/16/09 22:35/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 16:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 04:18/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 04:18/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 04:18/eli-c
Iron	4.37	mg/L		0.03		1	E200.8	03/10/09 04:18/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 04:18/eli-c
Manganese	2.7	mg/L	D	0.1		5	E200.7	03/10/09 16:41/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:15/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/16/09 22:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 04:18/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	03/10/09 04:18/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 04:18/eli-c
Strontium	4.7	mg/L		0.1		1	E200.8	03/10/09 04:18/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 04:18/eli-c
Uranium	0.113	mg/L		0.0003		1	E200.8	03/10/09 04:18/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/10/09 04:18/eli-c
DATA QUALITY								
A/C Balance (± 5)	7.55	%				1	A1030 E	04/14/09 00:00/ADM
Anions	28.4	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	33.0	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	1940	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-004
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:10
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.15					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-005
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	114	mg/L		5		1	A2320 B	03/03/09 14:28/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:28/mb
Bicarbonate as HCO3	139	mg/L		5		1	A2320 B	03/03/09 14:28/mb
Calcium	348	mg/L	D	6		5	E200.7	03/06/09 21:59/eli-c
Chloride	9	mg/L		1		1	E300.0	02/26/09 02:34/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	02/26/09 02:34/jmh
Magnesium	130	mg/L		0.5		5	E200.7	03/06/09 21:59/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:31/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 02:34/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 02:34/jmh
Potassium	15.5	mg/L		0.5		5	E200.7	03/06/09 21:59/eli-c
Sodium	85.5	mg/L		0.5		5	E200.7	03/06/09 21:59/eli-c
Sulfate	1380	mg/L	D	3		50	E300.0	02/26/09 02:18/jmh
Silica	10	mg/L		0.2		5	E200.7	03/06/09 21:59/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2390	umhos/cm		5.0		1	A2510 B	02/27/09 12:47/tb
Oxidation-Reduction Potential	110	mV				1	A2580 B	03/02/09 11:00/jmh
pH	6.78	s.u.		0.01		1	A4500-H B	02/27/09 11:00/tb
Sodium Adsorption Ratio (SAR)	0.99	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	03/02/09 09:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 20:05/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 20:05/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 20:05/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 21:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 20:05/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 20:05/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 20:05/eli-c
Iron	1.16	mg/L		0.03		5	E200.7	03/06/09 21:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 20:05/eli-c
Manganese	2.42	mg/L		0.01		1	E200.8	03/04/09 20:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 20:05/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 20:05/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 20:05/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:49/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 20:05/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 20:05/eli-c
Uranium	0.104	mg/L		0.0003		1	E200.8	03/04/09 20:05/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-005
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 20:05/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 20:05/eli-c
METALS - SUSPENDED								
Uranium	0.0047	mg/L		0.0003		1	E200.8	03/10/09 03:28/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:02/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1490	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	38.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	9.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	373	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	10.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	9.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	2.1	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.068	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.51	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.25	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	349	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	3.0	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	0.05	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	440	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	56	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	1.1	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	1.1	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.82	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.91	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-005
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	12.5	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	1	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	0.4	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - TOTAL								
Radon 222	42600	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	293	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 04:25/eli-c
Arsenic	0.003	mg/L	L	0.002		1	E200.8	03/10/09 04:25/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/10/09 04:25/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/16/09 22:41/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 16:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 04:25/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 04:25/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 04:25/eli-c
Iron	4.28	mg/L		0.03		1	E200.8	03/10/09 04:25/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 04:25/eli-c
Manganese	2.6	mg/L	D	0.1		5	E200.7	03/10/09 16:45/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:22/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/16/09 22:41/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 04:25/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 04:25/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 04:25/eli-c
Strontium	4.7	mg/L		0.1		1	E200.8	03/10/09 04:25/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 04:25/eli-c
Uranium	0.110	mg/L		0.0003		1	E200.8	03/10/09 04:25/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/10/09 04:25/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.91	%				1	A1030 E	04/14/09 00:00/ADM
Anions	31.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	32.5	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	2060	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-005
Client Sample ID: DewBurd GW698

Report Date: 04/14/09
Collection Date: 02/24/09 12:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.09					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-006
Client Sample ID: DewBurd GW688

Report Date: 04/14/09
Collection Date: 02/24/09 13:23
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	03/03/09 14:30/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:30/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	03/03/09 14:30/mb
Calcium	52	mg/L	D	6		5	E200.7	03/06/09 22:03/eli-c
Chloride	11	mg/L		1		1	E300.0	02/26/09 03:07/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	02/26/09 03:07/jmh
Magnesium	21.4	mg/L		0.5		5	E200.7	03/06/09 22:03/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:32/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 03:07/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 03:07/jmh
Potassium	12.1	mg/L		0.5		5	E200.7	03/06/09 22:03/eli-c
Sodium	181	mg/L		0.5		5	E200.7	03/06/09 22:03/eli-c
Sulfate	460	mg/L	D	3		50	E300.0	02/26/09 02:51/jmh
Silica	7.5	mg/L		0.2		5	E200.7	03/06/09 22:03/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1200	umhos/cm		5.0		1	A2510 B	02/27/09 12:49/tb
Oxidation-Reduction Potential	120	mV				1	A2580 B	03/02/09 11:00/jmh
pH	8.03	s.u.		0.01		1	A4500-H B	02/27/09 11:01/tb
Sodium Adsorption Ratio (SAR)	5.3	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	830	mg/L		5		1	A2540 C	03/02/09 09:58/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 20:12/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	03/04/09 20:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 20:12/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 22:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 20:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 20:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 20:12/eli-c
Iron	0.03	mg/L		0.03		5	E200.7	03/06/09 22:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 20:12/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	03/04/09 20:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 20:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 20:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 20:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:51/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 20:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 20:12/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/04/09 20:12/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-006
Client Sample ID: DewBurd GW688

Report Date: 04/14/09
Collection Date: 02/24/09 13:23
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 20:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 20:12/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:32/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:04/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	28.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	4.3	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	4.2	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	19.2	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	3.2	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	4.8	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	3.2	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	5.4	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.45	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.43	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.41	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	7.9	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	0.03	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-0.9	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	-0.054	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.26	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.73	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-006
Client Sample ID: DewBurd GW688

Report Date: 04/14/09
Collection Date: 02/24/09 13:23
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	0.2	pCi/L	U			1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	0.1	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	218	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	67.9	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 04:31/eli-c
Arsenic	0.003	mg/L	L	0.002		1	E200.8	03/10/09 04:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/10/09 04:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/16/09 23:15/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 16:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 04:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 04:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 04:31/eli-c
Iron	0.44	mg/L		0.03		1	E200.8	03/10/09 04:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 04:31/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	03/16/09 23:15/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:24/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/16/09 23:15/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 04:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 04:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 04:31/eli-c
Strontium	1.3	mg/L		0.1		1	E200.8	03/10/09 04:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 04:31/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	03/10/09 04:31/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	03/10/09 04:31/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.71	%				1	A1030 E	04/14/09 00:00/ADM
Anions	13.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	12.6	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	858	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-006
Client Sample ID: DewBurd GW688

Report Date: 04/14/09
Collection Date: 02/24/09 13:23
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-007
Client Sample ID: DewBurd GW680

Report Date: 04/14/09
Collection Date: 02/24/09 13:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	250	mg/L		5		1	A2320 B	03/03/09 14:33/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:33/mb
Bicarbonate as HCO3	305	mg/L		5		1	A2320 B	03/03/09 14:33/mb
Calcium	365	mg/L	D	6		5	E200.7	03/06/09 22:30/eli-c
Chloride	13	mg/L		1		1	E300.0	02/26/09 04:13/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	02/26/09 04:13/jmh
Magnesium	121	mg/L		0.5		5	E200.7	03/06/09 22:30/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:34/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 04:13/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 04:13/jmh
Potassium	19.2	mg/L		0.5		5	E200.7	03/06/09 22:30/eli-c
Sodium	145	mg/L		0.5		5	E200.7	03/06/09 22:30/eli-c
Sulfate	1400	mg/L	D	3		50	E300.0	02/26/09 03:23/jmh
Silica	8.6	mg/L		0.2		5	E200.7	03/06/09 22:30/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	2530	umhos/cm		5.0		1	A2510 B	02/27/09 12:50/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.16	s.u.		0.01		1	A4500-H B	02/27/09 11:03/tb
Sodium Adsorption Ratio (SAR)	1.7	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	2300	mg/L		5		1	A2540 C	03/02/09 09:59/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 20:19/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	03/04/09 20:19/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 20:19/eli-c
Boron	0.2	mg/L		0.1		5	E200.7	03/06/09 22:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 20:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 20:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 20:19/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 22:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 20:19/eli-c
Manganese	0.44	mg/L		0.01		1	E200.8	03/04/09 20:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 20:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 20:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 20:19/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 10:58/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 20:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 20:19/eli-c
Uranium	0.0185	mg/L		0.0003		1	E200.8	03/04/09 20:19/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-007
Client Sample ID: DewBurd GW680

Report Date: 04/14/09
Collection Date: 02/24/09 13:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 20:19/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 20:19/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:11/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	5140	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	73.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	10.4	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	1210	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	17.1	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	9.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	10.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.069	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.45	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.23	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	1330	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	6.1	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.009	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1000	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	80	pCi/L				1	E901.1	03/06/09 09:10/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	4.1	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.64	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.53	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.49	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Radium 226	6.4	pCi/L				1	E903.0	03/17/09 13:12/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-007
Client Sample ID: DewBurd GW680

Report Date: 04/14/09
Collection Date: 02/24/09 13:35
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	0.03	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	56800	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	334	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/09/09 14:14/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	03/09/09 14:14/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 22:39/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/09/09 14:14/eli-c
Boron	0.1	mg/L		0.1		1	E200.8	03/09/09 14:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/09/09 14:14/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/09/09 14:14/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/09/09 14:14/eli-c
Iron	0.24	mg/L		0.03		1	E200.8	03/09/09 14:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/09/09 14:14/eli-c
Manganese	0.44	mg/L		0.01		1	E200.8	03/06/09 03:42/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:27/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/09/09 14:14/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/09/09 14:14/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/09/09 14:14/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/09/09 14:14/eli-c
Strontium	7.2	mg/L		0.1		1	E200.8	03/09/09 14:14/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/09/09 14:14/eli-c
Uranium	0.0206	mg/L		0.0003		1	E200.8	03/09/09 14:14/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/09/09 14:14/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.760	%				1	A1030 E	04/14/09 00:00/ADM
Anions	34.4	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	35.0	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	2230	mg/L				1	A1030 E	04/14/09 00:00/ADM
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-008
Client Sample ID: DewBurd GW622

Report Date: 04/14/09
Collection Date: 02/24/09 15:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	178	mg/L		5		1	A2320 B	03/03/09 14:35/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:35/mb
Bicarbonate as HCO3	217	mg/L		5		1	A2320 B	03/03/09 14:35/mb
Calcium	85	mg/L	D	6		5	E200.7	03/06/09 22:43/eli-c
Chloride	10	mg/L		1		1	E300.0	02/26/09 05:18/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	02/26/09 05:18/jmh
Magnesium	30.5	mg/L		0.5		5	E200.7	03/06/09 22:43/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:35/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 05:18/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 05:18/jmh
Potassium	10.8	mg/L		0.5		5	E200.7	03/06/09 22:43/eli-c
Sodium	167	mg/L		0.5		5	E200.7	03/06/09 22:43/eli-c
Sulfate	495	mg/L	D	3		50	E300.0	02/26/09 04:29/jmh
Silica	7.3	mg/L		0.2		5	E200.7	03/06/09 22:43/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1230	umhos/cm		5.0		1	A2510 B	02/27/09 12:55/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.58	s.u.		0.01		1	A4500-H B	02/27/09 11:04/tb
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	900	mg/L		5		1	A2540 C	03/02/09 10:00/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 20:53/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 20:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 20:53/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 22:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 20:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 20:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 20:53/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 22:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 20:53/eli-c
Manganese	0.18	mg/L		0.01		1	E200.8	03/04/09 20:53/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 20:53/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 20:53/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 20:53/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:00/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 20:53/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 20:53/eli-c
Uranium	0.0053	mg/L		0.0003		1	E200.8	03/04/09 20:53/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-008
Client Sample ID: DewBurd GW622

Report Date: 04/14/09
Collection Date: 02/24/09 15:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 20:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 20:53/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:40/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:14/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	44.3	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	5.3	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	4.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	19.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	3.2	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	4.8	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	0.7	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.16	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.46	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	7.9	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.01	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	0.1	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.30	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.47	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-008
Client Sample ID: DewBurd GW622

Report Date: 04/14/09
Collection Date: 02/24/09 15:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	0.5	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 13:12/eli-c
Thorium 230	-0.09	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	1360	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	81.2	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 04:38/eli-c
Arsenic	0.004	mg/L	L	0.002		1	E200.8	03/10/09 04:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/10/09 04:38/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/16/09 23:22/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 16:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 04:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 04:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 04:38/eli-c
Iron	1.40	mg/L		0.03		1	E200.8	03/10/09 04:38/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	03/10/09 04:38/eli-c
Manganese	0.2	mg/L	D	0.1		5	E200.7	03/10/09 16:54/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/02/09 11:29/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/16/09 23:22/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 04:38/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 04:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 04:38/eli-c
Strontium	1.6	mg/L		0.1		1	E200.8	03/10/09 04:38/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 04:38/eli-c
Uranium	0.0051	mg/L		0.0003		1	E200.8	03/10/09 04:38/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	03/10/09 04:38/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.620	%				1	A1030 E	04/14/09 00:00/ADM
Anions	14.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	14.3	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	925	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-008
Client Sample ID: DewBurd GW622

Report Date: 04/14/09
Collection Date: 02/24/09 15:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-009
Client Sample ID: DewBurd GW615

Report Date: 04/14/09
Collection Date: 02/24/09 15:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	138	mg/L		5		1	A2320 B	03/03/09 14:39/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:39/mb
Bicarbonate as HCO3	168	mg/L		5		1	A2320 B	03/03/09 14:39/mb
Calcium	69	mg/L	D	1		1	E200.7	03/06/09 22:48/eli-c
Chloride	5	mg/L		1		1	E300.0	02/26/09 05:51/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	02/26/09 05:51/jmh
Magnesium	21.0	mg/L		0.5		1	E200.7	03/06/09 22:48/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:36/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 05:51/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 05:51/jmh
Potassium	8.4	mg/L		0.5		1	E200.7	03/06/09 22:48/eli-c
Sodium	124	mg/L		0.5		1	E200.7	03/06/09 22:48/eli-c
Sulfate	398	mg/L	D	3		50	E300.0	02/26/09 05:35/jmh
Silica	7.8	mg/L		0.2		1	E200.7	03/06/09 22:48/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	971	umhos/cm		5.0		1	A2510 B	02/27/09 12:57/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.23	s.u.		0.01		1	A4500-H B	02/27/09 11:06/tb
Sodium Adsorption Ratio (SAR)	3.3	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	730	mg/L		5		1	A2540 C	03/02/09 10:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 21:00/eli-c
Arsenic	0.012	mg/L		0.001		1	E200.8	03/04/09 21:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 21:00/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/06/09 22:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 21:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 21:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 21:00/eli-c
Iron	0.06	mg/L		0.03		1	E200.7	03/06/09 22:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 21:00/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	03/04/09 21:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 21:00/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 21:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 21:00/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:03/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 21:00/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 21:00/eli-c
Uranium	0.0025	mg/L		0.0003		1	E200.8	03/04/09 21:00/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-009
Client Sample ID: DewBurd GW615

Report Date: 04/14/09
Collection Date: 02/24/09 15:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 21:00/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 21:00/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:44/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:16/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	14.8	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	3.1	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	3.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	10.5	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	2.6	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	4.1	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	0.9	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.14	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.46	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.27	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	2.3	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.002	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1000	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	0.5	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.15	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.46	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-009
Client Sample ID: DewBurd GW615

Report Date: 04/14/09
Collection Date: 02/24/09 15:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	0.06	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	0.07	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	1590	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	83.6	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/09/09 14:20/eli-c
Arsenic	0.022	mg/L		0.001		1	E200.8	03/09/09 14:20/eli-c
Barium	ND	mg/L		0.1		1	E200.7	03/06/09 22:52/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/09/09 14:20/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/06/09 22:52/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/09/09 14:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/09/09 14:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/09/09 14:20/eli-c
Iron	1.31	mg/L		0.03		1	E200.7	03/06/09 22:52/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/09/09 14:20/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	03/06/09 03:48/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:10/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/09/09 14:20/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/09/09 14:20/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/09/09 14:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/09/09 14:20/eli-c
Strontium	1.3	mg/L		0.1		1	E200.7	03/06/09 22:52/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/09/09 14:20/eli-c
Uranium	0.0024	mg/L		0.0003		1	E200.8	03/09/09 14:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/09/09 14:20/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.02	%				1	A1030 E	04/14/09 00:00/ADM
Anions	11.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	10.8	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	729	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-009
Client Sample ID: DewBurd GW615

Report Date: 04/14/09
Collection Date: 02/24/09 15:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-010
Client Sample ID: DewBurd GW689

Report Date: 04/14/09
Collection Date: 02/24/09 16:04
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	148	mg/L		5		1	A2320 B	03/03/09 14:46/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:46/mb
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	03/03/09 14:46/mb
Calcium	45	mg/L	D	6		5	E200.7	03/06/09 22:57/eli-c
Chloride	5	mg/L		1		1	E300.0	02/26/09 06:24/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	02/26/09 06:24/jmh
Magnesium	14.0	mg/L		0.5		5	E200.7	03/06/09 22:57/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:37/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 06:24/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 06:24/jmh
Potassium	8.5	mg/L		0.5		5	E200.7	03/06/09 22:57/eli-c
Sodium	158	mg/L		0.5		5	E200.7	03/06/09 22:57/eli-c
Sulfate	380	mg/L	D	3		50	E300.0	02/26/09 06:08/jmh
Silica	8.3	mg/L		0.2		5	E200.7	03/06/09 22:57/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1040	umhos/cm		5.0		1	A2510 B	02/27/09 13:02/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	02/27/09 11:07/tb
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	690	mg/L		5		1	A2540 C	03/02/09 10:02/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 21:27/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 21:27/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 21:27/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 22:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 21:27/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 21:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 21:27/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 22:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 21:27/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	03/04/09 21:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 21:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 21:27/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 21:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:05/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 21:27/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 21:27/eli-c
Uranium	0.0030	mg/L		0.0003		1	E200.8	03/04/09 21:27/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-010
Client Sample ID: DewBurd GW689

Report Date: 04/14/09
Collection Date: 02/24/09 16:04
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 21:27/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 21:27/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:49/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:18/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	23.9	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha precision (±)	3.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Alpha MDC	3.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta	12.0	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Gross Beta MDC	4.7	pCi/L				1	E900.0	03/11/09 22:56/eli-ca
Lead 210	0.5	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.44	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	1.0	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.65	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	5.4	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.001	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	0.0	pCi/L	U			1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-2	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.35	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.43	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.56	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-010
Client Sample ID: DewBurd GW689

Report Date: 04/14/09
Collection Date: 02/24/09 16:04
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	0.2	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	1810	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	86.0	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 04:44/eli-c
Arsenic	0.003	mg/L	L	0.002		1	E200.8	03/10/09 04:44/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/10/09 04:44/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/16/09 23:29/eli-c
Boron	ND	mg/L		0.1		1	E200.7	03/10/09 16:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 04:44/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 04:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 04:44/eli-c
Iron	0.60	mg/L		0.03		1	E200.8	03/10/09 04:44/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	03/10/09 04:44/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	03/16/09 23:29/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:17/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/16/09 23:29/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 04:44/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 04:44/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 04:44/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	03/10/09 04:44/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 04:44/eli-c
Uranium	0.0032	mg/L		0.0003		1	E200.8	03/10/09 04:44/eli-c
Zinc	0.02	mg/L		0.01		1	E200.8	03/10/09 04:44/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.77	%				1	A1030 E	04/14/09 00:00/ADM
Anions	11.1	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	10.5	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	722	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
L - Lowest available reporting limit for the analytical methoc used.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-010
Client Sample ID: DewBurd GW689

Report Date: 04/14/09
Collection Date: 02/24/09 16:04
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-011
Client Sample ID: DewBurd GW681

Report Date: 04/14/09
Collection Date: 02/24/09 16:18
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	174	mg/L		5		1	A2320 B	03/03/09 14:48/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:48/mb
Bicarbonate as HCO3	212	mg/L		5		1	A2320 B	03/03/09 14:48/mb
Calcium	63	mg/L	D	6		5	E200.7	03/06/09 23:01/eli-c
Chloride	13	mg/L		1		1	E300.0	02/26/09 07:30/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	02/26/09 07:30/jmh
Magnesium	24.4	mg/L		0.5		5	E200.7	03/06/09 23:01/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:41/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 07:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 07:30/jmh
Potassium	10.3	mg/L		0.5		5	E200.7	03/06/09 23:01/eli-c
Sodium	200	mg/L		0.5		5	E200.7	03/06/09 23:01/eli-c
Sulfate	479	mg/L	D	3		50	E300.0	02/26/09 06:40/jmh
Silica	7.9	mg/L		0.2		5	E200.7	03/06/09 23:01/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm		5.0		1	A2510 B	02/27/09 13:03/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.83	s.u.		0.01		1	A4500-H B	02/27/09 11:10/tb
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	900	mg/L		5		1	A2540 C	03/02/09 10:03/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 21:33/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	03/04/09 21:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 21:33/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 23:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 21:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 21:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 21:33/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 23:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 21:33/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	03/04/09 21:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 21:33/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 21:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 21:33/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:12/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 21:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 21:33/eli-c
Uranium	0.0092	mg/L		0.0003		1	E200.8	03/04/09 21:33/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-011
Client Sample ID: DewBurd GW681

Report Date: 04/14/09
Collection Date: 02/24/09 16:18
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 21:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 21:33/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 03:53/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:25/eli-cε
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-cε
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1460	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Alpha precision (±)	26.4	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Alpha MDC	4.7	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta	402	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta precision (±)	7.9	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta MDC	5.7	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Lead 210	37.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	5.4	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.28	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.46	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.35	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	336	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	3.0	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.001	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	6000	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	350	pCi/L				1	E901.1	03/06/09 09:10/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	25.9	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	2.3	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	1.1	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.62	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Radium 226	1.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-011
Client Sample ID: DewBurd GW681

Report Date: 04/14/09
Collection Date: 02/24/09 16:18
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	0.1	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	389000	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	851	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 05:49/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	03/10/09 05:49/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 23:06/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/11/09 06:10/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 19:34/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 05:49/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 05:49/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 05:49/eli-c
Iron	0.04	mg/L		0.03		1	E200.8	03/10/09 05:49/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 05:49/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	03/06/09 03:54/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:19/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/11/09 06:10/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 05:49/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 05:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 05:49/eli-c
Strontium	1.2	mg/L		0.1		1	E200.8	03/10/09 05:49/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 05:49/eli-c
Uranium	0.0086	mg/L		0.0003		1	E200.8	03/10/09 05:49/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/10/09 05:49/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.990	%				1	A1030 E	04/14/09 00:00/ADM
Anions	13.9	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	14.1	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	916	mg/L				1	A1030 E	04/14/09 00:00/ADM
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-012
Client Sample ID: DewBurd GW697

Report Date: 04/14/09
Collection Date: 02/24/09 16:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	03/03/09 14:51/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:51/mb
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	03/03/09 14:51/mb
Calcium	52	mg/L	D	6		5	E200.7	03/06/09 23:11/eli-c
Chloride	8	mg/L		1		1	E300.0	02/26/09 08:35/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	02/26/09 08:35/jmh
Magnesium	16.8	mg/L		0.5		5	E200.7	03/06/09 23:11/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:44/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 08:35/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 08:35/jmh
Potassium	9.2	mg/L		0.5		5	E200.7	03/06/09 23:11/eli-c
Sodium	201	mg/L		0.5		5	E200.7	03/06/09 23:11/eli-c
Sulfate	436	mg/L	D	3		50	E300.0	02/26/09 07:46/jmh
Silica	8.0	mg/L		0.2		5	E200.7	03/06/09 23:11/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1210	umhos/cm		5.0		1	A2510 B	02/27/09 13:05/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.90	s.u.		0.01		1	A4500-H B	02/27/09 11:11/tb
Sodium Adsorption Ratio (SAR)	6.2	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	820	mg/L		5		1	A2540 C	03/02/09 10:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 21:40/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 21:40/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 21:40/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 23:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 21:40/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 21:40/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 21:40/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 23:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 21:40/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	03/04/09 21:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 21:40/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 21:40/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 21:40/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:14/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 21:40/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 21:40/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/04/09 21:40/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-012
Client Sample ID: DewBurd GW697

Report Date: 04/14/09
Collection Date: 02/24/09 16:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 21:40/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 21:40/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 04:13/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:27/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.2	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha MDC	4.3	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta	11.0	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta precision (±)	3.0	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta MDC	4.8	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Lead 210	1.0	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.034	pCi/L	U			1	E912.0	03/10/09 13:10/eli-c
Polonium 210 MDC	0.62	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Polonium 210 precision (±)	0.28	pCi/L				1	E912.0	03/10/09 13:10/eli-c
Radium 226	5.6	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1100	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-2	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	-0.019	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.55	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-012
Client Sample ID: DewBurd GW697

Report Date: 04/14/09
Collection Date: 02/24/09 16:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	0.05	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	236	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	66.5	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 05:56/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/10/09 05:56/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 23:29/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/11/09 06:16/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 19:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 05:56/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 05:56/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 05:56/eli-c
Iron	0.09	mg/L		0.03		1	E200.8	03/10/09 05:56/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 05:56/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	03/06/09 04:01/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:21/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/11/09 06:16/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 05:56/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 05:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 05:56/eli-c
Strontium	1.1	mg/L		0.1		1	E200.8	03/10/09 05:56/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 05:56/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 05:56/eli-c
Zinc	0.03	mg/L		0.01		1	E200.8	03/10/09 05:56/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.29	%				1	A1030 E	04/14/09 00:00/ADM
Anions	12.6	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	13.0	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	845	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-012
Client Sample ID: DewBurd GW697

Report Date: 04/14/09
Collection Date: 02/24/09 16:45
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-013
Client Sample ID: DewBurd GW695

Report Date: 04/14/09
Collection Date: 02/24/09 16:56
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	178	mg/L		5		1	A2320 B	03/03/09 14:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:53/mb
Bicarbonate as HCO3	217	mg/L		5		1	A2320 B	03/03/09 14:53/mb
Calcium	50	mg/L	D	6		5	E200.7	03/06/09 23:42/eli-c
Chloride	12	mg/L		1		1	E300.0	02/26/09 09:08/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	02/26/09 09:08/jmh
Magnesium	17.6	mg/L		0.5		5	E200.7	03/06/09 23:42/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:45/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 09:08/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 09:08/jmh
Potassium	9.8	mg/L		0.5		5	E200.7	03/06/09 23:42/eli-c
Sodium	225	mg/L		0.5		5	E200.7	03/06/09 23:42/eli-c
Sulfate	494	mg/L	D	3		50	E300.0	02/26/09 08:52/jmh
Silica	7.6	mg/L		0.2		5	E200.7	03/06/09 23:42/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1350	umhos/cm		5.0		1	A2510 B	02/27/09 13:11/tb
Oxidation-Reduction Potential	140	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.86	s.u.		0.01		1	A4500-H B	02/27/09 11:12/tb
Sodium Adsorption Ratio (SAR)	7.0	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	03/02/09 10:04/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 21:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 21:47/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 21:47/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 23:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 21:47/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 21:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 21:47/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 23:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 21:47/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	03/04/09 21:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 21:47/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 21:47/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 21:47/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:16/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 21:47/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 21:47/eli-c
Uranium	0.0028	mg/L		0.0003		1	E200.8	03/04/09 21:47/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-013
Client Sample ID: DewBurd GW695

Report Date: 04/14/09
Collection Date: 02/24/09 16:56
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 21:47/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 21:47/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 04:18/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:30/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.7	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha precision (±)	4.1	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha MDC	4.7	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta	12.7	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta MDC	5.7	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Lead 210	0.9	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	0.16	pCi/L	U			1	E912.0	03/11/09 12:08/eli-c
Polonium 210 MDC	0.74	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Radium 226	4.7	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	03/11/09 15:45/eli-c
Thorium 230	-0.02	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1200	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	180	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	0.1	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.25	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.48	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.83	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-013
Client Sample ID: DewBurd GW695

Report Date: 04/14/09
Collection Date: 02/24/09 16:56
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.1	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	0.02	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	1600	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	83.2	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 06:02/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/10/09 06:02/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 23:47/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/11/09 06:23/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 19:52/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 06:02/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 06:02/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 06:02/eli-c
Iron	0.23	mg/L		0.03		1	E200.8	03/10/09 06:02/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 06:02/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	03/06/09 04:07/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:24/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/11/09 06:23/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 06:02/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 06:02/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 06:02/eli-c
Strontium	0.9	mg/L		0.1		1	E200.8	03/10/09 06:02/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 06:02/eli-c
Uranium	0.0027	mg/L		0.0003		1	E200.8	03/10/09 06:02/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	03/10/09 06:02/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.610	%				1	A1030 E	04/14/09 00:00/ADM
Anions	14.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	14.0	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	937	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-013
Client Sample ID: DewBurd GW695

Report Date: 04/14/09
Collection Date: 02/24/09 16:56
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-014
Client Sample ID: DewBurd GW694

Report Date: 04/14/09
Collection Date: 02/24/09 17:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	206	mg/L		5		1	A2320 B	03/03/09 14:55/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:55/mb
Bicarbonate as HCO3	251	mg/L		5		1	A2320 B	03/03/09 14:55/mb
Calcium	99	mg/L	D	6		5	E200.7	03/06/09 23:51/eli-c
Chloride	9	mg/L		1		1	E300.0	02/26/09 09:41/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	02/26/09 09:41/jmh
Magnesium	35.5	mg/L		0.5		5	E200.7	03/06/09 23:51/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:46/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 09:41/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 09:41/jmh
Potassium	13.6	mg/L		0.5		5	E200.7	03/06/09 23:51/eli-c
Sodium	171	mg/L		0.5		5	E200.7	03/06/09 23:51/eli-c
Sulfate	518	mg/L	D	3		50	E300.0	02/26/09 09:25/jmh
Silica	8.7	mg/L		0.2		5	E200.7	03/06/09 23:51/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1340	umhos/cm		5.0		1	A2510 B	02/27/09 13:13/tb
Oxidation-Reduction Potential	150	mV				1	A2580 B	03/02/09 11:00/jmh
pH	7.55	s.u.		0.01		1	A4500-H B	02/27/09 11:14/tb
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	970	mg/L		5		1	A2540 C	03/02/09 10:05/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 22:21/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/04/09 22:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 22:21/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/06/09 23:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 22:21/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 22:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 22:21/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/06/09 23:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 22:21/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	03/04/09 22:21/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 22:21/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 22:21/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 22:21/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:23/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 22:21/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 22:21/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	03/04/09 22:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-014
Client Sample ID: DewBurd GW694

Report Date: 04/14/09
Collection Date: 02/24/09 17:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 22:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 22:21/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 04:22/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:36/eli-cε
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/09/09 13:39/eli-cε
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.3	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Alpha precision (±)	3.5	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Alpha MDC	4.9	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta	10.9	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Gross Beta MDC	5.7	pCi/L				1	E900.0	03/12/09 11:11/eli-cε
Lead 210	1.3	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	-0.031	pCi/L	U			1	E912.0	03/11/09 12:08/eli-c
Polonium 210 MDC	0.52	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Polonium 210 precision (±)	0.19	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Radium 226	2.2	pCi/L				1	E903.0	03/11/09 17:31/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/11/09 17:31/eli-c
Thorium 230	0.05	pCi/L	U			1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1600	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	230	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	-0.2	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.31	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.38	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.50	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-014
Client Sample ID: DewBurd GW694

Report Date: 04/14/09
Collection Date: 02/24/09 17:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.1	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	-0.09	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.4	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	235	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	66.3	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 06:09/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/10/09 06:09/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/06/09 23:56/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/11/09 06:43/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 20:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 06:09/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 06:09/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 06:09/eli-c
Iron	0.11	mg/L		0.03		1	E200.8	03/10/09 06:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 06:09/eli-c
Manganese	0.17	mg/L		0.01		1	E200.8	03/06/09 04:14/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:26/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/11/09 06:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 06:09/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 06:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 06:09/eli-c
Strontium	2.7	mg/L		0.1		1	E200.8	03/10/09 06:09/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 06:09/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	03/10/09 06:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/10/09 06:09/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.67	%				1	A1030 E	04/14/09 00:00/ADM
Anions	15.2	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	15.7	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	994	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-014
Client Sample ID: DewBurd GW694

Report Date: 04/14/09
Collection Date: 02/24/09 17:15
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-015
Client Sample ID: DewBurd GW696

Report Date: 04/14/09
Collection Date: 02/24/09 17:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	182	mg/L		5		1	A2320 B	03/03/09 14:58/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/03/09 14:58/mb
Bicarbonate as HCO3	222	mg/L		5		1	A2320 B	03/03/09 14:58/mb
Calcium	31	mg/L	D	6		5	E200.7	03/07/09 00:00/eli-c
Chloride	12	mg/L		1		1	E300.0	02/26/09 10:30/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	02/26/09 10:30/jmh
Magnesium	10.7	mg/L		0.5		5	E200.7	03/07/09 00:00/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	02/27/09 15:47/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/26/09 10:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/26/09 10:30/jmh
Potassium	10.1	mg/L		0.5		5	E200.7	03/07/09 00:00/eli-c
Sodium	273	mg/L		0.5		5	E200.7	03/07/09 00:00/eli-c
Sulfate	470	mg/L		1		10	E300.0	02/27/09 01:45/jmh
Silica	8.8	mg/L		0.2		5	E200.7	03/07/09 00:00/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1290	umhos/cm		5.0		1	A2510 B	02/27/09 13:14/tb
Oxidation-Reduction Potential	130	mV				1	A2580 B	03/02/09 11:00/jmh
pH	8.08	s.u.		0.01		1	A4500-H B	02/27/09 11:16/tb
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	04/07/09 09:24/ADM
Solids, Total Dissolved TDS @ 180 C	920	mg/L		5		1	A2540 C	03/02/09 10:06/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	03/04/09 22:28/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/04/09 22:28/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/04/09 22:28/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/07/09 00:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/04/09 22:28/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/04/09 22:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/04/09 22:28/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/07/09 00:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/04/09 22:28/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	03/04/09 22:28/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/04/09 22:28/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	03/04/09 22:28/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/04/09 22:28/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/09/09 11:25/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/04/09 22:28/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/04/09 22:28/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/04/09 22:28/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-015
Client Sample ID: DewBurd GW696

Report Date: 04/14/09
Collection Date: 02/24/09 17:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Vanadium	ND	mg/L		0.1		1	E200.8	03/04/09 22:28/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/04/09 22:28/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 04:26/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/06/09 14:39/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/26/09 15:17/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	4.3	pCi/L	U			1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Alpha MDC	4.8	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta	2.0	pCi/L	U			1	E900.0	03/12/09 11:11/eli-ca
Gross Beta precision (±)	3.4	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Gross Beta MDC	5.7	pCi/L				1	E900.0	03/12/09 11:11/eli-ca
Lead 210	-0.3	pCi/L	U			1	E909.0M	03/16/09 09:10/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/16/09 09:10/eli-c
Polonium 210	-0.094	pCi/L	U			1	E912.0	03/11/09 12:08/eli-c
Polonium 210 MDC	0.72	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Polonium 210 precision (±)	0.25	pCi/L				1	E912.0	03/11/09 12:08/eli-c
Radium 226	1.3	pCi/L				1	E903.0	03/11/09 17:31/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/11/09 17:31/eli-c
Thorium 230	0.2	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/13/09 12:03/eli-c
Gross Gamma	1000	pCi/L				1	E901.1	03/06/09 09:10/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	03/06/09 09:10/eli-c

- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.

RADIONUCLIDES - SUSPENDED								
Lead 210	0.8	pCi/L	U			1	E909.0M	03/11/09 10:11/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	03/11/09 10:11/eli-c
Polonium 210	0.045	pCi/L	U			1	E912.0	03/23/09 07:21/eli-c
Polonium 210 precision (±)	0.36	pCi/L				1	E912.0	03/23/09 07:21/eli-c
Polonium 210 MDC	0.80	pCi/L				1	E912.0	03/23/09 07:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-015
Client Sample ID: DewBurd GW696

Report Date: 04/14/09
Collection Date: 02/24/09 17:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.2	pCi/L	U			1	E903.0	03/17/09 14:53/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	03/17/09 14:53/eli-c
Thorium 230	-0.04	pCi/L	U			1	E907.0	03/14/09 15:06/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	03/14/09 15:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/14/09 15:06/eli-c
- The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agent prior to using these results for compliance purposes.								
RADIONUCLIDES - TOTAL								
Radon 222	234	pCi/L		100		1	D5072-92	02/28/09 09:50/eli-c
Radon 222 precision (±)	66.2	pCi/L				1	D5072-92	02/28/09 09:50/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/10/09 06:15/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/10/09 06:15/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/07/09 00:05/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/11/09 06:50/eli-c
Boron	ND	mg/L	D	0.2		5	E200.7	03/10/09 20:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/10/09 06:15/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/10/09 06:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/10/09 06:15/eli-c
Iron	0.10	mg/L		0.03		1	E200.8	03/10/09 06:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/10/09 06:15/eli-c
Manganese	0.07	mg/L		0.01		1	E200.8	03/06/09 04:20/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/27/09 16:33/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/11/09 06:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/10/09 06:15/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/10/09 06:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/10/09 06:15/eli-c
Strontium	0.8	mg/L		0.1		1	E200.8	03/10/09 06:15/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/10/09 06:15/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/10/09 06:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/10/09 06:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.91	%				1	A1030 E	04/14/09 00:00/ADM
Anions	13.8	meq/L				1	A1030 E	04/14/09 00:00/ADM
Cations	14.6	meq/L				1	A1030 E	04/14/09 00:00/ADM
Solids, Total Dissolved Calculated	941	mg/L				1	A1030 E	04/14/09 00:00/ADM

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc
Project: Edgemont
Lab ID: R09020293-015
Client Sample ID: DewBurd GW696

Report Date: 04/14/09
Collection Date: 02/24/09 17:31
Date Received: 02/25/09
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	04/14/09 00:00/ADM

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B								Batch: 090303A-ALK-SEL-W	
Sample ID: LCS1_090303A	Laboratory Control Sample				Run: PH_COND1-R_090303A			03/03/09 13:13	
Alkalinity, Total as CaCO3	964	mg/L	5.0	96	90	110			
Sample ID: MBLK1_090303A	Method Blank				Run: PH_COND1-R_090303A			03/03/09 13:15	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R09020281-005BMS	Sample Matrix Spike				Run: PH_COND1-R_090303A			03/03/09 13:58	
Alkalinity, Total as CaCO3	356	mg/L	5.0	102	80	120			
Sample ID: R09020281-005BMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_090303A			03/03/09 14:02	
Alkalinity, Total as CaCO3	366	mg/L	5.0	111	80	120	2.8	10	
Sample ID: R09020293-009AMS	Sample Matrix Spike				Run: PH_COND1-R_090303A			03/03/09 14:41	
Alkalinity, Total as CaCO3	240	mg/L	5.0	96	80	120			
Sample ID: R09020293-009AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_090303A			03/03/09 14:43	
Alkalinity, Total as CaCO3	250	mg/L	5.0	106	80	120	4.1	10	
Sample ID: R09020294-004AMS	Sample Matrix Spike				Run: PH_COND1-R_090303A			03/03/09 15:26	
Alkalinity, Total as CaCO3	118	mg/L	5.0	89	80	120			
Sample ID: R09020294-004AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_090303A			03/03/09 15:31	
Alkalinity, Total as CaCO3	118	mg/L	5.0	89	80	120		10	
Method: A2510 B								Batch: 090227_1_COND-PROBE-W	
Sample ID: LCS_COND-1_090227	Laboratory Control Sample				Run: PH_COND2-R_090227A			02/27/09 12:30	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_090227	Laboratory Control Sample				Run: PH_COND2-R_090227A			02/27/09 12:31	
Conductivity @ 25 C	151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_090227	Laboratory Control Sample				Run: PH_COND2-R_090227A			02/27/09 12:33	
Conductivity @ 25 C	4960	umhos/cm	5.0	99	90	110			
Sample ID: MBLK-1_090227	Method Blank				Run: PH_COND2-R_090227A			02/27/09 12:37	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R09020293-009ADUP	Sample Duplicate				Run: PH_COND2-R_090227A			02/27/09 13:00	
Conductivity @ 25 C	992	umhos/cm	5.0				2.1	10	
Sample ID: R09020293-015ADUP	Sample Duplicate				Run: PH_COND2-R_090227A			02/27/09 13:17	
Conductivity @ 25 C	1300	umhos/cm	5.0				0.8	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 090302A-SLDS-TDS-W	
Sample ID: LCS1_090302A	Laboratory Control Sample				Run: BAL-4-R_090302B				03/02/09 09:44
Solids, Total Dissolved TDS @ 180 C	220	mg/L	5.0	111	90	110			S
Sample ID: MBLK1_090302A	Method Blank				Run: BAL-4-R_090302B				03/02/09 09:45
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	5						
Sample ID: R09020293-008AMS	Sample Matrix Spike				Run: BAL-4-R_090302B				03/02/09 10:00
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	111	80	120			
Sample ID: R09020293-008AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_090302B				03/02/09 10:01
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	5.0	111	80	120	0	10	
Sample ID: R09020294-003AMS	Sample Matrix Spike				Run: BAL-4-R_090302B				03/02/09 10:08
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	108	80	120			
Sample ID: R09020294-003AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_090302B				03/02/09 10:09
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	5.0	113	80	120	0.7	10	
Method: A2580 B								Batch: 090302-ORP-ISE-W	
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_090302A				03/02/09 11:00
Oxidation-Reduction Potential	480	mV		101	95	105			
Method: A3114 B								Batch: C_SE3114-090306IV	
Sample ID: MBLK	Method Blank				Run: SUB-C115572				03/06/09 13:38
Selenium-IV	ND	mg/L	0.0002						
Sample ID: As/Se 1.0ppm-Q 03020	Laboratory Control Sample				Run: SUB-C115572				03/06/09 13:40
Selenium-IV	0.049	mg/L	0.0010	98	90	110			
Sample ID: R09020293-001E	Sample Matrix Spike				Run: SUB-C115572				03/06/09 13:48
Selenium-IV	0.049	mg/L	0.0010	98	85	115			
Sample ID: R09020293-001E	Sample Matrix Spike Duplicate				Run: SUB-C115572				03/06/09 13:50
Selenium-IV	0.046	mg/L	0.0010	92	85	115	6.8	10	
Sample ID: R09020293-010E	Sample Matrix Spike				Run: SUB-C115572				03/06/09 14:20
Selenium-IV	0.046	mg/L	0.0010	92	85	115			
Sample ID: R09020293-010E	Sample Matrix Spike Duplicate				Run: SUB-C115572				03/06/09 14:23
Selenium-IV	0.044	mg/L	0.0010	88	85	115	4.5	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Batch: 090227_1_PH-W	
Sample ID: LCS_pH-1_090227	Laboratory Control Sample				Run: PH_COND2-R_090227B			02/27/09 10:36	
pH	6.87	s.u.	0.010	100	98.55	101.45			
Sample ID: R09020293-004ADUP	Sample Duplicate				Run: PH_COND2-R_090227B			02/27/09 10:57	
pH	6.79	s.u.	0.010				0.4	1.25	
Sample ID: R09020293-014ADUP	Sample Duplicate				Run: PH_COND2-R_090227B			02/27/09 11:15	
pH	7.56	s.u.	0.010				0.1	1.25	
Method: A4500-NH3 G								Batch: A2009-02-27_2_NH3_01	
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_090227A			02/27/09 10:50	
Nitrogen, Ammonia as N	0.02	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_090227A			02/27/09 10:52	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	92	90	110			
Sample ID: LFB-4	Laboratory Fortified Blank				Run: TECHAA2-R_090227A			02/27/09 11:04	
Nitrogen, Ammonia as N	0.22	mg/L	0.10	88	90	110			S
Sample ID: R09020293-003BMS	Sample Matrix Spike				Run: TECHAA2-R_090227A			02/27/09 15:28	
Nitrogen, Ammonia as N	0.62	mg/L	0.10	87	80	120			
Sample ID: R09020293-003BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_090227A			02/27/09 15:29	
Nitrogen, Ammonia as N	0.63	mg/L	0.10	92	80	120	2.1	10	
Sample ID: R09020293-011BMS	Sample Matrix Spike				Run: TECHAA2-R_090227A			02/27/09 15:42	
Nitrogen, Ammonia as N	0.31	mg/L	0.10	101	80	120			
Sample ID: R09020293-011BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_090227A			02/27/09 15:43	
Nitrogen, Ammonia as N	0.33	mg/L	0.10	105	80	120	3.4	10	
Sample ID: R09020314-001CMS	Sample Matrix Spike				Run: TECHAA2-R_090227A			02/27/09 16:10	
Nitrogen, Ammonia as N	0.20	mg/L	0.10	80	80	120			
Sample ID: R09020314-001CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_090227A			02/27/09 16:11	
Nitrogen, Ammonia as N	0.18	mg/L	0.10	72	80	120	11	10	SR

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92									Batch: C_R115409
Sample ID: R09020293-015G	Sample Duplicate				Run: SUB-C115409				02/28/09 09:50
Radon 222	234	pCi/L	100				0	30	
Radon 222 precision (±)	66.2	pCi/L							
Sample ID: MB-R115409	Method Blank				Run: SUB-C115409				02/28/09 09:50
Radon 222	10	pCi/L							U
Radon 222 precision (±)	30	pCi/L							
Sample ID: LCS-R115409	Laboratory Control Sample				Run: SUB-C115409				02/28/09 09:50
Radon 222	301	pCi/L	100	95	70	130			
Method: E200.7									Batch: C_21707
Sample ID: MB-21707	Method Blank				Run: SUB-C115709				03/10/09 16:32
Boron	ND	mg/L	0.04						
Manganese	ND	mg/L	0.02						
Sample ID: LCS3-21707	Laboratory Control Sample				Run: SUB-C115709				03/10/09 16:36
Boron	0.509	mg/L	0.10	102	85	115			
Manganese	2.56	mg/L	0.020	102	85	115			
Sample ID: C09030079-003CMS3	Sample Matrix Spike				Run: SUB-C115709				03/10/09 17:08
Boron	0.547	mg/L	0.10	109	70	130			
Manganese	3.00	mg/L	0.020	107	70	130			
Sample ID: C09030079-003CMSD3	Sample Matrix Spike Duplicate				Run: SUB-C115709				03/10/09 17:12
Boron	0.557	mg/L	0.10	111	70	130	1.8	20	
Manganese	3.08	mg/L	0.020	110	70	130	2.6	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R115623
Sample ID: C09020945-001BMS	Sample Matrix Spike				Run: SUB-C115623			03/06/09 21:01	
Barium	0.561	mg/L	0.10	97	70	130			
Boron	0.518	mg/L	0.10	96	70	130			
Iron	0.561	mg/L	0.030	93	70	130			
Silicon	3.97	mg/L	0.10		70	130			A
Strontium	0.711	mg/L	0.10	110	70	130			
Calcium	67.4	mg/L	1.2	95	70	130			
Magnesium	56.9	mg/L	1.0	102	70	130			
Potassium	56.8	mg/L	1.0	95	70	130			
Sodium	83.8	mg/L	1.0	96	70	130			
Silica	8.49	mg/L	0.21		70	130			A
Sample ID: C09020945-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C115623			03/06/09 21:05	
Barium	0.551	mg/L	0.10	95	70	130	1.7	20	
Boron	0.509	mg/L	0.10	94	70	130	1.7	20	
Iron	0.551	mg/L	0.030	91	70	130	1.7	20	
Silicon	3.94	mg/L	0.10		70	130	0.7	20	A
Strontium	0.690	mg/L	0.10	105	70	130	3	20	
Calcium	65.7	mg/L	1.2	92	70	130	2.5	20	
Magnesium	54.1	mg/L	1.0	97	70	130	5.1	20	
Potassium	53.7	mg/L	1.0	89	70	130	5.6	20	
Sodium	80.3	mg/L	1.0	89	70	130	4.3	20	
Silica	8.43	mg/L	0.21		70	130	0.7	20	A
Sample ID: C09020974-006CMS	Sample Matrix Spike				Run: SUB-C115623			03/06/09 22:08	
Barium	2.40	mg/L	0.10	94	70	130			
Boron	2.36	mg/L	0.10	91	70	130			
Iron	2.33	mg/L	0.030	90	70	130			
Silicon	5.18	mg/L	0.10	65	70	130			S
Strontium	3.66	mg/L	0.10	96	70	130			
Calcium	283	mg/L	6.2	91	70	130			
Magnesium	257	mg/L	1.0	92	70	130			
Potassium	238	mg/L	1.0	89	70	130			
Sodium	405	mg/L	1.0	88	70	130			
Silica	11.1	mg/L	0.21	65	70	130			S
Sample ID: C09020974-006CMSD	Sample Matrix Spike Duplicate				Run: SUB-C115623			03/06/09 22:12	
Barium	2.45	mg/L	0.10	96	70	130	2	20	
Boron	2.43	mg/L	0.10	93	70	130	2.7	20	
Iron	2.39	mg/L	0.030	93	70	130	2.8	20	
Silicon	5.30	mg/L	0.10	70	70	130	2.4	20	
Strontium	3.77	mg/L	0.10	100	70	130	2.9	20	
Calcium	288	mg/L	6.2	93	70	130	1.8	20	
Magnesium	258	mg/L	1.0	93	70	130	0.3	20	
Potassium	237	mg/L	1.0	88	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7								Batch: C_R115623	
Sample ID: C09020974-006CMSD	Sample Matrix Spike Duplicate				Run: SUB-C115623			03/06/09 22:12	
Sodium	406	mg/L	1.0	88	70	130	0.3	20	
Silica	11.4	mg/L	0.21	70	70	130	2.4	20	
Sample ID: R09020293-012D	Sample Matrix Spike				Run: SUB-C115623			03/06/09 23:33	
Barium	2.46	mg/L	0.10	97	70	130			
Boron	2.44	mg/L	0.18	96	70	130			
Iron	2.47	mg/L	0.11	97	70	130			
Silicon	5.52	mg/L	0.11	67	70	130			S
Strontium	3.52	mg/L	0.11	95	70	130			
Calcium	291	mg/L	1.1	93	70	130			
Magnesium	250	mg/L	1.2	92	70	130			
Potassium	233	mg/L	1.0	88	70	130			
Sodium	418	mg/L	1.1	86	70	130			
Silica	11.8	mg/L	0.23	144	70	130			S
Sample ID: R09020293-012D	Sample Matrix Spike Duplicate				Run: SUB-C115623			03/06/09 23:38	
Barium	2.20	mg/L	0.10	86	70	130	11	20	
Boron	2.19	mg/L	0.18	86	70	130	11	20	
Iron	2.18	mg/L	0.11	86	70	130	12	20	
Silicon	4.91	mg/L	0.11	43	70	130	12	20	S
Strontium	3.30	mg/L	0.11	86	70	130	6.5	20	
Calcium	265	mg/L	1.1	83	70	130	9.3	20	
Magnesium	237	mg/L	1.2	86	70	130	5.7	20	
Potassium	233	mg/L	1.0	88	70	130	0.1	20	
Sodium	416	mg/L	1.1	85	70	130	0.5	20	
Silica	10.5	mg/L	0.23	92	70	130	12	20	
Method: E200.7								Batch: C_R115709	
Sample ID: C09020884-001BMS	Sample Matrix Spike				Run: SUB-C115709			03/10/09 18:34	
Boron	3.15	mg/L	0.10	100	70	130			
Sample ID: C09020884-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C115709			03/10/09 18:39	
Boron	3.09	mg/L	0.10	97	70	130	2.1	20	
Sample ID: R09020293-012D	Sample Matrix Spike				Run: SUB-C115709			03/10/09 19:43	
Boron	2.49	mg/L	0.18	99	70	130			
Sample ID: R09020293-012D	Sample Matrix Spike Duplicate				Run: SUB-C115709			03/10/09 19:48	
Boron	2.47	mg/L	0.18	99	70	130	0.5	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7_8									Batch: C_21713
Sample ID: MB-21713	Method Blank				Run: SUB-C115669				03/10/09 00:42
Uranium	8E-05	mg/L	1E-05						
Sample ID: LCS2-21713	Laboratory Control Sample				Run: SUB-C115669				03/10/09 00:47
Uranium	0.0800	mg/L	0.00030	80	75	125			
Method: E200.7_8									Batch: C_R115623
Sample ID: LRB	Method Blank				Run: SUB-C115623				03/06/09 12:28
Barium	ND	mg/L	0.002						
Boron	0.02	mg/L	0.006						
Iron	0.06	mg/L	0.0004						
Silicon	0.004	mg/L	0.003						
Strontium	0.002	mg/L	0.002						
Calcium	0.4	mg/L	0.02						
Magnesium	0.5	mg/L	0.01						
Potassium	0.1	mg/L	0.005						
Sodium	0.01	mg/L	0.006						
Silica	0.009	mg/L	0.005						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115623				03/06/09 12:33
Barium	2.53	mg/L	0.10	101	80	120			
Boron	2.55	mg/L	0.10	101	80	120			
Iron	2.50	mg/L	0.030	97	80	120			
Silicon	2.57	mg/L	0.0025	103	80	120			
Strontium	2.47	mg/L	0.10	99	80	120			
Calcium	25.0	mg/L	0.50	98	80	120			
Magnesium	24.9	mg/L	0.50	98	80	120			
Potassium	24.4	mg/L	0.50	97	80	120			
Sodium	25.1	mg/L	0.50	100	80	120			
Silica	5.50	mg/L	0.0054	103	80	120			
Method: E200.7_8									Batch: C_R115709
Sample ID: LRB	Method Blank				Run: SUB-C115709				03/10/09 14:55
Boron	0.02	mg/L	0.006						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115709				03/10/09 14:59
Boron	2.55	mg/L	0.10	101	80	120			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_21707
Sample ID: MB-21707	Method Blank				Run: SUB-C115667				03/10/09 03:59
Antimony	0.0008	mg/L	0.0004						
Arsenic	0.002	mg/L	4E-05						
Barium	ND	mg/L	0.0007						
Beryllium	ND	mg/L	9E-05						
Cadmium	ND	mg/L	5E-05						
Chromium	0.0005	mg/L	8E-05						
Copper	0.0002	mg/L	0.0001						
Iron	0.003	mg/L	0.002						
Lead	ND	mg/L	9E-05						
Manganese	0.00010	mg/L	4E-05						
Molybdenum	ND	mg/L	0.0001						
Nickel	ND	mg/L	6E-05						
Selenium	0.0001	mg/L	7E-05						
Silver	ND	mg/L	4E-05						
Strontium	ND	mg/L	0.0002						
Thallium	ND	mg/L	0.0003						
Uranium	ND	mg/L	7E-05						
Zinc	0.002	mg/L	0.0009						
Sample ID: LCS3-21707	Laboratory Control Sample				Run: SUB-C115667				03/10/09 04:06
Antimony	0.575	mg/L	0.050	115	85	115			
Arsenic	0.495	mg/L	0.0010	99	85	115			
Barium	0.509	mg/L	0.10	102	85	115			
Beryllium	0.213	mg/L	0.010	85	85	115			
Cadmium	0.258	mg/L	0.010	103	85	115			
Chromium	0.507	mg/L	0.050	101	85	115			
Copper	0.524	mg/L	0.010	105	85	115			
Iron	2.45	mg/L	0.030	98	85	115			
Lead	0.537	mg/L	0.050	107	85	115			
Manganese	2.35	mg/L	0.010	94	85	115			
Molybdenum	0.466	mg/L	0.10	93	85	115			
Nickel	0.486	mg/L	0.050	97	85	115			
Selenium	0.499	mg/L	0.0010	100	85	115			
Silver	0.0474	mg/L	0.010	95	85	115			
Strontium	0.507	mg/L	0.10	101	85	115			
Thallium	0.530	mg/L	0.10	106	85	115			
Uranium	0.528	mg/L	0.00030	106	85	115			
Zinc	0.492	mg/L	0.010	98	85	115			
Sample ID: C09030079-003CMS3	Sample Matrix Spike				Run: SUB-C115667				03/10/09 05:30
Antimony	0.586	mg/L	0.050	117	70	130			
Arsenic	0.494	mg/L	0.0010	98	70	130			
Barium	0.712	mg/L	0.10	117	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_21707
Sample ID: C09030079-003CMS3	Sample Matrix Spike				Run: SUB-C115667				03/10/09 05:30
Beryllium	0.178	mg/L	0.010	71	70	130			
Cadmium	0.259	mg/L	0.010	103	70	130			
Chromium	0.513	mg/L	0.050	101	70	130			
Copper	0.521	mg/L	0.010	103	70	130			
Iron	6.01	mg/L	0.030	112	70	130			
Lead	0.545	mg/L	0.050	108	70	130			
Manganese	2.54	mg/L	0.010	90	70	130			
Molybdenum	0.453	mg/L	0.10	90	70	130			
Nickel	0.485	mg/L	0.050	96	70	130			
Selenium	0.479	mg/L	0.0010	95	70	130			
Silver	0.0471	mg/L	0.010	94	70	130			
Strontium	0.816	mg/L	0.10	101	70	130			
Thallium	0.533	mg/L	0.10	107	70	130			
Uranium	0.538	mg/L	0.00030	106	70	130			
Zinc	0.495	mg/L	0.010	96	70	130			
Sample ID: C09030079-003CMSD3	Sample Matrix Spike Duplicate				Run: SUB-C115667				03/10/09 05:36
Antimony	0.586	mg/L	0.050	117	70	130	0	20	
Arsenic	0.494	mg/L	0.0010	98	70	130	0	20	
Barium	0.714	mg/L	0.10	117	70	130	0.2	20	
Beryllium	0.172	mg/L	0.010	69	70	130	3.7	20	S
Cadmium	0.260	mg/L	0.010	104	70	130	0.6	20	
Chromium	0.502	mg/L	0.050	99	70	130	2.1	20	
Copper	0.519	mg/L	0.010	103	70	130	0.4	20	
Iron	5.93	mg/L	0.030	109	70	130	1.4	20	
Lead	0.548	mg/L	0.050	109	70	130	0.6	20	
Manganese	2.52	mg/L	0.010	89	70	130	0.6	20	
Molybdenum	0.453	mg/L	0.10	90	70	130	0	20	
Nickel	0.484	mg/L	0.050	96	70	130	0.2	20	
Selenium	0.485	mg/L	0.0010	97	70	130	1.4	20	
Silver	0.0478	mg/L	0.010	96	70	130	1.3	20	
Strontium	0.818	mg/L	0.10	102	70	130	0.2	20	
Thallium	0.538	mg/L	0.10	108	70	130	0.9	20	
Uranium	0.547	mg/L	0.00030	108	70	130	1.7	20	
Zinc	0.493	mg/L	0.010	96	70	130	0.4	20	
Sample ID: MB-21707	Method Blank				Run: SUB-C115926				03/16/09 22:22
Beryllium	ND	mg/L	6E-05						
Manganese	ND	mg/L	0.0001						
Molybdenum	0.0001	mg/L	9E-05						
Sample ID: LCS3-21707	Laboratory Control Sample				Run: SUB-C115926				03/16/09 22:28
Beryllium	0.297	mg/L	0.010	119	85	115			S
Manganese	2.48	mg/L	0.010	99	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_21707
Sample ID: LCS3-21707	Laboratory Control Sample				Run: SUB-C115926				03/16/09 22:28
Molybdenum	0.529	mg/L	0.10	106	85	115			
- Response for Be is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder c the run QA is within acceptance range, this batch is approved.									
Sample ID: C09030079-003CMS3	Sample Matrix Spike				Run: SUB-C115926				03/16/09 23:42
Beryllium	0.281	mg/L	0.010	112	70	130			
Manganese	2.73	mg/L	0.010	97	70	130			
Molybdenum	0.531	mg/L	0.10	106	70	130			
Sample ID: C09030079-003CMSD3	Sample Matrix Spike Duplicate				Run: SUB-C115926				03/16/09 23:49
Beryllium	0.276	mg/L	0.010	110	70	130	1.9	20	
Manganese	2.72	mg/L	0.010	97	70	130	0.6	20	
Molybdenum	0.531	mg/L	0.10	106	70	130	0.1	20	
Method: E200.8									Batch: C_21713
Sample ID: R09020293-015I	Post Digestion Spike				Run: SUB-C115669				03/10/09 04:30
Uranium	0.0118	mg/L	0.00030	94	70	130			
Sample ID: R09020293-015I	Post Digestion Spike Duplicate				Run: SUB-C115669				03/10/09 04:34
Uranium	0.0120	mg/L	0.00030	96	70	130	1.9	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R115500
Sample ID: LRB	Method Blank				Run: SUB-C115500				03/04/09 13:17
Aluminum	ND	mg/L	0.002						
Arsenic	ND	mg/L	0.0003						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	6E-05						
Chromium	ND	mg/L	8E-05						
Copper	ND	mg/L	4E-05						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	4E-05						
Molybdenum	ND	mg/L	4E-05						
Nickel	ND	mg/L	9E-05						
Silver	ND	mg/L	2E-05						
Thorium 232	ND	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Vanadium	ND	mg/L	9E-05						
Zinc	ND	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115500				03/04/09 13:24
Aluminum	0.0504	mg/L	0.0022	101	85	115			
Arsenic	0.0522	mg/L	0.0010	104	85	115			
Barium	0.0516	mg/L	0.0010	103	85	115			
Cadmium	0.0514	mg/L	0.0010	103	85	115			
Chromium	0.0512	mg/L	0.0010	102	85	115			
Copper	0.0468	mg/L	0.0010	94	85	115			
Lead	0.0514	mg/L	0.0010	103	85	115			
Manganese	0.0512	mg/L	0.0010	102	85	115			
Mercury	0.00513	mg/L	0.0010	103	85	115			
Molybdenum	0.0508	mg/L	0.0010	102	85	115			
Nickel	0.0501	mg/L	0.0010	100	85	115			
Silver	0.0215	mg/L	0.0010	108	85	115			
Thorium 232	0.0493	mg/L	0.0010	99	85	115			
Uranium	0.0496	mg/L	0.00030	99	85	115			
Vanadium	0.0514	mg/L	0.0010	103	85	115			
Zinc	0.0539	mg/L	0.0010	108	85	115			
Sample ID: C09020974-009CMS4	Post Digestion Spike				Run: SUB-C115500				03/04/09 21:06
Aluminum	0.0534	mg/L	0.10	107	70	130			
Arsenic	0.0666	mg/L	0.0010	110	70	130			
Barium	0.0688	mg/L	0.10	114	70	130			
Cadmium	0.0551	mg/L	0.010	110	70	130			
Chromium	0.0531	mg/L	0.050	106	70	130			
Copper	0.0477	mg/L	0.010	95	70	130			
Lead	0.0557	mg/L	0.050	111	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_R115500	
Sample ID: C09020974-009CMS4	Post Digestion Spike				Run: SUB-C115500			03/04/09 21:06	
Manganese	0.120	mg/L	0.010	106	70	130			
Mercury	0.00538	mg/L	0.0010	108	70	130			
Molybdenum	0.0567	mg/L	0.10	111	70	130			
Nickel	0.0505	mg/L	0.050	101	70	130			
Silver	0.0118	mg/L	0.010	59	70	130			S
Thorium 232	0.0567	mg/L	0.0010	113	70	130			
Uranium	0.0587	mg/L	0.00030	112	70	130			
Vanadium	0.0551	mg/L	0.10	110	70	130			
Zinc	0.0556	mg/L	0.010	111	70	130			
Sample ID: C09020974-009CMSD4	Post Digestion Spike Duplicate				Run: SUB-C115500			03/04/09 21:13	
Aluminum	0.0514	mg/L	0.10	103	70	130		20	
Arsenic	0.0666	mg/L	0.0010	110	70	130	0	20	
Barium	0.0686	mg/L	0.10	114	70	130		20	
Cadmium	0.0546	mg/L	0.010	109	70	130	0.9	20	
Chromium	0.0530	mg/L	0.050	106	70	130	0.1	20	
Copper	0.0474	mg/L	0.010	95	70	130	0.6	20	
Lead	0.0560	mg/L	0.050	112	70	130	0.7	20	
Manganese	0.121	mg/L	0.010	107	70	130	0.6	20	
Mercury	0.00547	mg/L	0.0010	109	70	130	1.7	20	
Molybdenum	0.0563	mg/L	0.10	110	70	130		20	
Nickel	0.0506	mg/L	0.050	101	70	130	0.2	20	
Silver	0.0153	mg/L	0.010	76	70	130	26	20	R
Thorium 232	0.0571	mg/L	0.0010	114	70	130	0.7	20	
Uranium	0.0590	mg/L	0.00030	113	70	130	0.6	20	
Vanadium	0.0550	mg/L	0.10	110	70	130		20	
Zinc	0.0553	mg/L	0.010	111	70	130	0.5	20	
Sample ID: C09020995-014DMS4	Post Digestion Spike				Run: SUB-C115500			03/04/09 23:01	
Aluminum	0.119	mg/L	0.10	107	70	130			
Arsenic	0.0591	mg/L	0.0010	111	70	130			
Barium	0.103	mg/L	0.10	113	70	130			
Cadmium	0.0542	mg/L	0.010	108	70	130			
Chromium	0.0523	mg/L	0.050	104	70	130			
Copper	0.0484	mg/L	0.010	97	70	130			
Lead	0.0565	mg/L	0.050	111	70	130			
Manganese	0.0550	mg/L	0.010	104	70	130			
Mercury	0.00526	mg/L	0.0010	105	70	130			
Molybdenum	0.0605	mg/L	0.10	111	70	130			
Nickel	0.0586	mg/L	0.050	101	70	130			
Silver	0.0147	mg/L	0.010	73	70	130			
Thorium 232	0.0567	mg/L	0.0010	113	70	130			
Uranium	0.150	mg/L	0.00030	114	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_R115500	
Sample ID: C09020995-014DMS4	Post Digestion Spike				Run: SUB-C115500			03/04/09 23:01	
Vanadium	0.0623	mg/L	0.10	107	70	130			
Zinc	0.0788	mg/L	0.010	113	70	130			
Sample ID: C09020995-014DMSD4	Post Digestion Spike Duplicate				Run: SUB-C115500			03/04/09 23:08	
Aluminum	0.120	mg/L	0.10	108	70	130	0.7	20	
Arsenic	0.0582	mg/L	0.0010	110	70	130	1.5	20	
Barium	0.103	mg/L	0.10	113	70	130	0.3	20	
Cadmium	0.0546	mg/L	0.010	109	70	130	0.8	20	
Chromium	0.0522	mg/L	0.050	104	70	130	0.3	20	
Copper	0.0475	mg/L	0.010	95	70	130	1.7	20	
Lead	0.0564	mg/L	0.050	111	70	130	0.2	20	
Manganese	0.0545	mg/L	0.010	104	70	130	0.8	20	
Mercury	0.00532	mg/L	0.0010	106	70	130	1.1	20	
Molybdenum	0.0608	mg/L	0.10	111	70	130		20	
Nickel	0.0572	mg/L	0.050	98	70	130	2.4	20	
Silver	0.0153	mg/L	0.010	76	70	130	3.7	20	
Thorium 232	0.0569	mg/L	0.0010	114	70	130	0.4	20	
Uranium	0.150	mg/L	0.00030	115	70	130	0.3	20	
Vanadium	0.0621	mg/L	0.10	107	70	130		20	
Zinc	0.0767	mg/L	0.010	108	70	130	2.7	20	
Sample ID: C09030090-004AMS	Sample Matrix Spike				Run: SUB-C115500			03/04/09 16:22	
Uranium	0.053	mg/L	0.0010	99	70	130			
Sample ID: C09030090-004AMSD	Sample Matrix Spike Duplicate				Run: SUB-C115500			03/04/09 16:29	
Uranium	0.053	mg/L	0.0010	99	70	130	0.1	20	
Method: E200.8								Batch: C_R115550	
Sample ID: LRB	Method Blank				Run: SUB-C115550			03/06/09 00:41	
Manganese	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115550			03/06/09 00:47	
Manganese	0.0479	mg/L	0.0010	96	85	115			
Sample ID: R09020293-015D	Post Digestion Spike				Run: SUB-C115550			03/06/09 04:52	
Manganese	0.129	mg/L	0.010	123	70	130			
Silver	0.0175	mg/L	0.010	87	70	130			
Sample ID: R09020293-015D	Post Digestion Spike Duplicate				Run: SUB-C115550			03/06/09 04:59	
Manganese	0.126	mg/L	0.010	117	70	130	2.3	20	
Silver	0.0174	mg/L	0.010	87	70	130	0.6	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R115667
Sample ID: LRB	Method Blank				Run: SUB-C115667				03/09/09 12:22
Antimony	ND	mg/L	0.0006						
Arsenic	ND	mg/L	5E-05						
Beryllium	ND	mg/L	6E-05						
Boron	0.0005	mg/L	0.0004						
Cadmium	ND	mg/L	4E-05						
Chromium	ND	mg/L	4E-05						
Copper	ND	mg/L	7E-05						
Iron	ND	mg/L	0.0006						
Lead	ND	mg/L	2E-05						
Molybdenum	ND	mg/L	0.0001						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	3E-05						
Silver	ND	mg/L	4E-05						
Strontium	ND	mg/L	3E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	ND	mg/L	0.0002						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115667				03/09/09 12:29
Antimony	0.0481	mg/L	0.0010	96	85	115			
Arsenic	0.0491	mg/L	0.0010	98	85	115			
Beryllium	0.0478	mg/L	0.0010	96	85	115			
Boron	0.0481	mg/L	0.0010	95	85	115			
Cadmium	0.0489	mg/L	0.0010	98	85	115			
Chromium	0.0490	mg/L	0.0010	98	85	115			
Copper	0.0495	mg/L	0.0010	99	85	115			
Iron	1.27	mg/L	0.0010	101	85	115			
Lead	0.0489	mg/L	0.0010	98	85	115			
Molybdenum	0.0485	mg/L	0.0010	97	85	115			
Nickel	0.0496	mg/L	0.0010	99	85	115			
Selenium	0.0497	mg/L	0.0010	99	85	115			
Silver	0.0194	mg/L	0.0010	97	85	115			
Strontium	0.0462	mg/L	0.0010	92	85	115			
Thallium	0.0490	mg/L	0.0010	98	85	115			
Uranium	0.0461	mg/L	0.00030	92	85	115			
Zinc	0.0521	mg/L	0.0010	104	85	115			
Sample ID: R09020293-009D	Post Digestion Spike				Run: SUB-C115667				03/09/09 14:27
Antimony	0.0511	mg/L	0.050	102	70	130			
Arsenic	0.0728	mg/L	0.0010	101	70	130			
Beryllium	0.0454	mg/L	0.010	91	70	130			
Boron	0.110	mg/L	0.10	88	70	130			
Cadmium	0.0497	mg/L	0.010	99	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_R115667	
Sample ID: R09020293-009D	Post Digestion Spike				Run: SUB-C115667			03/09/09 14:27	
Chromium	0.0494	mg/L	0.050	99	70	130			
Copper	0.0488	mg/L	0.010	98	70	130			
Iron	2.59	mg/L	0.030	103	70	130			
Lead	0.0498	mg/L	0.050	100	70	130			
Molybdenum	0.0487	mg/L	0.10	95	70	130			
Nickel	0.0492	mg/L	0.050	98	70	130			
Selenium	0.0532	mg/L	0.0010	106	70	130			
Silver	0.00800	mg/L	0.010	40	70	130			S
Strontium	1.36	mg/L	0.10		70	130			A
Thallium	0.0498	mg/L	0.10	100	70	130			
Uranium	0.0506	mg/L	0.00030	96	70	130			
Zinc	0.0520	mg/L	0.010	101	70	130			
Sample ID: R09020293-009D	Post Digestion Spike Duplicate				Run: SUB-C115667			03/09/09 14:33	
Antimony	0.0519	mg/L	0.050	104	70	130	1.6	20	
Arsenic	0.0731	mg/L	0.0010	102	70	130	0.5	20	
Beryllium	0.0462	mg/L	0.010	92	70	130	1.9	20	
Boron	0.112	mg/L	0.10	91	70	130	1.5	20	
Cadmium	0.0500	mg/L	0.010	100	70	130	0.7	20	
Chromium	0.0494	mg/L	0.050	99	70	130		20	
Copper	0.0489	mg/L	0.010	98	70	130	0.2	20	
Iron	2.57	mg/L	0.030	102	70	130	0.8	20	
Lead	0.0506	mg/L	0.050	101	70	130		20	
Molybdenum	0.0491	mg/L	0.10	96	70	130		20	
Nickel	0.0492	mg/L	0.050	98	70	130		20	
Selenium	0.0535	mg/L	0.0010	107	70	130	0.6	20	
Silver	0.00768	mg/L	0.010	38	70	130		20	S
Strontium	1.36	mg/L	0.10		70	130	0.5	20	A
Thallium	0.0504	mg/L	0.10	101	70	130		20	
Uranium	0.0509	mg/L	0.00030	97	70	130	0.6	20	
Zinc	0.0519	mg/L	0.010	101	70	130	0.1	20	
Sample ID: C09030226-001CMS4	Post Digestion Spike				Run: SUB-C115667			03/10/09 07:08	
Antimony	0.0546	mg/L	0.050	109	70	130			
Arsenic	0.0529	mg/L	0.0010	100	70	130			
Beryllium	0.0341	mg/L	0.010	68	70	130			S
Boron	0.147	mg/L	0.10	57	70	130			S
Cadmium	0.0493	mg/L	0.010	99	70	130			
Chromium	0.0481	mg/L	0.050	93	70	130			
Copper	0.0484	mg/L	0.010	97	70	130			
Iron	1.35	mg/L	0.030	102	70	130			
Lead	0.0507	mg/L	0.050	101	70	130			
Molybdenum	0.0506	mg/L	0.10	89	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R115667
Sample ID: C09030226-001CMS4	Post Digestion Spike				Run: SUB-C115667				03/10/09 07:08
Nickel	0.0481	mg/L	0.050	95	70	130			
Selenium	0.0529	mg/L	0.0010	106	70	130			
Silver	0.0112	mg/L	0.010	56	70	130			S
Strontium	1.24	mg/L	0.10		70	130			A
Thallium	0.0504	mg/L	0.10	101	70	130			
Uranium	0.0500	mg/L	0.00030	97	70	130			
Zinc	0.0521	mg/L	0.010	102	70	130			
Sample ID: C09030226-001CMSD4	Post Digestion Spike Duplicate				Run: SUB-C115667				03/10/09 07:14
Antimony	0.0543	mg/L	0.050	109	70	130	0.4	20	
Arsenic	0.0531	mg/L	0.0010	100	70	130	0.4	20	
Beryllium	0.0342	mg/L	0.010	68	70	130	0.2	20	S
Boron	0.147	mg/L	0.10	58	70	130	0.1	20	S
Cadmium	0.0492	mg/L	0.010	98	70	130	0.1	20	
Chromium	0.0482	mg/L	0.050	94	70	130		20	
Copper	0.0480	mg/L	0.010	96	70	130	0.7	20	
Iron	1.30	mg/L	0.030	98	70	130	3.5	20	
Lead	0.0506	mg/L	0.050	101	70	130	0.1	20	
Molybdenum	0.0497	mg/L	0.10	87	70	130		20	
Nickel	0.0477	mg/L	0.050	94	70	130		20	
Selenium	0.0507	mg/L	0.0010	101	70	130	4.2	20	
Silver	0.0118	mg/L	0.010	59	70	130	5.3	20	S
Strontium	1.25	mg/L	0.10		70	130	0.6	20	A
Thallium	0.0503	mg/L	0.10	101	70	130		20	
Uranium	0.0499	mg/L	0.00030	97	70	130	0.1	20	
Zinc	0.0520	mg/L	0.010	102	70	130	0.1	20	
Method: E200.8									Batch: C_R115711
Sample ID: LRB	Method Blank				Run: SUB-C115711				03/10/09 12:30
Beryllium	ND	mg/L	6E-05						
Molybdenum	ND	mg/L	4E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C115711				03/10/09 12:37
Beryllium	0.0517	mg/L	0.0010	103	85	115			
Molybdenum	0.0499	mg/L	0.0010	100	85	115			
Sample ID: C09030221-002BMS4	Post Digestion Spike				Run: SUB-C115711				03/11/09 04:41
Beryllium	0.238	mg/L	0.010	95	70	130			
Molybdenum	0.264	mg/L	0.10	104	70	130			
Sample ID: C09030221-002BMSD4	Post Digestion Spike Duplicate				Run: SUB-C115711				03/11/09 04:48
Beryllium	0.236	mg/L	0.010	95	70	130	0.7	20	
Molybdenum	0.263	mg/L	0.10	104	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Batch: B_37498
Sample ID: MB-37498	Method Blank				Run: SUB-B125567				03/02/09 10:54
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-37498	Laboratory Fortified Blank				Run: SUB-B125567				03/02/09 10:56
Mercury	0.0019	mg/L	0.0010	97	85	115			
Sample ID: B09022083-001JMS	Sample Matrix Spike				Run: SUB-B125567				03/02/09 11:05
Mercury	0.0020	mg/L	0.0010	100	70	130			
Sample ID: B09022083-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-B125567				03/02/09 11:08
Mercury	0.0020	mg/L	0.0010	99	70	130	1	30	
Sample ID: B09022084-003EMS	Sample Matrix Spike				Run: SUB-B125567				03/02/09 11:34
Mercury	0.0019	mg/L	0.0010	95	70	130			
Sample ID: B09022084-003EMSD	Sample Matrix Spike Duplicate				Run: SUB-B125567				03/02/09 11:36
Mercury	0.0020	mg/L	0.0010	95	70	130	0.5	30	
Method: E245.1									Batch: B_37499
Sample ID: MB-37499	Method Blank				Run: SUB-B125469				02/27/09 16:05
Mercury	ND	mg/L	5E-05						
Sample ID: LFB-37499	Laboratory Fortified Blank				Run: SUB-B125469				02/27/09 16:07
Mercury	0.0018	mg/L	0.0010	91	85	115			
Sample ID: R09020293-009J	Sample Matrix Spike				Run: SUB-B125469				02/27/09 16:12
Mercury	0.0019	mg/L	0.0010	88	70	130			
Sample ID: R09020293-009J	Sample Matrix Spike Duplicate				Run: SUB-B125469				02/27/09 16:14
Mercury	0.0018	mg/L	0.0010	83	70	130	5.5	30	
Method: E245.1									Analytical Run: SUB-B125469
Sample ID: QCS	Initial Calibration Verification Standard								02/27/09 09:13
Mercury	0.0019	mg/L	0.0010	96	90	110			
Method: E245.1									Analytical Run: SUB-B125567
Sample ID: QCS	Initial Calibration Verification Standard								03/02/09 10:47
Mercury	0.0018	mg/L	0.0010	90	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R39724
Sample ID: LFB0902255159-3	Laboratory Fortified Blank				Run: DIONEX_090225A				02/25/09 21:06
Chloride	4.59	mg/L	0.50	92	90	110			
Fluoride	1.89	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N	2.21	mg/L	0.10	88	90	110			S
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	90	110			
Sulfate	13.6	mg/L	1.0	91	90	110			
Sample ID: LFB0902255159-4	Laboratory Fortified Blank				Run: DIONEX_090225A				02/25/09 21:22
Chloride	4.56	mg/L	0.50	91	90	110			
Fluoride	1.92	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N	2.20	mg/L	0.10	88	90	110			S
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	13.5	mg/L	1.0	90	90	110			
Sample ID: R09020255-001BMS	Sample Matrix Spike				Run: DIONEX_090225A				02/25/09 21:55
Chloride	8.88	mg/L	0.50	95	80	120			
Fluoride	2.33	mg/L	0.10	94	80	120			
Nitrogen, Nitrate as N	2.50	mg/L	0.10	94	80	120			
Nitrogen, Nitrite as N	2.45	mg/L	0.10	98	80	120			
Sulfate	109	mg/L	1.0		80	120			A
Sample ID: R09020255-001BMSD	Sample Matrix Spike Duplicate				Run: DIONEX_090225A				02/25/09 22:11
Chloride	8.76	mg/L	0.50	92	80	120	1.4	10	
Fluoride	2.28	mg/L	0.10	91	80	120	2.2	10	
Nitrogen, Nitrate as N	2.43	mg/L	0.10	92	80	120	2.8	10	
Nitrogen, Nitrite as N	2.38	mg/L	0.10	95	80	120	2.9	10	
Sulfate	109	mg/L	1.0		80	120	0.1	10	A
Sample ID: R09020293-004AMS	Sample Matrix Spike				Run: DIONEX_090225A				02/26/09 01:28
Chloride	239	mg/L	5.4	85	80	120			
Fluoride	89.3	mg/L	0.56	86	80	120			
Nitrogen, Nitrate as N	110	mg/L	1.3	88	80	120			
Nitrogen, Nitrite as N	120	mg/L	2.9	96	80	120			
Sulfate	1940	mg/L	3.4	92	80	120			
Sample ID: R09020293-004AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_090225A				02/26/09 01:45
Chloride	256	mg/L	5.4	91	80	120	6.5	10	
Fluoride	94.8	mg/L	0.56	91	80	120	5.9	10	
Nitrogen, Nitrate as N	116	mg/L	1.3	93	80	120	5.4	10	
Nitrogen, Nitrite as N	126	mg/L	2.9	101	80	120	5.4	10	
Sulfate	1980	mg/L	3.4	98	80	120	2.1	10	
Sample ID: R09020293-008AMS	Sample Matrix Spike				Run: DIONEX_090225A				02/26/09 04:45
Chloride	249	mg/L	5.4	85	80	120			
Fluoride	93.3	mg/L	0.56	90	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: RESPEC Inc
Project: Edgemont

Report Date: 04/14/09
Work Order: R09020293

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0								Batch: R39724	
Sample ID: R09020293-008AMS	Sample Matrix Spike				Run: DIONEX_090225A			02/26/09 04:45	
Nitrogen, Nitrate as N	114	mg/L	1.3	91	80	120			
Nitrogen, Nitrite as N	125	mg/L	2.9	100	80	120			
Sulfate	1120	mg/L	3.4	83	80	120			
Sample ID: R09020293-008AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_090225A			02/26/09 05:02	
Chloride	238	mg/L	5.4	81	80	120	4.3	10	
Fluoride	88.9	mg/L	0.56	86	80	120	4.8	10	
Nitrogen, Nitrate as N	109	mg/L	1.3	87	80	120	4.4	10	
Nitrogen, Nitrite as N	119	mg/L	2.9	95	80	120	5	10	
Sulfate	1080	mg/L	3.4	78	80	120	3.1	10	S
Sample ID: R09020293-012AMS	Sample Matrix Spike				Run: DIONEX_090225A			02/26/09 08:02	
Chloride	246	mg/L	5.4	90	80	120			
Fluoride	93.2	mg/L	0.56	90	80	120			
Nitrogen, Nitrate as N	114	mg/L	1.3	91	80	120			
Nitrogen, Nitrite as N	124	mg/L	2.9	99	80	120			
Sulfate	1060	mg/L	3.4	83	80	120			
Sample ID: R09020293-012AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_090225A			02/26/09 08:19	
Chloride	236	mg/L	5.4	86	80	120	4.1	10	
Fluoride	88.4	mg/L	0.56	85	80	120	5.3	10	
Nitrogen, Nitrate as N	108	mg/L	1.3	87	80	120	5.3	10	
Nitrogen, Nitrite as N	118	mg/L	2.9	94	80	120	5.2	10	
Sulfate	1040	mg/L	3.4	80	80	120	2	10	
Method: E300.0								Batch: R39736	
Sample ID: LFB0902262544-3	Laboratory Fortified Blank				Run: DIONEX_090226A			02/26/09 19:28	
Sulfate	14.2	mg/L	1.0	94	90	110			
Sample ID: LFB0902262544-4	Laboratory Fortified Blank				Run: DIONEX_090226A			02/26/09 19:44	
Sulfate	13.3	mg/L	1.0	88	90	110			S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Scott Env.	Dewey Burdock – Powertech	State:	Yes ☐ No ☐
Report Mail Address:	**Contact Name:** Phone/Fax:	Email:	Sampler: (Please Print)
RESPEC	Allen Scott 605-673-4859		
Invoice Address:	**Invoice Contact & Phone:**	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____
☐ A2LA ☐ EDD/EDT(Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

ANALYSIS REQUESTED: As Per Quote

Number of Containers; Sample Type: A W S V B O Air Water Soils/Solids Vegetation Bioassay Other; SEE ATTACHED; Normal Turnaround (TAT)

RUSH — Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:
Cooler ID(s):
Receipt Temp 3.8 °C
On Ice: (Yes) No
Custody Seal Y N
Bottles/Coolers B C
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	LABORATORY USE ONLY
1	DB Blank01	2-24-09	18:00	water	R0902093-001
2	Putnam GW704	2-24-09	9:40	"	002
3	GW 3026	2-24-09	11:35	"	003
4	GW698	2-24-09	12:10	"	004
5	GW698	2-24-09	12:15	"	005
6	GW688	2-24-09	13:23	"	006
7	GW680	2-24-09	13:35	"	007
8	GW622	2-24-09	15:31	"	008
9	GW615	2-24-09	15:45	"	009
10					010

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	2-25-09 1100				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Troiland	Date/Time: 2-25-09 1100	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Scott Env.	Dewey Burdock - Powertech	State:	Yes ☐ No ☐
Report Mail Address:	**Contact Name:**	**Phone/Fax:**	**Email:** / **Sampler: (Please Print)**
RESPEC	Allen Scott	605-673-4859	
Invoice Address:	**Invoice Contact & Phone:**	**Purchase Order:**	**Quote/Bottle Order:**

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED: as per Quote

RUSH: Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:
Cooler ID(s):
Receipt Temp 3.8 °C
On Ice: Yes No
Custody Seal Y N
Bottles/Coolers B C
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other)	SEE ATTACHED	Normal Turnaround (TAT)	LABORATORY USE ONLY
1	GW 689	2-24-09	16:04	water			L09020293-011
2	GW 681	2-24-09	16:18	"			012
3	GW 697	2-24-09	16:45	"			013
4	GW 695	2-24-09	16:56	"			014
5	GW 694	2-24-09	17:15	"			015
6	GW 696	2-24-09	17:31	"			016
7							
8							
9							
10							

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	2-23-09 11:00				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Troiland	Date/Time: 2-25-09 1100	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

** REPORT **

RESPEC Inc
Cory Foreman
3824 Jet Dr
Rapid City SD 57701

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

ANALYTICAL SUMMARY REPORT

February 27, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No. R10010180

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 1/19/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10010180-001	DB-09-21-01	01/18/10 0:00	01/19/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10010180-002	DB-09-21-02	01/18/10 0:00	01/19/10	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of your sample analysis.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by applicable quality assurance samples throughout the test. Where applicable, the results of these quality assurance samples will be included with your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please feel free to call (888)672-1225, (605)342-1225 or llarson@energylab.com.

Sincerely,

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

ANALYTICAL SUMMARY REPORT

Linda Larson
Branch Manager
Energy Laboratories, Inc.
Rapid City, SD

Report Approved By: Linda K. Larson Branch Manager

Digitally signed by Linda Larson
Date: 2010.03.09 13:22:54 -07:00

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10010180

Report Date: 02/27/10

CASE NARRATIVE

Tests Associated with Analyst identified as ELI-B were subcontracted to Energy Laboratories Billings Branch, EPA Number MT00005.

Tests Associated with Analyst identified as ELI-CA were subcontracted to Energy Laboratories Casper Branch, EPA Number WY00002.
Comments imported for SUBBED Workorder: C10010713
PO210 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences. Please consult with your local regulatory agency prior to using these results for compliance purposes.

PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10010713

Comments
The alkalinity on DB-09-21-01 seems to have some sort of buffering affect. A recheck on the alkalinity resulted in 104 mg/L

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-001
Client Sample ID: DB-09-21-01

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	40	mg/L		5		1	A2320 B	01/26/10 15:01/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	01/26/10 15:01/mb
Bicarbonate as HCO3	44	mg/L		5		1	A2320 B	01/26/10 15:01/mb
Calcium	61	mg/L	D	1		5	E200.7	02/02/10 16:53/eli-c
Chloride	7	mg/L		1		1	E300.0	01/20/10 17:23/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	01/20/10 17:23/jmh
Magnesium	21.7	mg/L		0.5		5	E200.7	02/02/10 16:53/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	01/19/10 12:18/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	01/20/10 17:23/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	01/20/10 17:23/jmh
Potassium	13.6	mg/L		0.5		5	E200.7	02/02/10 16:53/eli-c
Sodium	166	mg/L	D	1		5	E200.7	02/02/10 16:53/eli-c
Sulfate	513	mg/L		1		20	E300.0	01/20/10 16:33/jmh
Silica	7.1	mg/L		0.2		5	E200.7	02/02/10 16:53/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1150	umhos/cm		5.0		1	A2510 B	01/21/10 09:16/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	01/25/10 16:00/jmh
pH	9.03	s.u.		0.01		1	A4500-H B	01/22/10 12:07/tb
Sodium Adsorption Ratio (SAR)	4.6	unitless		0.10		1	Calculation	02/05/10 15:38/ADM
Solids, Total Dissolved TDS @ 180 C	770	mg/L		5		1	A2540 C	01/25/10 10:52/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	01/27/10 15:48/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	01/27/10 15:48/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/27/10 15:48/eli-c
Boron	ND	mg/L		0.1		5	E200.7	02/02/10 16:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/27/10 15:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/27/10 15:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/27/10 15:48/eli-c
Iron	ND	mg/L		0.03		5	E200.7	02/02/10 16:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/27/10 15:48/eli-c
Manganese	0.01	mg/L		0.01		1	E200.8	01/27/10 15:48/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/27/10 15:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/27/10 15:48/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/27/10 15:48/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	01/26/10 12:08/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	01/27/10 15:48/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/27/10 15:48/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-001
Client Sample ID: DB-09-21-01

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	01/27/10 15:48/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/27/10 15:48/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/27/10 15:48/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/02/10 04:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	01/26/10 10:32/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	01/26/10 14:36/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.0	pCi/L	U			1	E900.0	02/06/10 01:58/eli-ca
Gross Alpha precision (±)	2.9	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Alpha MDC	4.6	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta	11.3	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta MDC	3.9	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Lead 210	0.3	pCi/L	U			1	E909.0M	02/09/10 11:19/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Polonium 210	0.050	pCi/L	U			1	E912.0	02/19/10 08:46/eli-c
Polonium 210 MDC	0.44	pCi/L				1	E912.0	02/19/10 08:46/eli-c
Polonium 210 precision (±)	0.22	pCi/L				1	E912.0	02/19/10 08:46/eli-c
Radium 226	0.6	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Thorium 230	0.02	pCi/L	U			1	E907.0	01/26/10 09:42/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	01/26/10 09:42/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	01/26/10 09:42/eli-c
Gross Gamma	1100	pCi/L				1	E901.1	01/23/10 20:28/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	01/23/10 20:28/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	1.9	pCi/L	U			1	E909.0M	02/09/10 11:19/eli-c
Lead 210 precision (±)	4.3	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Lead 210 MDC	7.1	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Polonium 210	-0.056	pCi/L	U			1	E912.0	02/17/10 08:48/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND Not detected at the reporting limit
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-001
Client Sample ID: DB-09-21-01

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 precision (±)	0.44	pCi/L				1	E912.0	02/17/10 08:48/eli-c
Polonium 210 MDC	1.2	pCi/L				1	E912.0	02/17/10 08:48/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	02/04/10 08:48/eli-cat
Radium 226 precision (±)	0.03	pCi/L				1	E903.0	02/04/10 08:48/eli-cat
Radium 226 MDC	0.08	pCi/L				1	E903.0	02/04/10 08:48/eli-cat
Thorium 230	-0.1	pCi/L	U			1	E907.0	02/02/10 15:49/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	02/02/10 15:49/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	206	pCi/L		100		1	D5072-92	12/20/09 00:00/ADM
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	01/28/10 16:22/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	01/28/10 16:22/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/28/10 16:22/eli-c
[illegible]	ND	mg/L		0.001		[illegible]	E200.8	01/28/10 16:22/eli-c
Boron	ND	mg/L		0.1		1	E200.8	02/01/10 20:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/28/10 16:22/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/28/10 16:22/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/28/10 16:22/eli-c
Iron	0.10	mg/L		0.03		1	E200.8	02/01/10 20:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/28/10 16:22/eli-c
Manganese	0.02	mg/L		0.01		1	E200.8	01/28/10 16:22/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	01/21/10 14:54/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	01/28/10 16:22/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/28/10 16:22/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/01/10 20:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/01/10 20:32/eli-c
Strontium	2.6	mg/L		0.1		1	E200.8	02/01/10 20:32/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/01/10 20:32/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/01/10 20:32/eli-c
	ND	mg/L		0.01			E200.8	02/01/10 20:32/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.96	%				1	A1030 E	02/05/10 00:00/jmh
Anions	11.7	meq/L				1	A1030 E	02/05/10 00:00/jmh
Cations	12.4	meq/L				1	A1030 E	02/05/10 00:00/jmh
Solids, Total Dissolved Calculated	825	mg/L				1	A1030 E	02/05/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND Not detected at the reporting limit
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-001
Client Sample ID: DB-09-21-01

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	02/05/10 00:00/jmh

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-002
Client Sample ID: DB-09-21-02

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	196	mg/L		5		1	A2320 B	01/26/10 15:08/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	01/26/10 15:08/mb
Bicarbonate as HCO3	239	mg/L		5		1	A2320 B	01/26/10 15:08/mb
Calcium	172	mg/L	D	1		5	E200.7	02/02/10 16:57/eli-c
Chloride	10	mg/L		1		1	E300.0	01/20/10 17:55/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	01/20/10 17:55/jmh
Magnesium	49.0	mg/L		0.5		5	E200.7	02/02/10 16:57/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	01/19/10 12:19/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	01/20/10 17:55/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	01/20/10 17:55/jmh
Potassium	12.4	mg/L		0.5		5	E200.7	02/02/10 16:57/eli-c
Sodium	127	mg/L	D	1		5	E200.7	02/02/10 16:57/eli-c
Sulfate	714	mg/L		1		20	E300.0	01/20/10 17:39/jmh
Silica	9.1	mg/L		0.2		5	E200.7	02/02/10 16:57/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1620	umhos/cm		5.0		1	A2510 B	01/21/10 09:18/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	01/25/10 16:00/jmh
pH	7.63	s.u.		0.01		1	A4500-H B	01/22/10 12:10/tb
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	02/05/10 15:38/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L		5		1	A2540 C	01/25/10 10:53/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	01/27/10 15:54/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	01/27/10 15:54/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/27/10 15:54/eli-c
Boron	ND	mg/L		0.1		5	E200.7	02/02/10 16:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/27/10 15:54/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/27/10 15:54/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/27/10 15:54/eli-c
Iron	ND	mg/L		0.03		5	E200.7	02/02/10 16:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/27/10 15:54/eli-c
Manganese	0.52	mg/L		0.01		1	E200.8	01/27/10 15:54/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/27/10 15:54/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/27/10 15:54/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/27/10 15:54/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	01/26/10 12:15/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	01/27/10 15:54/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/27/10 15:54/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND Not detected at the reporting limit

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-002
Client Sample ID: DB-09-21-02

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0089	mg/L		0.0003		1	E200.8	01/27/10 15:54/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/27/10 15:54/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/27/10 15:54/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/02/10 04:40/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	01/26/10 10:39/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	01/26/10 14:36/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	39.7	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Alpha precision (±)	6.7	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Alpha MDC	7.4	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta	18.3	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta precision (±)	4.0	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Gross Beta MDC	6.2	pCi/L				1	E900.0	02/06/10 01:58/eli-ca
Lead 210	1.1	pCi/L	U			1	E909.0M	02/09/10 11:19/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Polonium 210	0.074	pCi/L	U			1	E912.0	02/19/10 08:46/eli-c
Polonium 210 MDC	1.4	pCi/L				1	E912.0	02/19/10 08:46/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1	E912.0	02/19/10 08:46/eli-c
Radium 226	2.7	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	02/02/10 11:19/eli-c
Thorium 230	0.01	pCi/L	U			1	E907.0	01/26/10 09:42/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	01/26/10 09:42/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	01/26/10 09:42/eli-c
Gross Gamma	820	pCi/L				1	E901.1	01/23/10 20:28/eli-c
Gross Gamma precision (+)	130	pCi/L				1	E901.1	01/23/10 20:28/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	2.6	pCi/L	U			1	E909.0M	02/09/10 11:19/eli-c
Lead 210 precision (±)	4.3	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Lead 210 MDC	7.1	pCi/L				1	E909.0M	02/09/10 11:19/eli-c
Polonium 210	0.12	pCi/L	U			1	E912.0	02/17/10 08:48/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-002
Client Sample ID: DB-09-21-02

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 precision (±)	0.94	pCi/L				1	E912.0	02/17/10 08:48/eli-c
Polonium 210 MDC	2.1	pCi/L				1	E912.0	02/17/10 08:48/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0	02/04/10 08:48/eli-ca
Radium 226 precision (±)	0.04	pCi/L				1	E903.0	02/04/10 08:48/eli-ca
Radium 226 MDC	0.08	pCi/L				1	E903.0	02/04/10 08:48/eli-ca
Thorium 230	0.06	pCi/L	U			1	E907.0	02/02/10 15:49/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	02/02/10 15:49/eli-c
- See Case Narrative regarding Pb210 analysis.								
- See Case Narrative regarding Po210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	270	pCi/L		100		1	D5072-92	12/20/09 00:00/ADM
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	01/28/10 16:28/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	01/28/10 16:28/eli-c
[illegible]	ND	mg/L		0.1		[illegible]	E200.8	01/28/10 16:28/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	01/28/10 16:28/eli-c
Boron	ND	mg/L		0.1		1	E200.8	02/01/10 20:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/28/10 16:28/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/28/10 16:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/28/10 16:28/eli-c
Iron	0.03	mg/L		0.03		1	E200.8	02/01/10 20:38/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/28/10 16:28/eli-c
Manganese	0.54	mg/L		0.01		1	E200.8	01/28/10 16:28/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	01/21/10 14:56/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	01/28/10 16:28/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/28/10 16:28/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	01/28/10 16:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	01/28/10 16:28/eli-c
Strontium	2.4	mg/L		0.1		1	E200.8	01/28/10 16:28/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	01/28/10 16:28/eli-c
	0.0087	mg/L		0.0003			E200.8	01/28/10 16:28/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/28/10 16:28/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.62	%				1	A1030 E	02/05/10 00:00/jmh
Anions	19.1	meq/L				1	A1030 E	02/05/10 00:00/jmh
Cations	18.5	meq/L				1	A1030 E	02/05/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10010180-002
Client Sample ID: DB-09-21-02

Report Date: 02/27/10
Collection Date: 01/18/10
Date Received: 01/19/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
Solids, Total Dissolved Calculated	1230	mg/L				1	A1030 E	02/05/10 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	02/05/10 00:00/jmh

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B								Batch: 100126A-ALK-SEL-W	
Sample ID: LCS1_100126A	Laboratory Control Sample				Run: PH_COND1-R_100126A			01/26/10 14:03	
Alkalinity, Total as CaCO3	984	mg/L	5.0	98	90	110			
Sample ID: MBLK1_100126A	Method Blank				Run: PH_COND1-R_100126A			01/26/10 14:04	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R10010209-001AMS	Sample Matrix Spike				Run: PH_COND1-R_100126A			01/26/10 15:15	
Alkalinity, Total as CaCO3	238	mg/L	5.0	89	80	120			
Sample ID: R10010209-001AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_100126A			01/26/10 15:18	
Alkalinity, Total as CaCO3	238	mg/L	5.0	89	80	120	0	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Batch: 100121_1_COND-PROBE-W	
Sample ID: LCS_COND-1_100121	Laboratory Control Sample				Run: PH_COND2-R_100121A				01/21/10 08:59
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS1-1_100121	Laboratory Control Sample				Run: PH_COND2-R_100121A				01/21/10 09:01
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_100121	Laboratory Control Sample				Run: PH_COND2-R_100121A				01/21/10 09:03
Conductivity @ 25 C	5030	umhos/cm	5.0	101	90	110			
Sample ID: MBLK-1_100121	Method Blank				Run: PH_COND2-R_100121A				01/21/10 09:07
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R10010114-001ADUP	Sample Duplicate				Run: PH_COND2-R_100121A				01/21/10 09:11
Conductivity @ 25 C	5670	umhos/cm	5.0				0	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 100125A-SLDS-TDS-W	
Sample ID: LCS1_100125A	Laboratory Control Sample				Run: BAL-4-R_100125A			01/25/10 10:51	
Solids, Total Dissolved TDS @ 180 C	200	mg/L	10	100	90	110			
Sample ID: MBLK1_100125A	Method Blank				Run: BAL-4-R_100125A			01/25/10 10:51	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	5						
Sample ID: R10010227-001AMS	Sample Matrix Spike				Run: BAL-4-R_100125A			01/25/10 10:59	
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	10	107	80	120			
Sample ID: R10010227-001AMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_100125A			01/25/10 11:00	
Solids, Total Dissolved TDS @ 180 C	2000	mg/L	10	106	80	120	0.1	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B								Batch: 100125-ORP-ISE-W	
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_100125A			01/25/10 16:00	
Oxidation-Reduction Potential	460	mV		97	95	105			
Sample ID: R10010180-001F	Sample Duplicate				Run: PH_COND1-R_100125A			01/25/10 16:00	
Oxidation-Reduction Potential	220	mV					5.2	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B								Batch: C_SE3114-100126A	
Sample ID: MBLK	Method Blank				Run: SUB-C128931			01/26/10 10:25	
Selenium-IV	ND	mg/L	0.0003						
Sample ID: As/Se 1.0ppm-Q 01051	Laboratory Control Sample				Run: SUB-C128931			01/26/10 10:28	
Selenium-IV	0.048	mg/L	0.0010	96	90	110			
Sample ID: R10010180-001E	Sample Matrix Spike				Run: SUB-C128931			01/26/10 10:35	
Selenium-IV	0.050	mg/L	0.0010	100	85	115			
Sample ID: R10010180-001E	Sample Matrix Spike Duplicate				Run: SUB-C128931			01/26/10 10:37	
Selenium-IV	0.048	mg/L	0.0010	97	85	115	3	10	
Method: A3114 B								Batch: C_SE3114-100126B	
Sample ID: MBLK	Method Blank				Run: SUB-C128938			01/26/10 12:01	
Selenium	ND	mg/L	0.0002						
Sample ID: As/Se 1.0ppm-Q 01051	Laboratory Control Sample				Run: SUB-C128938			01/26/10 12:03	
Selenium	0.050	mg/L	0.0010	100	90	110			
Sample ID: R10010180-001E	Sample Matrix Spike				Run: SUB-C128938			01/26/10 12:10	
Selenium	0.051	mg/L	0.0010	103	85	115			
Sample ID: R10010180-001E	Sample Matrix Spike Duplicate				Run: SUB-C128938			01/26/10 12:12	
Selenium	0.051	mg/L	0.0010	103	85	115	0	15	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Batch: 100122_1_PH-W	
Sample ID: LCS_pH-1_100122	Laboratory Control Sample				Run: PH_COND2-R_100122A			01/22/10 11:58	
pH	6.90	s.u.	0.010	101	98.55	101.45			
Sample ID: R10010179-002CDUP	Sample Duplicate				Run: PH_COND2-R_100122A			01/22/10 12:04	
pH	8.07	s.u.	0.010				0	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G								Batch: A2010-01-19_2_NH3_01	
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_100119A			01/19/10 11:06	
Nitrogen, Ammonia as N	0.02	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_100119A			01/19/10 11:29	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	90	90	110			
Sample ID: R10010180-002BMS	Sample Matrix Spike				Run: TECHAA2-R_100119A			01/19/10 12:20	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	74	80	120			S
Sample ID: R10010180-002BMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_100119A			01/19/10 12:21	
Nitrogen, Ammonia as N	0.19	mg/L	0.10	75	80	120	1.1	10	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R129210
Sample ID: MB-100202A	Method Blank				Run: SUB-C129210				02/02/10 14:52
Silicon	0.03	mg/L	0.007						
Boron	0.01	mg/L	0.009						
Calcium	ND	mg/L	0.2						
Iron	ND	mg/L	0.002						
Magnesium	ND	mg/L	0.05						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.3						
Sample ID: LFB-100202A	Laboratory Fortified Blank				Run: SUB-C129210				02/02/10 14:56
Silicon	0.45	mg/L	0.0075	95	85	115			
Boron	1.0	mg/L	0.10	99	85	115			
Calcium	50	mg/L	0.50	99	85	115			
Iron	1.00	mg/L	0.030	100	85	115			
Magnesium	49	mg/L	0.50	99	85	115			
Potassium	44	mg/L	0.50	88	85	115			
Sodium	48	mg/L	0.50	97	85	115			
Silica	0.97	mg/L	0.016	97	85	125			
Sample ID: C10010571-001BMS2	Sample Matrix Spike				Run: SUB-C129210				02/02/10 17:09
Boron	2.03	mg/L	0.10	97	70	130			
Iron	1.99	mg/L	0.030	97	70	130			
Silicon	9.05	mg/L	0.10		70	130			A
Calcium	241	mg/L	1.0	99	70	130			
Magnesium	124	mg/L	1.0	97	70	130			
Potassium	101	mg/L	1.0	80	70	130			
Sodium	141	mg/L	1.0	99	70	130			
Sample ID: C10010571-001BMSD2	Sample Matrix Spike Duplicate				Run: SUB-C129210				02/02/10 17:13
Boron	2.08	mg/L	0.10	99	70	130	2.5	20	
Iron	1.99	mg/L	0.030	97	70	130	0	20	
Silicon	9.23	mg/L	0.10		70	130	1.9	20	A
Calcium	241	mg/L	1.0	99	70	130	0	20	
Magnesium	123	mg/L	1.0	96	70	130	0.8	20	
Potassium	101	mg/L	1.0	80	70	130	0.1	20	
Sodium	144	mg/L	1.0	102	70	130	2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R129009
Sample ID: LRB	Method Blank				Run: SUB-C129009				01/27/10 12:26
Aluminum	ND	mg/L	0.002						
Arsenic	ND	mg/L	0.0003						
Barium	ND	mg/L	3E-05						
Cadmium	ND	mg/L	6E-05						
Chromium	ND	mg/L	8E-05						
Copper	ND	mg/L	4E-05						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	4E-05						
Molybdenum	ND	mg/L	4E-05						
Nickel	ND	mg/L	9E-05						
Silver	ND	mg/L	2E-05						
Thorium 232	0.0002	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Vanadium	ND	mg/L	9E-05						
Zinc	0.0002	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C129009				01/27/10 12:47
Aluminum	0.0541	mg/L	0.0022	108	85	115			
Arsenic	0.0541	mg/L	0.0010	108	85	115			
Barium	0.0560	mg/L	0.0010	112	85	115			
Cadmium	0.0543	mg/L	0.0010	109	85	115			
Chromium	0.0534	mg/L	0.0010	107	85	115			
Copper	0.0536	mg/L	0.0010	107	85	115			
Lead	0.0546	mg/L	0.0010	109	85	115			
Manganese	0.0536	mg/L	0.0010	107	85	115			
Mercury	0.00557	mg/L	0.0010	111	85	115			
Molybdenum	0.0546	mg/L	0.0010	109	85	115			
Nickel	0.0531	mg/L	0.0010	106	85	115			
Silver	0.0209	mg/L	0.0010	105	85	115			
Thorium 232	0.0510	mg/L	0.0010	102	85	115			
Uranium	0.0537	mg/L	0.00030	107	85	115			
Vanadium	0.0532	mg/L	0.0010	106	85	115			
Zinc	0.0540	mg/L	0.0010	107	85	115			
Sample ID: R10010180-002C	Post Digestion Spike				Run: SUB-C129009				01/27/10 16:01
Aluminum	0.0588	mg/L	0.0010	114	70	130			
Arsenic	0.0606	mg/L	0.0010	115	70	130			
Barium	0.0731	mg/L	0.0010	118	70	130			
Cadmium	0.0547	mg/L	0.010	109	70	130			
Chromium	0.0517	mg/L	0.050	102	70	130			
Copper	0.0524	mg/L	0.010	102	70	130			
Lead	0.0570	mg/L	0.050	114	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R129009
Sample ID: R10010180-002C	Post Digestion Spike				Run: SUB-C129009				01/27/10 16:01
Manganese	0.564	mg/L	0.010		70	130			A
Mercury	0.00581	mg/L	0.0010	116	70	130			
Molybdenum	0.0582	mg/L	0.0010	115	70	130			
Nickel	0.0539	mg/L	0.050	103	70	130			
Silver	0.0189	mg/L	0.010	94	70	130			
Thorium 232	0.0630	mg/L	0.0010	126	70	130			
Uranium	0.0724	mg/L	0.00030	127	70	130			
Vanadium	0.0552	mg/L	0.0010	108	70	130			
Zinc	0.0539	mg/L	0.010	101	70	130			
Sample ID: R10010180-002C	Post Digestion Spike Duplicate				Run: SUB-C129009				01/27/10 16:08
Aluminum	0.0579	mg/L	0.0010	112	70	130	1.5	20	
Arsenic	0.0605	mg/L	0.0010	115	70	130	0.2	20	
Barium	0.0735	mg/L	0.0010	119	70	130	0.6	20	
Cadmium	0.0549	mg/L	0.010	110	70	130	0.4	20	
Chromium	0.0520	mg/L	0.050	102	70	130	0.5	20	
Copper	0.0519	mg/L	0.010	101	70	130	0.9	20	
Lead	0.0571	mg/L	0.050	114	70	130	0.2	20	
Manganese	0.564	mg/L	0.010		70	130	0.1	20	A
Mercury	0.00592	mg/L	0.0010	118	70	130	1.9	20	
Molybdenum	0.0587	mg/L	0.0010	116	70	130	0.9	20	
Nickel	0.0534	mg/L	0.050	102	70	130	1	20	
Silver	0.0188	mg/L	0.010	94	70	130	0.4	20	
Thorium 232	0.0629	mg/L	0.0010	126	70	130	0.1	20	
Uranium	0.0726	mg/L	0.00030	127	70	130	0.2	20	
Vanadium	0.0548	mg/L	0.0010	107	70	130	0.7	20	
Zinc	0.0529	mg/L	0.010	99	70	130	1.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R129058
Sample ID: LRB	Method Blank				Run: SUB-C129058				01/28/10 14:40
Antimony	0.0001	mg/L	0.0001						
Arsenic	ND	mg/L	0.0003						
Barium	ND	mg/L	3E-05						
Beryllium	ND	mg/L	6E-05						
Cadmium	ND	mg/L	6E-05						
Chromium	ND	mg/L	8E-05						
Copper	5E-05	mg/L	4E-05						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	5E-05						
Molybdenum	ND	mg/L	4E-05						
Nickel	ND	mg/L	9E-05						
Selenium	ND	mg/L	0.001						
Silver	4E-05	mg/L	2E-05						
Strontium	ND	mg/L	2E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Zinc	0.0008	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C129058				01/28/10 14:47
Antimony	0.0508	mg/L	0.0010	101	85	115			
Arsenic	0.0511	mg/L	0.0010	102	85	115			
Barium	0.0509	mg/L	0.0010	102	85	115			
Beryllium	0.0511	mg/L	0.0010	102	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0511	mg/L	0.0010	102	85	115			
Copper	0.0515	mg/L	0.0010	103	85	115			
Lead	0.0509	mg/L	0.0010	102	85	115			
Manganese	0.0506	mg/L	0.0010	101	85	115			
Molybdenum	0.0515	mg/L	0.0010	103	85	115			
Nickel	0.0510	mg/L	0.0010	102	85	115			
Selenium	0.0508	mg/L	0.0014	102	85	115			
Silver	0.0204	mg/L	0.0010	102	85	115			
Strontium	0.0501	mg/L	0.0010	100	85	115			
Thallium	0.0497	mg/L	0.0010	99	85	115			
Uranium	0.0498	mg/L	0.00030	100	85	115			
Zinc	0.0521	mg/L	0.0010	103	85	115			
Sample ID: R10010180-002D	Post Digestion Spike				Run: SUB-C129058				01/28/10 16:35
Antimony	0.0564	mg/L	0.050	113	70	130			
Arsenic	0.0550	mg/L	0.0010	103	70	130			
Barium	0.0654	mg/L	0.0010	103	70	130			
Beryllium	0.0441	mg/L	0.010	88	70	130			
Cadmium	0.0489	mg/L	0.010	98	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R129058
Sample ID: R10010180-002D	Post Digestion Spike				Run: SUB-C129058				01/28/10 16:35
Chromium	0.0491	mg/L	0.0010	98	70	130			
Copper	0.0458	mg/L	0.010	89	70	130			
Lead	0.0514	mg/L	0.050	103	70	130			
Manganese	0.582	mg/L	0.010		70	130			A
Molybdenum	0.0515	mg/L	0.0010	101	70	130			
Nickel	0.0458	mg/L	0.0010	87	70	130			
Selenium	0.0517	mg/L	0.0010	103	70	130			
Silver	0.00941	mg/L	0.0010	47	70	130			S
Strontium	2.42	mg/L	0.10		70	130			A
Thallium	0.0491	mg/L	0.0010	98	70	130			
Uranium	0.0621	mg/L	0.00030	107	70	130			
Zinc	0.0483	mg/L	0.010	93	70	130			
Sample ID: R10010180-002D	Post Digestion Spike Duplicate				Run: SUB-C129058				01/28/10 16:42
Antimony	0.0565	mg/L	0.050	113	70	130	0.2	20	
Arsenic	0.0556	mg/L	0.0010	105	70	130	1.1	20	
Barium	0.0655	mg/L	0.0010	104	70	130	0.3	20	
Beryllium	0.0448	mg/L	0.010	90	70	130	1.7	20	
Cadmium	0.0496	mg/L	0.010	99	70	130	1.5	20	
Chromium	0.0491	mg/L	0.0010	98	70	130	0	20	
Copper	0.0466	mg/L	0.010	91	70	130	1.8	20	
Lead	0.0514	mg/L	0.050	103	70	130	0.1	20	
Manganese	0.578	mg/L	0.010		70	130	0.7	20	A
Molybdenum	0.0524	mg/L	0.0010	103	70	130	1.8	20	
Nickel	0.0473	mg/L	0.0010	90	70	130	3.2	20	
Selenium	0.0513	mg/L	0.0010	103	70	130	0.7	20	
Silver	0.00920	mg/L	0.0010	46	70	130	2.3	20	S
Strontium	2.43	mg/L	0.10		70	130	0.3	20	A
Thallium	0.0495	mg/L	0.0010	99	70	130	0.9	20	
Uranium	0.0625	mg/L	0.00030	108	70	130	0.6	20	
Zinc	0.0489	mg/L	0.010	94	70	130	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: SUB-C129168	
Sample ID: ICV	Initial Calibration Verification Standard							02/01/10 13:08	
Uranium	0.0495	mg/L	0.00030	99	90	110			
Method: E200.8								Batch: C_25076	
Sample ID: MB-25076	Method Blank				Run: SUB-C129168			02/02/10 00:36	
Uranium	0.01	mg/L	6E-05						
Sample ID: LCS2-25076	Laboratory Control Sample				Run: SUB-C129168			02/02/10 00:40	
Uranium	0.109	mg/L	0.00030	109	85	115			
Sample ID: R10010180-002I	Post Digestion Spike				Run: SUB-C129168			02/02/10 04:44	
Uranium	0.0520	mg/L	0.00030	104	70	130			
Sample ID: R10010180-002I	Post Digestion Spike Duplicate				Run: SUB-C129168			02/02/10 05:05	
Uranium	0.0519	mg/L	0.00030	104	70	130	0.1	20	
Method: E200.8								Batch: C_R129172	
Sample ID: LRB	Method Blank				Run: SUB-C129172			02/01/10 13:36	
Boron	0.0008	mg/L	0.0004						
Iron	ND	mg/L	0.0006						
Selenium	ND	mg/L	3E-05						
Silver	0.0001	mg/L	4E-05						
Strontium	ND	mg/L	3E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	3E-05						
Zinc	0.0009	mg/L	0.0002						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C129172			02/01/10 13:42	
Boron	0.0524	mg/L	0.0010	98	85	115			
Iron	1.28	mg/L	0.0010	102	85	115			
Selenium	0.0508	mg/L	0.0010	102	85	115			
Silver	0.0202	mg/L	0.0010	101	85	115			
Strontium	0.0493	mg/L	0.0010	98	85	115			
Thallium	0.0507	mg/L	0.0010	101	85	115			
Uranium	0.0487	mg/L	0.00030	97	85	115			
Zinc	0.0539	mg/L	0.0010	105	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Batch: B_44007
Sample ID: MB-44007	Method Blank				Run: SUB-B142124				01/21/10 14:42
Mercury	ND	mg/L	5E-05						
Sample ID: LCS-44007	Laboratory Control Sample				Run: SUB-B142124				01/21/10 14:44
Mercury	0.0019	mg/L	0.0010	94	85	115			
Sample ID: B10011137-001CMS	Sample Matrix Spike				Run: SUB-B142124				01/21/10 14:48
Mercury	0.0019	mg/L	0.0010	96	70	130			
Sample ID: B10011137-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-B142124				01/21/10 14:50
Mercury	0.0019	mg/L	0.0010	97	70	130	0.5	30	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R44459
Sample ID: LFB011910-10	Laboratory Fortified Blank				Run: DIONEX_100120A				01/20/10 16:17
Chloride	4.92	mg/L	0.50	98	90	110			
Fluoride	2.05	mg/L	0.10	103	90	110			
Nitrogen, Nitrate as N	2.38	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N	2.60	mg/L	0.10	104	90	110			
Sulfate	14.7	mg/L	1.0	98	90	110			
Sample ID: R10010180-001AMS	Sample Matrix Spike				Run: DIONEX_100120A				01/20/10 16:50
Chloride	107	mg/L	2.2	95	80	120			
Fluoride	41.9	mg/L	0.22	98	80	120			
Nitrogen, Nitrate as N	48.0	mg/L	0.50	96	80	120			
Nitrogen, Nitrite as N	53.3	mg/L	1.2	107	80	120			
Sulfate	754	mg/L	1.3	81	80	120			
Sample ID: R10010180-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_100120A				01/20/10 17:06
Chloride	108	mg/L	2.2	96	80	120	1	10	
Fluoride	42.3	mg/L	0.22	99	80	120	1.1	10	
Nitrogen, Nitrate as N	48.2	mg/L	0.50	96	80	120	0.5	10	
Nitrogen, Nitrite as N	53.5	mg/L	1.2	107	80	120	0.3	10	
Sulfate	757	mg/L	1.3	82	80	120	0.4	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0827
Sample ID: MB-GrAB-0827	Method Blank				Run: SUB-C129405				02/05/10 11:47
Gross Alpha	-0.7	pCi/L							U
Gross Alpha precision (±)	0.8	pCi/L							
Gross Alpha MDC	0.9	pCi/L							
Gross Beta	-5	pCi/L							U
Gross Beta precision (±)	2	pCi/L							
Gross Beta MDC	2	pCi/L							
Sample ID: Th230-GrAB-0827	Laboratory Control Sample				Run: SUB-C129405				02/05/10 11:47
Gross Alpha	100	pCi/L		99	70	130			
Sample ID: Cs137-GrAB-0827	Laboratory Control Sample				Run: SUB-C129405				02/05/10 11:47
Gross Beta	74	pCi/L		87	70	130			
Sample ID: C10010313-009AMS	Sample Matrix Spike				Run: SUB-C129405				02/05/10 11:48
Gross Alpha	100	pCi/L		101	70	130			
Sample ID: C10010313-009AMSD	Sample Matrix Spike Duplicate				Run: SUB-C129405				02/05/10 11:48
Gross Alpha	100	pCi/L		104	70	130	2.6	17	
Sample ID: C10010313-009AMS	Sample Matrix Spike				Run: SUB-C129405				02/05/10 11:48
Gross Beta	96	pCi/L		111	70	130			
Sample ID: C10010313-009AMSD	Sample Matrix Spike Duplicate				Run: SUB-C129405				02/06/10 01:58
Gross Beta	88	pCi/L		102	70	130	8.7	16.4	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R128951
Sample ID: LCS-R128951	Laboratory Control Sample				Run: SUB-C128951				01/23/10 20:28
Americium 241	730	pCi/L	20	83	70	130			
Barium 133	550	pCi/L	20	98	70	130			
Cesium 137	890	pCi/L	20	97	70	130			
Potassium 40	2700	pCi/L	20	82	70	130			
Sample ID: MB-R128951	Method Blank				Run: SUB-C128951				01/23/10 20:28
Gross Gamma	ND	pCi/L							U
Sample ID: R10010180-002H	Sample Duplicate				Run: SUB-C128951				01/23/10 20:28
Gross Gamma	830	pCi/L					1.3	30	
Gross Gamma precision (±)	130	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4321
Sample ID: C10010728-001DMS	Sample Matrix Spike				Run: SUB-C129197				02/02/10 12:51
Radium 226	18.2	pCi/L		91	70	130			
Sample ID: C10010728-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C129197				02/02/10 12:51
Radium 226	17.1	pCi/L		83	70	130	6.6	23.7	
Sample ID: MB-RA226-4321	Method Blank				Run: SUB-C129197				02/02/10 14:22
Radium 226	-0.07	pCi/L							U
Radium 226 precision (±)	0.09	pCi/L							
Radium 226 MDC	0.2	pCi/L							
Sample ID: LCS-RA226-4321	Laboratory Control Sample				Run: SUB-C129197				02/02/10 14:22
Radium 226	9.1	pCi/L		117	70	130			
Method: E903.0									Batch: C_R129243
Sample ID: C10010546-012AMS	Sample Matrix Spike				Run: SUB-C129243				02/03/10 13:28
Radium 226	8.6	pCi/g-dry		113	70	130			
Sample ID: C10010546-012AMSD	Sample Matrix Spike Duplicate				Run: SUB-C129243				02/03/10 13:28
Radium 226	8.0	pCi/g-dry		102	70	130	7.5	24.2	
Sample ID: LCS-25024	Laboratory Control Sample				Run: SUB-C129243				02/03/10 13:28
Radium 226	1.7	pCi/g-dry		112	70	130			
Sample ID: MB-25024	Method Blank				Run: SUB-C129243				02/03/10 13:28
Radium 226	-0.0003	pCi/g-dry							U
Radium 226 precision (±)	0.0002	pCi/g-dry							
Radium 226 MDC	0.0004	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0								Batch: C_RA-TH-ISO-1079	
Sample ID: LCS-RA-TH-ISO-1079	Laboratory Control Sample				Run: SUB-C129046			01/26/10 09:42	
Thorium 230	5.2	pCi/L		94	70	130			
Sample ID: C10010532-002AMS	Sample Matrix Spike				Run: SUB-C129046			01/26/10 09:42	
Thorium 230	11	pCi/L		87	70	130			
Sample ID: C10010532-002AMSD	Sample Matrix Spike Duplicate				Run: SUB-C129046			01/26/10 09:42	
Thorium 230	14	pCi/L		108	70	130	22	44.5	
Sample ID: MB-RA-TH-ISO-1079	Method Blank				Run: SUB-C129046			01/26/10 09:42	
Thorium 230	0.02	pCi/L							U
Thorium 230 MDC	0.1	pCi/L							
Thorium 230 precision (±)	0.07	pCi/L							
Method: E907.0								Batch: C_R129307	
Sample ID: LCS-25076	Laboratory Control Sample				Run: SUB-C129307			02/02/10 15:49	
Thorium 230	5.8	pCi/L		120	70	130			
Sample ID: MB-25076	Method Blank				Run: SUB-C129307			02/02/10 15:49	
Thorium 230	-0.1	pCi/L							U
Thorium 230 MDC	0.2	pCi/L							
Thorium 230 precision (±)	0.10	pCi/L							
Sample ID: TAP WATER-MS	Sample Matrix Spike				Run: SUB-C129307			02/02/10 15:49	
Thorium 230	5.2	pCi/L		101	70	130			
Sample ID: TAP WATER-MSD	Sample Matrix Spike Duplicate				Run: SUB-C129307			02/02/10 15:49	
Thorium 230	5.9	pCi/L		114	70	130	14	35.3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_PB-210-0652
Sample ID: C09071013-004DMS	Sample Matrix Spike				Run: SUB-C129676				02/09/10 11:19
Lead 210	220	pCi/L		95	70	130			
Sample ID: C09071013-004DMSD	Sample Matrix Spike Duplicate				Run: SUB-C129676				02/09/10 11:19
Lead 210	260	pCi/L		118	70	130	21	17.3	R
- The RPD for the MSD is high. The individual spike recoveries are within range, the MB is acceptable, and the LCS is within range, therefore the batch is approved.									
Sample ID: MB-PB-210-0652	Method Blank				Run: SUB-C129676				02/09/10 11:19
Lead 210	0.4	pCi/L							U
Lead 210 precision (±)	3	pCi/L							
Lead 210 MDC	6	pCi/L							
Sample ID: LCS-PB-210-0652	Laboratory Control Sample				Run: SUB-C129676				02/09/10 11:19
Lead 210	120	pCi/L		103	70	130			
Method: E909.0M									Batch: C_25076
Sample ID: C10010532-003DMS	Sample Matrix Spike				Run: SUB-C129677				02/09/10 11:19
Lead 210	93	pCi/L		98	70	130			
Sample ID: C10010532-003DMSD	Sample Matrix Spike Duplicate				Run: SUB-C129677				02/09/10 11:19
Lead 210	98	pCi/L		104	70	130	5.8	16.6	
Sample ID: MB-25076	Method Blank				Run: SUB-C129677				02/09/10 11:19
Lead 210	5	pCi/L							U
Lead 210 precision (±)	10	pCi/L							
Lead 210 MDC	20	pCi/L							
Sample ID: LCS-25076	Laboratory Control Sample				Run: SUB-C129677				02/09/10 11:19
Lead 210	490	pCi/L		86	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0									Batch: C_PO210-0281
Sample ID: C10020209-003DMS	Sample Matrix Spike				Run: SUB-C129833				02/17/10 15:45
Polonium 210	33	pCi/L		100	70	130			
Sample ID: C10020209-003DMSD	Sample Matrix Spike Duplicate				Run: SUB-C129833				02/17/10 15:45
Polonium 210	34	pCi/L		104	70	130	4.2	55.8	
Sample ID: LCS-PO210-0281	Method Blank				Run: SUB-C129833				02/19/10 08:46
Polonium 210	0.10	pCi/L							U
Polonium 210 MDC	0.8	pCi/L							
Polonium 210 precision (±)	0.4	pCi/L							
Sample ID: MB-PO210-0281	Laboratory Control Sample				Run: SUB-C129833				02/19/10 08:46
Polonium 210	13	pCi/L		78	70	130			
Method: E912.0									Batch: C_R129834
Sample ID: LCS-25076	Laboratory Control Sample				Run: SUB-C129834				02/17/10 08:48
Polonium 210	95	pCi/L		120	70	130			
Sample ID: MB-25076	Method Blank				Run: SUB-C129834				02/17/10 08:48
Polonium 210	0.2	pCi/L							U
Polonium 210 precision (±)	1	pCi/L							
Polonium 210 MDC	3	pCi/L							
Sample ID: C10020209-003EMS	Sample Matrix Spike				Run: SUB-C129834				02/17/10 11:59
Polonium 210	25	pCi/L		120	70	130			
Sample ID: C10020209-003EMSD	Sample Matrix Spike Duplicate				Run: SUB-C129834				02/17/10 11:59
Polonium 210	19	pCi/L		91	70	130	27	61.3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 02/27/10
Work Order: R10010180

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A								Analytical Run: SUB-B142124	
Sample ID: QCS	Initial Calibration Verification Standard								01/21/10 14:35
Mercury	0.0020	mg/L	0.0010	98	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT- Provide as much information as possible.

Company Name: Scott Environmental	Project Name, PWS, Permit, Etc.: PowerTech, Inc.	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address:	Contact Name: Allen Scott Phone/Fax:	Email:	Sampler: (Please Print) Allen Scott
Invoice Address: PowerTech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ A2LA ☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

ANALYSIS REQUESTED: As Per Quote; SEE ATTACHED

RUSH: Normal Turnaround (TAT)

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 6.6 °C

On Ice: Yes No

Custody Seal Y N

Bottles/Coolers B C

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Solids/Solids Vegetation Bioassay Other)
1	DB-09-21-01	1-18-10		water
2	DB-09-21-02	1-18-10		water
3				
4				
5				
6				
7				
8				
9				
10				

LABORATORY USE ONLY: R1001080-001 002

Custody Record MUST be Signed

Relinquished by (print): Allen Scott	Date/Time: 1-19-10 10:24	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____	Lab Disposal: _____		Received by Laboratory: Steve Froiland Date/Time: 1-19-10 10:24 Signature:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

September 10, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10020266

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 2/23/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10020266-001	DB-09-21-01	02/22/10 0:00	02/23/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10020266-002	DB-09-21-02	02/22/10 0:00	02/23/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.09.10 10:34:07 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10020266

Revised Date: 09/10/10
Report Date: 03/29/10

CASE NARRATIVE

Tests Associated with Analyst identified as ELI-B were subcontracted to Energy Laboratories Billings Branch, EPA Number MT00005.

Tests Associated with Analyst identified as ELI-CA were subcontracted to Energy Laboratories Casper Branch, EPA Number WY00002.
Comments imported for SUBBED Workorder: C10020811
PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10020811

This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

This report is being re-issued due to a change in the report that was made following the original issuance of the report. The reason for this re-issuance is due to the following.
- The Gross Gamma was re-reported

All samples were analyzed in accordance with prescribed methodology, except were noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or rapid_city@energylab.com.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	36	mg/L		5		1	A2320 B	03/01/10 12:25/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/01/10 12:25/mb
Bicarbonate as HCO3	39	mg/L		5		1	A2320 B	03/01/10 12:25/mb
Calcium	54	mg/L	D	1		5	E200.7	03/04/10 18:59/eli-c
Chloride	7.2	mg/L		0.5		1	E300.0	02/23/10 20:06/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	02/23/10 20:06/jmh
Magnesium	22.5	mg/L		0.5		5	E200.7	03/04/10 18:59/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	02/26/10 14:13/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/23/10 20:06/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/23/10 20:06/jmh
Potassium	12.9	mg/L		0.5		5	E200.7	03/04/10 18:59/eli-c
Sodium	162	mg/L	D	1		5	E200.7	03/04/10 18:59/eli-c
Sulfate	495	mg/L		1		20	E300.0	02/23/10 19:50/jmh
Silica	7.8	mg/L		0.2		5	E200.7	03/04/10 18:59/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1570	umhos/cm		5.0		1	A2510 B	03/02/10 15:46/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	03/01/10 15:00/jmh
pH	9.34	s.u.		0.01		1	A4500-H B	02/25/10 10:14/tb
Sodium Adsorption Ratio (SAR)	4.7	unitless		0.10		1	Calculation	03/19/10 08:36/ADM
Solids, Total Dissolved TDS @ 180 C	840	mg/L		5		1	A2540 C	02/25/10 15:59/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/26/10 21:33/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/26/10 21:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/26/10 21:33/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/04/10 18:59/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/26/10 21:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/26/10 21:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/26/10 21:33/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/04/10 18:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/26/10 21:33/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/26/10 21:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/26/10 21:33/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/26/10 21:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/26/10 21:33/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/10 15:28/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	02/26/10 21:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/26/10 21:33/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	02/26/10 21:33/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/26/10 21:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/26/10 21:33/eli-c
METALS - SUSPENDED								
Uranium	0.0015	mg/L	B	0.0003		1	E200.8	03/06/10 00:29/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/10 13:50/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/10 15:50/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	1.1	pCi/L	U			1	E900.0	03/05/10 00:36/eli-ca
Gross Alpha precision (±)	2.3	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Alpha MDC	3.8	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta	6.7	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta precision (±)	2.3	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta MDC	3.6	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Lead 210	-0.1	pCi/L	U			1	E909.0M	03/12/10 08:14/eli-c
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	03/12/10 08:14/eli-c
Lead 210 MDC	1.3	pCi/L				1	E909.0M	03/12/10 08:14/eli-c
Polonium 210	0.050	pCi/L	U			1	E912.0	03/15/10 08:48/eli-ca
Polonium 210 MDC	0.38	pCi/L				1	E912.0	03/15/10 08:48/eli-ca
Polonium 210 precision (±)	0.19	pCi/L				1	E912.0	03/15/10 08:48/eli-ca
Radium 226	0.8	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Thorium 230	0.01	pCi/L	U			1	E907.0	03/08/10 16:08/eli-ca
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/08/10 16:08/eli-ca
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	03/08/10 16:08/eli-ca
Gross Gamma	ND	pCi/L		20		1	E901.1	02/26/10 17:33/eli-ca
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	02/26/10 17:33/eli-ca
RADIONUCLIDES - SUSPENDED								
Lead 210	0.2	pCi/L	U			1	E909.0M	03/23/10 07:42/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/23/10 07:42/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	03/23/10 07:42/eli-c
Polonium 210	0.069	pCi/L	U			1	E912.0	03/15/10 12:17/eli-ca
Polonium 210 precision (±)	0.26	pCi/L				1	E912.0	03/15/10 12:17/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.53	pCi/L				1	E912.0	03/15/10 12:17/eli-ca
Radium 226	0.03	pCi/L	U			1	E903.0	03/09/10 17:27/eli-ca
Radium 226 precision (±)	0.07	pCi/L				1	E903.0	03/09/10 17:27/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	03/09/10 17:27/eli-ca
Thorium 230	-0.07	pCi/L	U			1	E907.0	03/09/10 13:24/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	03/09/10 13:24/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	ND	pCi/L		100		1	D5072-92	02/24/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/26/10 22:21/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/26/10 22:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/26/10 22:21/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/26/10 22:21/eli-c
Boron	ND	mg/L		0.1		5	E200.8	03/02/10 22:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/26/10 22:21/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/26/10 22:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/26/10 22:21/eli-c
Iron	ND	mg/L		0.03		5	E200.8	03/02/10 22:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/26/10 22:21/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/26/10 22:21/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/25/10 15:01/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	02/26/10 22:21/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/26/10 22:21/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/26/10 22:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/26/10 22:21/eli-c
Strontium	2.2	mg/L		0.1		1	E200.8	02/26/10 22:21/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/26/10 22:21/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/26/10 22:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/26/10 22:21/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.90	%				1	A1030 E	03/22/10 00:00/jmh
Anions	11.2	meq/L				1	A1030 E	03/22/10 00:00/jmh
Cations	11.9	meq/L				1	A1030 E	03/22/10 00:00/jmh
Solids, Total Dissolved Calculated	1130	mg/L				1	A1030 E	03/22/10 00:00/jmh
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	03/22/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	190	mg/L		5		1	A2320 B	03/01/10 12:38/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/01/10 12:38/mb
Bicarbonate as HCO3	232	mg/L		5		1	A2320 B	03/01/10 12:38/mb
Calcium	166	mg/L	D	1		5	E200.7	03/04/10 19:23/eli-c
Chloride	9.9	mg/L		0.5		1	E300.0	02/23/10 20:39/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	02/23/10 20:39/jmh
Magnesium	48.0	mg/L		0.5		5	E200.7	03/04/10 19:23/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/26/10 14:14/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	02/23/10 20:39/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	02/23/10 20:39/jmh
Potassium	12.3	mg/L		0.5		5	E200.7	03/04/10 19:23/eli-c
Sodium	126	mg/L	D	1		5	E200.7	03/04/10 19:23/eli-c
Sulfate	677	mg/L		1		20	E300.0	02/23/10 20:23/jmh
Silica	8.8	mg/L		0.2		5	E200.7	03/04/10 19:23/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1160	umhos/cm		5.0		1	A2510 B	03/02/10 15:50/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	03/01/10 15:00/jmh
pH	7.57	s.u.		0.01		1	A4500-H B	02/25/10 10:17/tb
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	03/19/10 08:36/ADM
Solids, Total Dissolved TDS @ 180 C	1300	mg/L		5		1	A2540 C	02/25/10 15:59/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	02/26/10 22:48/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	02/26/10 22:48/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/26/10 22:48/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/04/10 19:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/26/10 22:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/26/10 22:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/26/10 22:48/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/04/10 19:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/26/10 22:48/eli-c
Manganese	0.48	mg/L		0.01		1	E200.8	02/26/10 22:48/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/26/10 22:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/26/10 22:48/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/26/10 22:48/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	02/25/10 15:31/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	02/26/10 22:48/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/26/10 22:48/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0079	mg/L		0.0003		1	E200.8	02/26/10 22:48/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/26/10 22:48/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/26/10 22:48/eli-c
METALS - SUSPENDED								
Uranium	0.0011	mg/L	B	0.0003		1	E200.8	03/06/10 00:35/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/25/10 13:53/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	02/25/10 15:50/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	37.9	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Alpha precision (±)	5.9	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Alpha MDC	6.1	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta	27.5	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta precision (±)	4.0	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Gross Beta MDC	5.9	pCi/L				1	E900.0	03/05/10 00:36/eli-ca
Lead 210	-0.1	pCi/L	U			1	E909.0M	03/12/10 10:16/eli-c
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	03/12/10 10:16/eli-c
Lead 210 MDC	1.3	pCi/L				1	E909.0M	03/12/10 10:16/eli-c
Polonium 210	0.23	pCi/L	U			1	E912.0	03/15/10 08:48/eli-ca
Polonium 210 MDC	0.64	pCi/L				1	E912.0	03/15/10 08:48/eli-ca
Polonium 210 precision (±)	0.39	pCi/L				1	E912.0	03/15/10 08:48/eli-ca
Radium 226	2.3	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/09/10 13:45/eli-c
Thorium 230	-0.01	pCi/L	U			1	E907.0	03/08/10 16:08/eli-ca
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/08/10 16:08/eli-ca
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	03/08/10 16:08/eli-ca
Gross Gamma	ND	pCi/L		20		1	E901.1	02/26/10 17:33/eli-ca
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	02/26/10 17:33/eli-ca
RADIONUCLIDES - SUSPENDED								
Lead 210	0.3	pCi/L	U			1	E909.0M	03/23/10 07:42/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	03/23/10 07:42/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	03/23/10 07:42/eli-c
Polonium 210	-0.096	pCi/L	U			1	E912.0	03/15/10 12:17/eli-ca
Polonium 210 precision (±)	0.26	pCi/L				1	E912.0	03/15/10 12:17/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 03/29/10
Collection Date: 02/22/10
Date Received: 02/23/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10020266-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.73	pCi/L				1	E912.0	03/15/10 12:17/eli-ca
Radium 226	0.07	pCi/L	U			1	E903.0	03/09/10 17:27/eli-ca
Radium 226 precision (±)	0.07	pCi/L				1	E903.0	03/09/10 17:27/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	03/09/10 17:27/eli-ca
Thorium 230	-0.07	pCi/L	U			1	E907.0	03/09/10 13:24/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	03/09/10 13:24/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	313	pCi/L		100		1	D5072-92	02/24/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	02/26/10 22:55/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	02/26/10 22:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/26/10 22:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	02/26/10 22:55/eli-c
Boron	ND	mg/L		0.1		5	E200.8	03/02/10 22:24/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/26/10 22:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/26/10 22:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/26/10 22:55/eli-c
Iron	0.07	mg/L		0.03		5	E200.8	03/02/10 22:24/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/26/10 22:55/eli-c
Manganese	0.50	mg/L		0.01		1	E200.8	02/26/10 22:55/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	02/25/10 15:03/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	02/26/10 22:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/26/10 22:55/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	02/26/10 22:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/26/10 22:55/eli-c
Strontium	2.5	mg/L		0.1		1	E200.8	02/26/10 22:55/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	02/26/10 22:55/eli-c
Uranium	0.0080	mg/L		0.0003		1	E200.8	02/26/10 22:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/26/10 22:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.440	%				1	A1030 E	03/22/10 00:00/jmh
Anions	18.2	meq/L				1	A1030 E	03/22/10 00:00/jmh
Cations	18.0	meq/L				1	A1030 E	03/22/10 00:00/jmh
Solids, Total Dissolved Calculated	1540	mg/L				1	A1030 E	03/22/10 00:00/jmh
TDS Balance (0.80 - 1.20)	1.08					1	A1030 E	03/22/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B								Batch: 100301A-ALK-SEL-W	
Sample ID: LCS1_100301A	Laboratory Control Sample				Run: PH_COND1-R_100301A			03/01/10 11:16	
Alkalinity, Total as CaCO3	956	mg/L	5.0	96	90	110			
Sample ID: MBLK1_100301A	Method Blank				Run: PH_COND1-R_100301A			03/01/10 11:18	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R10020303-004BMS	Sample Matrix Spike				Run: PH_COND1-R_100301A			03/01/10 14:40	
Alkalinity, Total as CaCO3	1330	mg/L	6.1	96	80	120			
Sample ID: R10020303-004BMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_100301A			03/01/10 14:55	
Alkalinity, Total as CaCO3	1340	mg/L	6.1	100	80	120	0.6	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Batch: 100302_1_COND-PROBE-W	
Sample ID: LCS1-1_100302	Laboratory Control Sample				Run: PH_COND2-R_100302B			03/02/10 15:36	
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_100302	Laboratory Control Sample				Run: PH_COND2-R_100302B			03/02/10 15:38	
Conductivity @ 25 C	5010	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100302	Method Blank				Run: PH_COND2-R_100302B			03/02/10 15:42	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: LCS_COND-1_100302	Laboratory Control Sample				Run: PH_COND2-R_100302B			03/02/10 15:44	
Conductivity @ 25 C	1420	umhos/cm	5.0	100	90	110			
Sample ID: R10020266-001ADUP	Sample Duplicate				Run: PH_COND2-R_100302B			03/02/10 15:48	
Conductivity @ 25 C	1570	umhos/cm	5.0				0	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 100225A-SLDS-TDS-W	
Sample ID: LCS1_100225A	Laboratory Control Sample				Run: BAL-4-R_100225A			02/25/10 15:58	
Solids, Total Dissolved TDS @ 180 C	220	mg/L	10	106	90	110			
Sample ID: MBLK1_100225A	Method Blank				Run: BAL-4-R_100225A			02/25/10 15:58	
Solids, Total Dissolved TDS @ 180 C	6	mg/L	5						
Sample ID: R10020306-002DMS	Sample Matrix Spike				Run: BAL-4-R_100225A			02/25/10 16:05	
Solids, Total Dissolved TDS @ 180 C	3100	mg/L	10	100	80	120			
Sample ID: R10020306-002DMSD	Sample Matrix Spike Duplicate				Run: BAL-4-R_100225A			02/25/10 16:05	
Solids, Total Dissolved TDS @ 180 C	3100	mg/L	10	99	80	120	0.3	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B								Batch: 100301-ORP-ISE-W	
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND2-R_100301A			03/01/10 15:00	
Oxidation-Reduction Potential	470	mV		100	95	105			
Sample ID: R10020266-001F	Sample Duplicate				Run: PH_COND2-R_100301A			03/01/10 15:00	
Oxidation-Reduction Potential	220	mV					2.4	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B								Analytical Run: SUB-C130009	
Sample ID: As/Se 1.0ppm-Q 02231	Initial Calibration Verification Standard							02/25/10 13:36	
Selenium-IV	0.051	mg/L	0.0010	103	90	110			
Method: A3114 B								Batch: C_SE3114-100225A	
Sample ID: MBLK	Method Blank				Run: SUB-C130009			02/25/10 13:42	
Selenium-IV	ND	mg/L	0.0003						
Sample ID: As/Se 1.0ppm-Q 02231	Laboratory Control Sample				Run: SUB-C130009			02/25/10 13:45	
Selenium-IV	0.051	mg/L	0.0010	102	90	110			
Sample ID: R10020266-002E	Sample Matrix Spike				Run: SUB-C130009			02/25/10 13:57	
Selenium-IV	0.048	mg/L	0.0010	97	85	115			
Sample ID: R10020266-002E	Sample Matrix Spike Duplicate				Run: SUB-C130009			02/25/10 14:00	
Selenium-IV	0.050	mg/L	0.0010	99	85	115	2.4	10	
Method: A3114 B								Analytical Run: SUB-C130017	
Sample ID: As/Se 1.0ppm-Q 02231	Initial Calibration Verification Standard							02/25/10 15:14	
Selenium	0.053	mg/L	0.0010	106	90	110			
Method: A3114 B								Batch: C_SE3114-100225B	
Sample ID: MBLK	Method Blank				Run: SUB-C130017			02/25/10 15:21	
Selenium	0.0005	mg/L	0.0002						
Sample ID: As/Se 1.0ppm-Q 02231	Laboratory Control Sample				Run: SUB-C130017			02/25/10 15:24	
Selenium	0.052	mg/L	0.0010	103	90	110			
Sample ID: R10020266-002E	Sample Matrix Spike				Run: SUB-C130017			02/25/10 15:33	
Selenium	0.049	mg/L	0.0010	96	85	115			
Sample ID: R10020266-002E	Sample Matrix Spike Duplicate				Run: SUB-C130017			02/25/10 15:35	
Selenium	0.049	mg/L	0.0010	97	85	115	0.6	15	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 100225_1_PH-W
Sample ID: LCS_pH-1_100225	Laboratory Control Sample				Run: PH_COND2-R_100225A			02/25/10 10:02	
pH	7.23	s.u.	0.010	98	98.55	101.45			
Sample ID: R10020245-001ADUP	Sample Duplicate				Run: PH_COND2-R_100225A			02/25/10 10:10	
pH	6.49	s.u.	0.010				0.2	1.25	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G								Batch: A2010-02-26_2_NH3_01	
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_100226A			02/26/10 11:00	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_100226A			02/26/10 11:01	
Nitrogen, Ammonia as N	0.25	mg/L	0.10	99	90	110			
Sample ID: R10020231-002CMS	Sample Matrix Spike				Run: TECHAA2-R_100226A			02/26/10 13:56	
Nitrogen, Ammonia as N	0.22	mg/L	0.10	90	80	120			
Sample ID: R10020231-002CMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_100226A			02/26/10 13:58	
Nitrogen, Ammonia as N	0.23	mg/L	0.10	93	80	120	3.1	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7								Analytical Run: SUB-C130316	
Sample ID: ICV	Initial Calibration Verification Standard							03/04/10 10:01	
Silicon	5.1	mg/L	0.0073	102	95	105			
Boron	2.5	mg/L	0.10	101	95	105			
Calcium	25	mg/L	0.50	100	95	105			
Iron	2.5	mg/L	0.030	99	95	105			
Magnesium	25	mg/L	0.50	98	95	105			
Potassium	25	mg/L	0.50	99	95	105			
Sodium	25	mg/L	0.50	99	95	105			
Sample ID: ICSA	Interference Check Sample A							03/04/10 10:17	
Silicon	0.0039	mg/L	0.0073		0	0			
Boron	0.45	mg/L	0.10		0	0			
Calcium	490	mg/L	0.50	97	90	110			
Iron	180	mg/L	0.030	91	90	110			
Magnesium	510	mg/L	0.50	102	90	110			
Potassium	-0.0012	mg/L	0.50		0	0			
Sodium	0.13	mg/L	0.50		0	0			
Sample ID: ICSAB	Interference Check Sample AB							03/04/10 10:21	
Silicon	0.0025	mg/L	0.0073		0	0			
Boron	0.034	mg/L	0.10		0	0			
Calcium	490	mg/L	0.50	98	90	110			
Iron	200	mg/L	0.11	99	90	110			
Magnesium	510	mg/L	0.50	102	90	110			
Potassium	0.00040	mg/L	0.50		0	0			
Sodium	0.025	mg/L	0.50		0	0			
Method: E200.7								Batch: C_R130316	
Sample ID: MB-100304A	Method Blank				Run: SUB-C130316			03/04/10 10:45	
Silicon	ND	mg/L	0.007						
Boron	ND	mg/L	0.009						
Calcium	ND	mg/L	0.2						
Iron	ND	mg/L	0.002						
Magnesium	ND	mg/L	0.05						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.3						
Sample ID: LFB-100304A	Laboratory Fortified Blank				Run: SUB-C130316			03/04/10 10:49	
Silicon	0.45	mg/L	0.0075	95	85	115			
Boron	0.98	mg/L	0.10	98	85	115			
Calcium	49	mg/L	0.50	98	85	115			
Iron	0.96	mg/L	0.030	96	85	115			
Magnesium	48	mg/L	0.50	97	85	115			
Potassium	45	mg/L	0.50	90	85	115			
Sodium	49	mg/L	0.50	98	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R130316
Sample ID: LFB-100304A	Laboratory Fortified Blank				Run: SUB-C130316				03/04/10 10:49
Sample ID: R10020266-001C	Sample Matrix Spike				Run: SUB-C130316				03/04/10 19:03
Boron	5.24	mg/L	0.10	103	70	130			
Iron	5.09	mg/L	0.030	100	70	130			
Silicon	6.00	mg/L	0.10	117	70	130			
Calcium	306	mg/L	1.1	99	70	130			
Magnesium	268	mg/L	1.0	96	70	130			
Potassium	254	mg/L	1.0	95	70	130			
Sodium	414	mg/L	1.4	99	70	130			
Sample ID: R10020266-001C	Sample Matrix Spike Duplicate				Run: SUB-C130316				03/04/10 19:07
Boron	5.24	mg/L	0.10	103	70	130	0	20	
Iron	4.90	mg/L	0.030	96	70	130	4	20	
Silicon	5.74	mg/L	0.10	104	70	130	4.5	20	
Calcium	299	mg/L	1.1	96	70	130	2.2	20	
Magnesium	262	mg/L	1.0	94	70	130	2.3	20	
Potassium	251	mg/L	1.0	93	70	130	1.2	20	
Sodium	416	mg/L	1.4	100	70	130	0.5	20	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: SUB-C130108	
Sample ID: ICV	Initial Calibration Verification Standard								02/26/10 13:18
Aluminum	0.0499	mg/L	0.0022	100	90	110			
Antimony	0.0507	mg/L	0.0010	101	90	110			
Arsenic	0.0501	mg/L	0.0010	100	90	110			
Barium	0.0511	mg/L	0.0010	102	90	110			
Beryllium	0.0506	mg/L	0.0010	101	90	110			
Cadmium	0.0510	mg/L	0.0010	102	90	110			
Chromium	0.0505	mg/L	0.0010	101	90	110			
Copper	0.0508	mg/L	0.0010	102	90	110			
Lead	0.0499	mg/L	0.0010	100	90	110			
Manganese	0.0502	mg/L	0.0010	100	90	110			
Mercury	0.00531	mg/L	0.0010	106	90	110			
Molybdenum	0.0520	mg/L	0.0010	104	90	110			
Nickel	0.0501	mg/L	0.0010	100	90	110			
Selenium	0.248	mg/L	0.0014	99	90	110			
Silver	0.0531	mg/L	0.0010	106	90	110			
Strontium	0.0499	mg/L	0.0010	100	90	110			
Thallium	0.0497	mg/L	0.0010	99	90	110			
Thorium 232	0.0460	mg/L	0.0010	92	90	110			
Uranium	0.0516	mg/L	0.00030	103	90	110			
Vanadium	0.0495	mg/L	0.0010	99	90	110			
Zinc	0.0509	mg/L	0.0010	102	90	110			
Sample ID: ICSA	Interference Check Sample A								02/26/10 13:25
Aluminum	0.984	mg/L	0.0022	98	80	120			
Antimony	0.000493	mg/L	0.0010		0	0			
Arsenic	2.49E-05	mg/L	0.0010		0	0			
Barium	3.10E-05	mg/L	0.0010		0	0			
Beryllium	3.80E-06	mg/L	0.0010		0	0			
Cadmium	1.67E-05	mg/L	0.0010		0	0			
Chromium	2.08E-05	mg/L	0.0010		0	0			
Copper	-0.000225	mg/L	0.0010		0	0			
Lead	7.90E-06	mg/L	0.0010		0	0			
Manganese	3.49E-05	mg/L	0.0010		0	0			
Mercury	6.41E-05	mg/L	0.0010		0	0			
Molybdenum	0.0202	mg/L	0.0010	101	80	120			
Nickel	4.50E-06	mg/L	0.0010		0	0			
Selenium	0.000143	mg/L	0.0014		0	0			
Silver	0.000386	mg/L	0.0010		0	0			
Strontium	2.80E-05	mg/L	0.0010		0	0			
Thallium	1.74E-05	mg/L	0.0010		0	0			
Thorium 232	0.000874	mg/L	0.0010		0	0			
Uranium	7.10E-06	mg/L	0.00030		0	0			
Vanadium	1.01E-05	mg/L	0.0010		0	0			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: SUB-C130108	
Sample ID: ICSA	Interference Check Sample A							02/26/10 13:25	
Zinc	0.000202	mg/L	0.0010		0	0			
Sample ID: ICSAB	Interference Check Sample AB							02/26/10 13:31	
Aluminum	0.984	mg/L	0.0022	98	70	130			
Antimony	0.000126	mg/L	0.0010		0	0			
Arsenic	0.0104	mg/L	0.0010	104	70	130			
Barium	5.51E-05	mg/L	0.0010		0	0			
Beryllium	1.30E-05	mg/L	0.0010		0	0			
Cadmium	0.0103	mg/L	0.0010	103	70	130			
Chromium	0.0103	mg/L	0.0010	103	70	130			
Copper	0.0101	mg/L	0.0010	101	70	130			
Lead	1.36E-05	mg/L	0.0010		0	0			
Manganese	0.0101	mg/L	0.0010	101	70	130			
Mercury	2.40E-05	mg/L	0.0010		0	0			
Molybdenum	0.0206	mg/L	0.0010	103	70	130			
Nickel	0.0101	mg/L	0.0010	101	70	130			
Selenium	0.000145	mg/L	0.0014		0	0			
Silver	0.00991	mg/L	0.0010	99	70	130			
Strontium	3.83E-05	mg/L	0.0010		0	0			
Thallium	6.00E-06	mg/L	0.0010		0	0			
Thorium 232	0.000331	mg/L	0.0010		0	0			
Uranium	1.00E-07	mg/L	0.00030		0	0			
Vanadium	-0.000193	mg/L	0.0010		0	0			
Zinc	0.0104	mg/L	0.0010	104	70	130			
Method: E200.8								Batch: C_R130108	
Sample ID: LRB	Method Blank				Run: SUB-C130108			02/26/10 14:05	
Aluminum	ND	mg/L	0.002						
Antimony	ND	mg/L	0.0001						
Arsenic	ND	mg/L	0.0003						
Barium	ND	mg/L	3E-05						
Beryllium	ND	mg/L	6E-05						
Cadmium	ND	mg/L	6E-05						
Chromium	ND	mg/L	8E-05						
Copper	ND	mg/L	4E-05						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	5E-05						
Mercury	ND	mg/L	4E-05						
Molybdenum	ND	mg/L	4E-05						
Nickel	ND	mg/L	9E-05						
Selenium	ND	mg/L	0.001						
Silver	0.0002	mg/L	2E-05						
Strontium	ND	mg/L	2E-05						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R130108
Sample ID: LRB	Method Blank				Run: SUB-C130108				02/26/10 14:05
Thallium	ND	mg/L	3E-05						
Thorium 232	0.0002	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Vanadium	ND	mg/L	9E-05						
Zinc	0.0009	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C130108				02/26/10 14:12
Aluminum	0.0519	mg/L	0.0022	104	85	115			
Antimony	0.0546	mg/L	0.0010	109	85	115			
Arsenic	0.0540	mg/L	0.0010	108	85	115			
Barium	0.0550	mg/L	0.0010	110	85	115			
Beryllium	0.0524	mg/L	0.0010	105	85	115			
Cadmium	0.0537	mg/L	0.0010	107	85	115			
Chromium	0.0526	mg/L	0.0010	105	85	115			
Copper	0.0511	mg/L	0.0010	102	85	115			
Lead	0.0534	mg/L	0.0010	107	85	115			
Manganese	0.0522	mg/L	0.0010	104	85	115			
Mercury	0.00546	mg/L	0.0010	109	85	115			
Molybdenum	0.0553	mg/L	0.0010	111	85	115			
Nickel	0.0522	mg/L	0.0010	104	85	115			
Selenium	0.0529	mg/L	0.0014	106	85	115			
Silver	0.0203	mg/L	0.0010	100	85	115			
Strontium	0.0530	mg/L	0.0010	106	85	115			
Thallium	0.0532	mg/L	0.0010	106	85	115			
Thorium 232	0.0565	mg/L	0.0010	113	85	115			
Uranium	0.0547	mg/L	0.00030	109	85	115			
Vanadium	0.0526	mg/L	0.0010	105	85	115			
Zinc	0.0543	mg/L	0.0010	107	85	115			
Sample ID: R10020266-001C	Post Digestion Spike				Run: SUB-C130108				02/26/10 21:40
Aluminum	0.0532	mg/L	0.10	102	70	130			
Arsenic	0.0518	mg/L	0.0010	102	70	130			
Barium	0.0808	mg/L	0.10	107	70	130			
Cadmium	0.0514	mg/L	0.010	103	70	130			
Chromium	0.0509	mg/L	0.050	102	70	130			
Copper	0.0484	mg/L	0.010	94	70	130			
Lead	0.0524	mg/L	0.050	105	70	130			
Manganese	0.0575	mg/L	0.010	100	70	130			
Mercury	0.00536	mg/L	0.0010	107	70	130			
Molybdenum	0.0568	mg/L	0.10	109	70	130			
Nickel	0.0478	mg/L	0.050	96	70	130			
Silver	0.0186	mg/L	0.010	93	70	130			
Thorium 232	0.0569	mg/L	0.0010	114	70	130			
Uranium	0.0551	mg/L	0.00030	110	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_R130108	
Sample ID: R10020266-001C	Post Digestion Spike				Run: SUB-C130108			02/26/10 21:40	
Vanadium	0.0518	mg/L	0.10	103	70	130			
Zinc	0.0511	mg/L	0.010	96	70	130			
Sample ID: R10020266-001C	Post Digestion Spike Duplicate				Run: SUB-C130108			02/26/10 21:47	
Aluminum	0.0530	mg/L	0.0010	101	70	130	0.5	20	
Arsenic	0.0519	mg/L	0.0010	103	70	130	0.3	20	
Barium	0.0802	mg/L	0.0010	105	70	130	0.7	20	
Cadmium	0.0514	mg/L	0.010	103	70	130	0	20	
Chromium	0.0508	mg/L	0.050	101	70	130	0.2	20	
Copper	0.0489	mg/L	0.010	95	70	130	1	20	
Lead	0.0524	mg/L	0.050	105	70	130	0	20	
Manganese	0.0574	mg/L	0.010	100	70	130	0.1	20	
Mercury	0.00538	mg/L	0.0010	107	70	130	0.3	20	
Molybdenum	0.0570	mg/L	0.0010	109	70	130	0.4	20	
Nickel	0.0476	mg/L	0.0010	95	70	130	0.4	20	
Silver	0.0189	mg/L	0.010	95	70	130	1.6	20	
Thorium 232	0.0574	mg/L	0.0010	115	70	130	0.8	20	
Uranium	0.0558	mg/L	0.00030	112	70	130	1.3	20	
Vanadium	0.0519	mg/L	0.0010	104	70	130	0.2	20	
Zinc	0.0511	mg/L	0.010	96	70	130	0	20	
Sample ID: R10020266-001D	Post Digestion Spike				Run: SUB-C130108			02/26/10 22:28	
Antimony	0.0571	mg/L	0.050	114	70	130			
Arsenic	0.0518	mg/L	0.0010	104	70	130			
Barium	0.0810	mg/L	0.0010	106	70	130			
Beryllium	0.0494	mg/L	0.010	99	70	130			
Cadmium	0.0513	mg/L	0.010	103	70	130			
Chromium	0.0505	mg/L	0.050	101	70	130			
Copper	0.0478	mg/L	0.010	94	70	130			
Lead	0.0524	mg/L	0.050	104	70	130			
Manganese	0.0550	mg/L	0.010	99	70	130			
Molybdenum	0.0548	mg/L	0.0010	105	70	130			
Nickel	0.0470	mg/L	0.0010	93	70	130			
Selenium	0.0509	mg/L	0.0010	102	70	130			
Silver	0.0189	mg/L	0.010	95	70	130			
Strontium	2.28	mg/L	0.10		70	130			A
Thallium	0.0515	mg/L	0.0010	103	70	130			
Uranium	0.0551	mg/L	0.00030	110	70	130			
Zinc	0.0498	mg/L	0.010	95	70	130			
Sample ID: R10020266-001D	Post Digestion Spike Duplicate				Run: SUB-C130108			02/26/10 22:34	
Antimony	0.0572	mg/L	0.050	114	70	130	0.2	20	
Arsenic	0.0525	mg/L	0.0010	105	70	130	1.3	20	
Barium	0.0808	mg/L	0.0010	106	70	130	0.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: C_R130108	
Sample ID: R10020266-001D	Post Digestion Spike Duplicate				Run: SUB-C130108			02/26/10 22:34	
Beryllium	0.0490	mg/L	0.010	98	70	130	0.9	20	
Cadmium	0.0509	mg/L	0.010	102	70	130	0.8	20	
Chromium	0.0504	mg/L	0.050	101	70	130	0	20	
Copper	0.0482	mg/L	0.010	95	70	130	0.9	20	
Lead	0.0518	mg/L	0.050	103	70	130	1.1	20	
Manganese	0.0548	mg/L	0.010	99	70	130	0.3	20	
Molybdenum	0.0546	mg/L	0.0010	105	70	130	0.3	20	
Nickel	0.0472	mg/L	0.0010	93	70	130	0.2	20	
Selenium	0.0512	mg/L	0.0010	102	70	130	0.5	20	
Silver	0.0187	mg/L	0.010	94	70	130	0.9	20	
Strontium	2.28	mg/L	0.10		70	130	0.1	20	A
Thallium	0.0512	mg/L	0.0010	102	70	130	0.7	20	
Uranium	0.0548	mg/L	0.00030	110	70	130	0.6	20	
Zinc	0.0505	mg/L	0.010	97	70	130	1.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: SUB-C130212	
Sample ID: ICV	Initial Calibration Verification Standard							03/02/10 14:47	
Boron	0.0542	mg/L	0.0010	108	90	110			
Iron	1.04	mg/L	0.0010	104	90	110			
Sample ID: ICSA	Interference Check Sample A							03/02/10 14:54	
Boron	0.000960	mg/L	0.0010		0	0			
Iron	1.01	mg/L	0.0010	101	80	120			
Sample ID: ICSAB	Interference Check Sample AB							03/02/10 15:00	
Boron	0.000509	mg/L	0.0010		0	0			
Iron	1.01	mg/L	0.0010	101	70	130			
Method: E200.8								Batch: C_R130212	
Sample ID: LRB	Method Blank				Run: SUB-C130212			03/02/10 15:35	
Boron	ND	mg/L	0.0004						
Iron	ND	mg/L	0.0006						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C130212			03/02/10 15:48	
Boron	0.0519	mg/L	0.0010	104	85	115			
Iron	1.30	mg/L	0.0010	104	85	115			
Sample ID: C10020843-003CMS4	Post Digestion Spike				Run: SUB-C130212			03/03/10 10:45	
Boron	0.113	mg/L	0.10	100	70	130			
Iron	1.27	mg/L	0.030	99	70	130			
Sample ID: C10020843-003CMSD4	Post Digestion Spike Duplicate				Run: SUB-C130212			03/03/10 10:52	
Boron	0.112	mg/L	0.10	97	70	130	1.5	20	
Iron	1.27	mg/L	0.030	99	70	130	0.1	20	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: SUB-C130368	
Sample ID: ICV	Initial Calibration Verification Standard							03/05/10 12:06	
Uranium	0.0508	mg/L	0.00030	102	90	110			
Method: E200.8								Batch: C_25430	
Sample ID: MB-25430	Method Blank				Run: SUB-C130368			03/06/10 00:19	
Uranium	0.001	mg/L	6E-05						
Sample ID: LCS2-25430	Laboratory Control Sample				Run: SUB-C130368			03/06/10 00:24	
Uranium	0.123	mg/L	0.00030	121	85	115			S
- Response is above standard QA limit. This could indicate a high bias for the sample results. Since this there is no remaining filter to re-process, and the remainder of the run QA is within acceptance range, this batch is approved.									
Sample ID: R10020266-002I	Post Digestion Spike				Run: SUB-C130368			03/06/10 00:40	
Uranium	0.0540	mg/L	0.00030	106	70	130			
Sample ID: R10020266-002I	Post Digestion Spike Duplicate				Run: SUB-C130368			03/06/10 00:45	
Uranium	0.0531	mg/L	0.00030	104	70	130	1.7	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1								Analytical Run: SUB-B143772	
Sample ID: QCS	Initial Calibration Verification Standard							02/25/10 14:37	
Mercury	0.0018	mg/L	0.0010	92	90	110			
Method: E245.1								Batch: B_44724	
Sample ID: MB-44724	Method Blank				Run: SUB-B143772			02/25/10 14:47	
Mercury	ND	mg/L	5E-05						
Sample ID: LCS-44724	Laboratory Control Sample				Run: SUB-B143772			02/25/10 14:50	
Mercury	0.0018	mg/L	0.0010	91	85	115			
Sample ID: R10020236-005A	Sample Matrix Spike				Run: SUB-B143772			02/25/10 14:54	
Mercury	0.0016	mg/L	0.0010	80	70	130			
Sample ID: R10020236-005A	Sample Matrix Spike Duplicate				Run: SUB-B143772			02/25/10 14:57	
Mercury	0.0017	mg/L	0.0010	82	70	130	2.4	30	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R44872
Sample ID: LFB022310-10	Laboratory Fortified Blank				Run: DIONEX_100224A				02/23/10 18:28
Chloride	4.68	mg/L	0.50	94	90	110			
Fluoride	1.98	mg/L	0.10	99	90	110			
Nitrogen, Nitrate as N	2.28	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N	2.40	mg/L	0.10	96	90	110			
Sulfate	14.0	mg/L	1.0	93	90	110			
Sample ID: R10020252-001AMS	Sample Matrix Spike				Run: DIONEX_100224A				02/23/10 19:17
Chloride	24.0	mg/L	0.50		80	120			A
Fluoride	2.10	mg/L	0.10	94	80	120			
Nitrogen, Nitrate as N	2.52	mg/L	0.10	90	80	120			
Nitrogen, Nitrite as N	2.41	mg/L	0.10	96	80	120			
Sulfate	29.7	mg/L	1.0	81	80	120			
Sample ID: R10020252-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_100224A				02/23/10 19:33
Chloride	24.1	mg/L	0.50		80	120	0.5	10	A
Fluoride	2.11	mg/L	0.10	94	80	120	0.4	10	
Nitrogen, Nitrate as N	2.52	mg/L	0.10	90	80	120	0.1	10	
Nitrogen, Nitrite as N	2.42	mg/L	0.10	97	80	120	0.5	10	
Sulfate	29.8	mg/L	1.0	81	80	120	0.3	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0								Batch: C_GrAB-0854	
Sample ID: MB-GrAB-0854	Method Blank				Run: SUB-C130382			03/04/10 03:14	
Gross Alpha	-0.6	pCi/L							U
Gross Alpha precision (±)	0.6	pCi/L							
Gross Alpha MDC	0.7	pCi/L							
Gross Beta	0.2	pCi/L							U
Gross Beta precision (±)	1	pCi/L							
Gross Beta MDC	2	pCi/L							
Sample ID: Th230-GrAB-0854	Laboratory Control Sample				Run: SUB-C130382			03/04/10 03:14	
Gross Alpha	100	pCi/L		99	70	130			
Sample ID: Cs137-GrAB-0854	Laboratory Control Sample				Run: SUB-C130382			03/04/10 03:14	
Gross Beta	85	pCi/L		94	70	130			
Sample ID: C10020552-001DMS	Sample Matrix Spike				Run: SUB-C130382			03/04/10 03:14	
Gross Alpha	210	pCi/L		101	70	130			
Sample ID: C10020552-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C130382			03/04/10 03:14	
Gross Alpha	170	pCi/L		67	70	130	18	20	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.									
Sample ID: C10020552-001DMS	Sample Matrix Spike				Run: SUB-C130382			03/04/10 03:14	
Gross Beta	130	pCi/L		104	70	130			
Sample ID: C10020552-001DMSD	Sample Matrix Spike Duplicate				Run: SUB-C130382			03/04/10 03:14	
Gross Beta	120	pCi/L		101	70	130	2	15	
Sample ID: C10020817-001ADUP	Sample Duplicate				Run: SUB-C130382			03/05/10 00:36	
Gross Alpha	-0.266	pCi/L					98	521.1	U
Gross Alpha precision (±)	1.50	pCi/L							
Gross Alpha MDC	2.58	pCi/L							
Gross Beta	16.2	pCi/L					28	40.7	
Gross Beta precision (±)	2.23	pCi/L							
Gross Beta MDC	3.28	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1								Batch: C_R130184	
Sample ID: LCS-R130184	Laboratory Control Sample				Run: SUB-C130184			02/26/10 17:33	
Americium 241	660	pCi/L	20	82	70	130			
Cesium 137	990	pCi/L	20	97	70	130			
Potassium 40	6700	pCi/L	20	101	70	130			
Sample ID: MB-R130184	Method Blank				Run: SUB-C130184			02/26/10 17:33	
Actinium 228	ND	pCi/L							
Actinium 228 precision (±)	ND	pCi/L							
Americium 241	ND	pCi/L							
Americium 241 precision (±)	ND	pCi/L							
Barium 133	ND	pCi/L							
Barium 133 precision (±)	ND	pCi/L							
Bismuth 212	ND	pCi/L							
Bismuth 212 precision (±)	ND	pCi/L							
Bismuth 214	ND	pCi/L							U
Cesium 134	ND	pCi/L							
Cesium 134 precision (±)	ND	pCi/L							
Cesium 137	ND	pCi/L							
Cesium 137 precision (±)	ND	pCi/L							
Cobalt 60	ND	pCi/L							
Cobalt 60 precision (±)	ND	pCi/L							
Iodine 125	ND	pCi/L							
Iodine 125 precision (±)	ND	pCi/L							
Iodine 131	ND	pCi/L							U
Lead 212	ND	pCi/L							
Lead 212 precision (±)	ND	pCi/L							
Lead 214	ND	pCi/L							
Lead 214 precision (±)	ND	pCi/L							
Manganese 54	ND	pCi/L							
Manganese 54 precision (±)	ND	pCi/L							
Potassium 40	ND	pCi/L							U
Radium 223	ND	pCi/L							
Radium 223 precision (±)	ND	pCi/L							
Radium 224	ND	pCi/L							
Radium 224 precision (±)	ND	pCi/L							
Thallium 208	ND	pCi/L							
Thallium 208 precision (±)	ND	pCi/L							
Thorium 228	ND	pCi/L							
Thorium 228 precision (±)	ND	pCi/L							
Thorium 234	ND	pCi/L							
Thorium 234 precision (±)	ND	pCi/L							
Zinc 65	ND	pCi/L							
Zinc 65 precision (±)	ND	pCi/L							
Radium 228	ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R130184
Sample ID: MB-R130184	Method Blank				Run: SUB-C130184			02/26/10 17:33	
Radium 228 precision (±)	ND	pCi/L							
Gross Gamma	ND	pCi/L							U
Sample ID: C10020817-004ADUP	Sample Duplicate				Run: SUB-C130184			02/26/10 17:33	
Bismuth 212	ND	pCi/L	20					30	
Bismuth 212 precision (±)	ND	pCi/L							
Bismuth 214	ND	pCi/L	20					30	
Cesium 134	ND	pCi/L	20					30	
Cesium 134 precision (±)	ND	pCi/L							
Cesium 137	ND	pCi/L	20					30	
Cesium 137 precision (±)	ND	pCi/L							
Cobalt 60	ND	pCi/L	20					30	
Cobalt 60 precision (±)	ND	pCi/L							
Iodine 125	ND	pCi/L	20					30	
Iodine 125 precision (±)	ND	pCi/L							
Iodine 131	ND	pCi/L	20					30	U
Lead 212	ND	pCi/L	20					30	
Lead 212 precision (±)	ND	pCi/L							
Lead 214	ND	pCi/L	20					30	
Lead 214 precision (±)	ND	pCi/L							
Manganese 54	ND	pCi/L	20					30	
Manganese 54 precision (±)	ND	pCi/L							
Potassium 40	ND	pCi/L	20					30	U
Radium 223	ND	pCi/L	20					30	
Radium 223 precision (±)	ND	pCi/L							
Radium 224	ND	pCi/L	20					30	
Radium 224 precision (±)	ND	pCi/L							
Thallium 208	ND	pCi/L	20					30	
Thallium 208 precision (±)	ND	pCi/L							
Thorium 228	ND	pCi/L	20					30	
Thorium 228 precision (±)	ND	pCi/L							
Thorium 234	ND	pCi/L	20					30	
Thorium 234 precision (±)	ND	pCi/L							
Zinc 65	ND	pCi/L	20					30	
Zinc 65 precision (±)	ND	pCi/L							
Radium 228	ND	pCi/L	20					30	
Radium 228 precision (±)	ND	pCi/L							
Gross Gamma	ND	pCi/L	20					30	U
Gross Gamma precision (±)	ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 03/29/10
Work Order: R10020266

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_R130472
Sample ID: LCS-25430	Laboratory Control Sample				Run: SUB-C130472				03/09/10 17:27
Radium 226	15	pCi/L		98	70	130			
Sample ID: MB-25430	Method Blank				Run: SUB-C130472				03/09/10 17:27
Radium 226	0.2	pCi/L							U
Radium 226 precision (±)	0.2	pCi/L							
Radium 226 MDC	0.3	pCi/L							
Sample ID: C10020854-001AMS	Sample Matrix Spike				Run: SUB-C130472				03/10/10 09:16
Radium 226	310	pCi/g		-257	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. Both of the LSCs analyzed with the batch meet acceptance criteria; this batch is approved.									
Sample ID: C10020854-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C130472				03/10/10 09:16
Radium 226	400	pCi/g		443	70	130	26	12.4	SR
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. Both of the LSCs analyzed with the batch meet acceptance criteria; this batch is approved.									
Method: E903.0									Batch: C_RA226-4389
Sample ID: C10030004-002CMS	Sample Matrix Spike				Run: SUB-C130649				03/09/10 16:32
Radium 226	17	pCi/L		105	70	130			
Sample ID: C10030004-002CMSD	Sample Matrix Spike Duplicate				Run: SUB-C130649				03/09/10 16:32
Radium 226	15	pCi/L		94	70	130	11	24	
Sample ID: MB-RA226-4389	Method Blank				Run: SUB-C130649				03/09/10 18:03
Radium 226	-0.2	pCi/L							U
Radium 226 precision (±)	0.08	pCi/L							
Radium 226 MDC	0.2	pCi/L							
Sample ID: LCS-RA226-4389	Laboratory Control Sample				Run: SUB-C130649				03/09/10 18:03
Radium 226	8.6	pCi/L		111	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0								Batch: C_RA-TH-ISO-1109	
Sample ID: LCS-RA-TH-ISO-1109	Laboratory Control Sample				Run: SUB-C130435			03/08/10 11:54	
Thorium 230	5.9	pCi/L		114	70	130			
Sample ID: R10020266-001H	Sample Matrix Spike				Run: SUB-C130435			03/08/10 16:08	
Thorium 230	11	pCi/L		89	70	130			
Sample ID: R10020266-001H	Sample Matrix Spike Duplicate				Run: SUB-C130435			03/08/10 16:08	
Thorium 230	13	pCi/L		105	70	130	16	37.5	
Sample ID: MB-RA-TH-ISO-1109	Method Blank				Run: SUB-C130435			03/08/10 16:08	
Thorium 230	0.07	pCi/L							U
Thorium 230 MDC	0.2	pCi/L							
Thorium 230 precision (±)	0.1	pCi/L							
Method: E907.0								Batch: C_25430	
Sample ID: C10020823-007FMS	Sample Matrix Spike				Run: SUB-C130526			03/09/10 13:24	
Thorium 230	6.7	pCi/L		107	70	130			
Sample ID: C10020823-007FMSD	Sample Matrix Spike Duplicate				Run: SUB-C130526			03/09/10 13:24	
Thorium 230	6.2	pCi/L		95	70	130	7.7	35.2	
Sample ID: LCS-25430	Laboratory Control Sample				Run: SUB-C130526			03/09/10 13:24	
Thorium 230	5.4	pCi/L		113	70	130			
Sample ID: MB-25430	Method Blank				Run: SUB-C130526			03/09/10 13:24	
Thorium 230	0.006	pCi/L							U
Thorium 230 MDC	0.08	pCi/L							
Thorium 230 precision (±)	0.09	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M								Batch: C_PB-210-0669	
Sample ID: C09081027-005CMS	Sample Matrix Spike				Run: SUB-C130620			03/12/10 22:26	
Lead 210	210	pCi/L		96	70	130			
Sample ID: C09081027-005CMSD	Sample Matrix Spike Duplicate				Run: SUB-C130620			03/13/10 00:28	
Lead 210	180	pCi/L		81	70	130	17	18.4	
Sample ID: MB-PB-210-0669	Method Blank				Run: SUB-C130620			03/13/10 02:29	
Lead 210	1	pCi/L							U
Lead 210 precision (±)	3	pCi/L							
Lead 210 MDC	5	pCi/L							
Sample ID: LCS-PB-210-0669	Laboratory Control Sample				Run: SUB-C130620			03/13/10 06:33	
Lead 210	120	pCi/L		105	70	130			

- One of the two LCSs run with the batch was substituted for the Standard due to poor recovery. This resulted in the STD, LCS, MS, and MSD all being from the same stock solution. The efficiency is acceptable therefore the batch is approved.

Method: E909.0M								Batch: C_R130998	
Sample ID: C09090819-001FMS	Sample Matrix Spike				Run: SUB-C130998			03/23/10 07:42	
Lead 210	150	pCi/Filter		103	70	130			
Sample ID: C09090819-001FMSD	Sample Matrix Spike Duplicate				Run: SUB-C130998			03/23/10 07:42	
Lead 210	164	pCi/Filter		113	70	130	8.5	17.8	
Sample ID: MB-25430	Method Blank				Run: SUB-C130998			03/23/10 07:42	
Lead 210	ND	pCi/L							U
Lead 210 precision (±)	20	pCi/L							
Lead 210 MDC	30	pCi/L							
Sample ID: LCS-25430	Laboratory Control Sample				Run: SUB-C130998			03/23/10 07:42	
Lead 210	550	pCi/L		105	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 03/29/10
Project: Dewey Groundwater Sampling
Work Order: R10020266

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0									Batch: C_PO210-0283
Sample ID: LCS-25262	Laboratory Control Sample				Run: SUB-C130624				03/08/10 09:25
Polonium 210	66	pCi/L		85	70	130			
Sample ID: MB-25262	Method Blank				Run: SUB-C130624				03/08/10 09:25
Polonium 210	0.4	pCi/L							U
Polonium 210 precision (±)	1	pCi/L							
Polonium 210 MDC	2	pCi/L							
Sample ID: C10020823-007EMS	Sample Matrix Spike				Run: SUB-C130624				03/15/10 08:47
Polonium 210	30	pCi/L		92	70	130			
Sample ID: C10020823-007EMSD	Sample Matrix Spike Duplicate				Run: SUB-C130624				03/15/10 08:47
Polonium 210	25	pCi/L		75	70	130	20	59.3	
Method: E912.0									Batch: C_25430
Sample ID: C10020823-004FMS	Sample Matrix Spike				Run: SUB-C130723				03/15/10 12:17
Polonium 210	24	pCi/L		113	70	130			
Sample ID: C10020823-004FMSD	Sample Matrix Spike Duplicate				Run: SUB-C130723				03/15/10 12:17
Polonium 210	17	pCi/L		79	70	130	35	54.1	
Sample ID: LCS-25430	Laboratory Control Sample				Run: SUB-C130723				03/15/10 12:17
Polonium 210	82	pCi/L		104	70	130			
Sample ID: MB-25430	Method Blank				Run: SUB-C130723				03/15/10 12:17
Polonium 210	0.1	pCi/L							U
Polonium 210 precision (±)	1	pCi/L							
Polonium 210 MDC	3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT- Provide as much information as possible.

Company Name: Scott Environmental	Project Name, PWS, Permit, Etc. Powertech - Dewey	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Powertech	Contact Name: Allen Scott Phone/Fax: 673-4859	Email:	Sampler: (Please Print)
Invoice Address:	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED: As per Quote

RUSH: Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:
Cooler ID(s):
Receipt Temp 3.8 °C
On Ice: Yes No
Custody Seal Y N
Bottles/Coolers B C
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other)	SEE ATTACHED	Normal Turnaround (TAT)	LABORATORY USE ONLY
1	DB-09-21-01	2-22-10		water			R10020266-001
2	DB-09-21-02	2-22-10		water			002
3							
4							
5							
6							
7							
8							
9							
10							

Custody Record MUST be Signed

Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
Allen Scott	2-23-10 9:53 Am	[signature]			
			Received by Laboratory: Steve Trailand	2-23-10 9:58	[signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

ANALYTICAL SUMMARY REPORT

May 03, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10030205

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 3 samples for Powertech USA Inc on 3/17/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10030205-001	DB-09-21-01	03/15/10 0:00	03/17/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10030205-002	DB-09-21-01 Dup	03/15/10 0:00	03/17/10	Aqueous	Same As Above
R10030205-003	DB-09-21-02	03/15/10 0:00	03/17/10	Aqueous	Same As Above

Thank you for submitting your samples to Energy Laboratories, Inc. - Rapid City. The following pages contain the results of your sample analysis.

The samples were analyzed in accordance with the methods specified on the analytical reports. All analyses were accompanied by applicable quality assurance samples throughout the test. Where applicable, the results of these quality assurance samples will be included with your analytical data.

If you have any questions regarding the analyses performed or the results of these analyses, please feel free to call (888)672-1225, (605)342-1225 or llarson@energylab.com.

Sincerely,

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

ANALYTICAL SUMMARY REPORT

Linda Larson
Branch Manager
Energy Laboratories, Inc.
Rapid City, SD

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by
Linda Larson
Date: 2010.05.04 08:45:38 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10030205

Report Date: 05/03/10

CASE NARRATIVE

Tests Associated with Analyst identified as ELI-CA were subcontracted to Energy Laboratories Casper Branch, EPA Number WY00002.

Tests Associated with Analyst identified as ELI-B were subcontracted to Energy Laboratories Billings Branch, EPA Number MT00005.
Comments imported for SUBBED Workorder: C10030626
PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10030626

Radon analysis was subbed to the South Dakota State Health Lab.

The samples were received two days after samples collected. Analyst missed alkalinity hold time by one day to error in reading sample date in laboratory information system.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-001
Client Sample ID: DB-09-21-01

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	160	mg/L	H	5		1	A2320 B	03/30/10 09:44/mb
Carbonate as CO3	ND	mg/L	H	5		1	A2320 B	03/30/10 09:44/mb
Bicarbonate as HCO3	195	mg/L	H	5		1	A2320 B	03/30/10 09:44/mb
Calcium	88	mg/L	D	1		5	E200.7	03/19/10 13:23/eli-c
Chloride	8	mg/L		1		1	E300.0	03/18/10 18:50/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/18/10 18:50/jmh
Magnesium	31.8	mg/L		0.5		5	E200.7	03/19/10 13:23/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	03/23/10 11:27/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/18/10 18:50/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/18/10 18:50/jmh
Potassium	11.5	mg/L		0.5		5	E200.7	03/19/10 13:23/eli-c
Sodium	154	mg/L	D	1		5	E200.7	03/19/10 13:23/eli-c
Sulfate	509	mg/L		1		20	E300.0	03/18/10 18:01/jmh
Silica	8.3	mg/L		0.2		5	E200.7	03/19/10 13:23/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1360	umhos/cm		5.0		1	A2510 B	03/19/10 10:58/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	03/22/10 15:30/jmh
pH	7.93	s.u.		0.01		1	A4500-H B	03/19/10 10:03/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	04/08/10 14:52/ADM
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	03/19/10 13:55/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	03/19/10 13:23/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/20/10 01:47/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/19/10 13:23/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/19/10 13:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/20/10 01:47/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	03/19/10 13:23/eli-c
Copper	ND	mg/L		0.01		5	E200.7	03/19/10 13:23/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/19/10 13:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/20/10 01:47/eli-c
Manganese	0.04	mg/L		0.01		5	E200.7	03/19/10 13:23/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/20/10 01:47/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	03/19/10 13:23/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	03/19/10 13:23/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/22/10 14:34/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/20/10 01:47/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/20/10 01:47/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-001
Client Sample ID: DB-09-21-01

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/20/10 01:47/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	03/20/10 01:47/eli-c
Zinc	ND	mg/L		0.01		5	E200.7	03/19/10 13:23/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/23/10 23:35/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/22/10 12:59/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/22/10 14:55/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.6	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Alpha MDC	5.4	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta	13.7	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta precision (±)	3.9	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta MDC	6.2	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Lead 210	2.0	pCi/L	U			1	E909.0M	04/03/10 04:17/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	04/03/10 04:17/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	04/03/10 04:17/eli-c
Polonium 210	-0.020	pCi/L	U			1	E912.0	03/26/10 08:55/eli-c
Polonium 210 MDC	0.56	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Polonium 210 precision (±)	0.21	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Radium 226	2.1	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Thorium 230	0.002	pCi/L	U			1	E907.0	03/23/10 08:45/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Gross Gamma	810	pCi/L		20		1	E901.1	03/22/10 09:00/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	03/22/10 09:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.06	pCi/L	U			1	E909.0M	04/02/10 03:57/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	04/02/10 03:57/eli-c
Lead 210 MDC	2.9	pCi/L				1	E909.0M	04/02/10 03:57/eli-c
Polonium 210	-0.013	pCi/L	U			1	E912.0	04/06/10 08:44/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-001
Client Sample ID: DB-09-21-01

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 precision (±)	0.099	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Polonium 210 MDC	0.26	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Radium 226	0.2	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Radium 226 MDC	0.08	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Thorium 230	-0.08	pCi/L	U			1	E907.0	03/23/10 17:02/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	03/23/10 17:02/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	260	pCi/L		100		1	D5072-92	03/18/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/22/10 12:35/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/22/10 12:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/22/10 12:35/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/22/10 12:35/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	03/23/10 14:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/22/10 12:35/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/22/10 12:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/22/10 12:35/eli-c
Iron	0.34	mg/L	D	0.04		5	E200.7	03/23/10 14:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/22/10 12:35/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	03/22/10 12:35/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/22/10 12:09/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/22/10 12:35/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/22/10 12:35/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/22/10 12:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/22/10 12:35/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	03/22/10 12:35/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/22/10 12:35/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/22/10 12:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/22/10 12:35/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.0300	%				1	A1030 E	04/08/10 00:00/jmh
Anions	14.0	meq/L				1	A1030 E	04/08/10 00:00/jmh
Cations	14.0	meq/L				1	A1030 E	04/08/10 00:00/jmh
Solids, Total Dissolved Calculated	922	mg/L				1	A1030 E	04/08/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-001
Client Sample ID: DB-09-21-01

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.08					1	A1030 E	04/08/10 00:00/jmh

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-002
Client Sample ID: DB-09-21-01 Dup

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	158	mg/L	H	5		1	A2320 B	03/30/10 09:48/mb
Carbonate as CO3	ND	mg/L	H	5		1	A2320 B	03/30/10 09:48/mb
Bicarbonate as HCO3	193	mg/L	H	5		1	A2320 B	03/30/10 09:48/mb
Calcium	87	mg/L	D	1		5	E200.7	03/19/10 13:27/eli-c
Chloride	8	mg/L		1		1	E300.0	03/18/10 19:23/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/18/10 19:23/jmh
Magnesium	31.1	mg/L		0.5		5	E200.7	03/19/10 13:27/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	03/23/10 11:28/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/18/10 19:23/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/18/10 19:23/jmh
Potassium	11.2	mg/L		0.5		5	E200.7	03/19/10 13:27/eli-c
Sodium	156	mg/L	D	1		5	E200.7	03/19/10 13:27/eli-c
Sulfate	531	mg/L		1		20	E300.0	03/18/10 19:06/jmh
Silica	8.1	mg/L		0.2		5	E200.7	03/19/10 13:27/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1360	umhos/cm		5.0		1	A2510 B	03/19/10 11:00/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	03/22/10 15:30/jmh
pH	7.94	s.u.		0.01		1	A4500-H B	03/19/10 10:09/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	04/08/10 14:52/ADM
Solids, Total Dissolved TDS @ 180 C	1000	mg/L		5		1	A2540 C	03/19/10 13:56/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	03/19/10 13:27/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	03/20/10 01:54/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/19/10 13:27/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/19/10 13:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/20/10 01:54/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	03/19/10 13:27/eli-c
Copper	ND	mg/L		0.01		5	E200.7	03/19/10 13:27/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/19/10 13:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/20/10 01:54/eli-c
Manganese	0.04	mg/L		0.01		5	E200.7	03/19/10 13:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/20/10 01:54/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	03/19/10 13:27/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	03/19/10 13:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/22/10 14:36/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/20/10 01:54/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/20/10 01:54/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-002
Client Sample ID: DB-09-21-01 Dup

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/20/10 01:54/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	03/20/10 01:54/eli-c
Zinc	ND	mg/L		0.01		5	E200.7	03/19/10 13:27/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/23/10 23:39/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/22/10 13:01/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/22/10 14:55/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	10.0	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Alpha precision (±)	5.2	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Alpha MDC	7.6	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta	17.3	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta precision (±)	4.1	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Gross Beta MDC	6.4	pCi/L				1	E900.0	03/29/10 23:12/eli-ca
Lead 210	1.1	pCi/L	U			1	E909.0M	04/03/10 06:19/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	04/03/10 06:19/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	04/03/10 06:19/eli-c
Polonium 210	0.066	pCi/L	U			1	E912.0	03/26/10 08:55/eli-c
Polonium 210 MDC	0.59	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Radium 226	1.9	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Thorium 230	-0.007	pCi/L	U			1	E907.0	03/23/10 08:45/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Gross Gamma	930	pCi/L		20		1	E901.1	03/22/10 09:00/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	03/22/10 09:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.2	pCi/L	U			1	E909.0M	04/02/10 10:02/eli-c
Lead 210 precision (±)	1.8	pCi/L				1	E909.0M	04/02/10 10:02/eli-c
Lead 210 MDC	3.0	pCi/L				1	E909.0M	04/02/10 10:02/eli-c
Polonium 210	0.013	pCi/L	U			1	E912.0	04/06/10 08:44/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-002
Client Sample ID: DB-09-21-01 Dup

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 precision (±)	0.15	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Polonium 210 MDC	0.33	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Radium 226	0.2	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Radium 226 MDC	0.08	pCi/L				1	E903.0	03/29/10 23:54/eli-ca
Thorium 230	0.03	pCi/L	U			1	E907.0	03/23/10 17:02/eli-c
Thorium 230 precision (±)	0.04	pCi/L				1	E907.0	03/23/10 17:02/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	232	pCi/L		100		1	D5072-92	03/18/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/22/10 12:42/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/22/10 12:42/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/22/10 12:42/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/22/10 12:42/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/23/10 14:18/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/22/10 12:42/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/22/10 12:42/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/22/10 12:42/eli-c
Iron	0.34	mg/L	D	0.04		5	E200.7	03/23/10 14:18/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/22/10 12:42/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	03/22/10 12:42/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/22/10 12:12/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/22/10 12:42/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/22/10 12:42/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	03/22/10 12:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/22/10 12:42/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	03/22/10 12:42/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/22/10 12:42/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	03/22/10 12:42/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/22/10 12:42/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.77	%				1	A1030 E	04/08/10 00:00/jmh
Anions	14.4	meq/L				1	A1030 E	04/08/10 00:00/jmh
Cations	14.0	meq/L				1	A1030 E	04/08/10 00:00/jmh
Solids, Total Dissolved Calculated	940	mg/L				1	A1030 E	04/08/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-002
Client Sample ID: DB-09-21-01 Dup

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.09					1	A1030 E	04/08/10 00:00/jmh

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-003
Client Sample ID: DB-09-21-02

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	200	mg/L	H	5		1	A2320 B	03/30/10 09:58/mb
Carbonate as CO3	ND	mg/L	H	5		1	A2320 B	03/30/10 09:58/mb
Bicarbonate as HCO3	244	mg/L	H	5		1	A2320 B	03/30/10 09:58/mb
Calcium	166	mg/L	D	1		5	E200.7	03/19/10 13:31/eli-c
Chloride	10	mg/L		1		1	E300.0	03/18/10 19:56/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	03/18/10 19:56/jmh
Magnesium	46.6	mg/L		0.5		5	E200.7	03/19/10 13:31/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/23/10 11:29/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/18/10 19:56/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	03/18/10 19:56/jmh
Potassium	11.3	mg/L		0.5		5	E200.7	03/19/10 13:31/eli-c
Sodium	124	mg/L	D	1		5	E200.7	03/19/10 13:31/eli-c
Sulfate	666	mg/L		1		20	E300.0	03/18/10 19:39/jmh
Silica	8.3	mg/L		0.2		5	E200.7	03/19/10 13:31/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1570	umhos/cm		5.0		1	A2510 B	03/19/10 11:03/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	03/22/10 15:30/jmh
pH	7.48	s.u.		0.01		1	A4500-H B	03/19/10 10:11/tb
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	04/08/10 14:52/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L		5		1	A2540 C	03/19/10 13:57/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	03/19/10 13:31/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/20/10 02:28/eli-c
Barium	ND	mg/L		0.1		5	E200.7	03/19/10 13:31/eli-c
Boron	ND	mg/L		0.1		5	E200.7	03/19/10 13:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/20/10 02:28/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	03/19/10 13:31/eli-c
Copper	ND	mg/L		0.01		5	E200.7	03/19/10 13:31/eli-c
Iron	ND	mg/L		0.03		5	E200.7	03/19/10 13:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/20/10 02:28/eli-c
Manganese	0.53	mg/L		0.01		5	E200.7	03/19/10 13:31/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	03/20/10 02:28/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	03/19/10 13:31/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	03/19/10 13:31/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	03/22/10 14:38/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	03/23/10 16:29/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	03/23/10 16:29/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-003
Client Sample ID: DB-09-21-02

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0078	mg/L		0.0003		1	E200.8	03/20/10 02:28/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	03/20/10 02:28/eli-c
Zinc	ND	mg/L		0.01		5	E200.7	03/19/10 13:31/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	03/23/10 23:43/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/22/10 13:03/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/22/10 14:55/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	11.2	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Gross Alpha precision (±)	3.8	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Gross Alpha MDC	5.1	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Gross Beta	19.7	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Gross Beta MDC	4.3	pCi/L				1	E900.0	04/17/10 10:27/eli-ca
Lead 210	0.7	pCi/L	U			1	E909.0M	04/03/10 08:20/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	04/03/10 08:20/eli-c
Lead 210 MDC	2.8	pCi/L				1	E909.0M	04/03/10 08:20/eli-c
Polonium 210	0.0	pCi/L	U			1	E912.0	03/26/10 08:55/eli-c
Polonium 210 MDC	0.42	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Polonium 210 precision (±)	0.17	pCi/L				1	E912.0	03/26/10 08:55/eli-c
Radium 226	2.9	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	03/29/10 17:02/eli-ca
Thorium 230	-0.01	pCi/L	U			1	E907.0	03/23/10 08:45/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	03/23/10 08:45/eli-c
Gross Gamma	990	pCi/L		20		1	E901.1	03/22/10 09:00/eli-c
Gross Gamma precision (±)	150	pCi/L				1	E901.1	03/22/10 09:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.7	pCi/L	U			1	E909.0M	04/02/10 12:04/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	04/02/10 12:04/eli-c
Lead 210 MDC	2.9	pCi/L				1	E909.0M	04/02/10 12:04/eli-c
Polonium 210	0.061	pCi/L	U			1	E912.0	04/06/10 08:44/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-003
Client Sample ID: DB-09-21-02

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 precision (±)	0.18	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Polonium 210 MDC	0.34	pCi/L				1	E912.0	04/06/10 08:44/eli-c
Radium 226	0.2	pCi/L				1	E903.0	03/29/10 23:54/eli-cat
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	03/29/10 23:54/eli-cat
Radium 226 MDC	0.08	pCi/L				1	E903.0	03/29/10 23:54/eli-cat
Thorium 230	-0.001	pCi/L	U			1	E907.0	03/23/10 17:02/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	03/23/10 17:02/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	319	pCi/L		100		1	D5072-92	03/18/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	03/22/10 12:55/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	03/22/10 12:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	03/22/10 12:55/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	03/22/10 12:55/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	03/23/10 14:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	03/22/10 12:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	03/22/10 12:55/eli-c
Copper	ND	mg/L		0.01		1	E200.8	03/22/10 12:55/eli-c
Iron	0.15	mg/L	D	0.04		5	E200.7	03/23/10 14:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	03/22/10 12:55/eli-c
Manganese	0.56	mg/L		0.01		1	E200.8	03/22/10 12:55/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	03/22/10 12:14/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	03/22/10 12:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	03/22/10 12:55/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	03/22/10 12:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	03/22/10 12:55/eli-c
Strontium	2.4	mg/L		0.1		1	E200.8	03/22/10 12:55/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	03/22/10 12:55/eli-c
Uranium	0.0088	mg/L		0.0003		1	E200.8	03/22/10 12:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	03/22/10 12:55/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.990	%				1	A1030 E	04/08/10 00:00/jmh
Anions	18.2	meq/L				1	A1030 E	04/08/10 00:00/jmh
Cations	17.8	meq/L				1	A1030 E	04/08/10 00:00/jmh
Solids, Total Dissolved Calculated	1170	mg/L				1	A1030 E	04/08/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10030205-003
Client Sample ID: DB-09-21-02

Report Date: 05/03/10
Collection Date: 03/15/10
Date Received: 03/17/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	04/08/10 00:00/jmh

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B								Batch: 100330A-ALK-SEL-W	
Sample ID: LCS1_100330A	Laboratory Control Sample				Run: PH_COND1-R_100330A			03/30/10 09:31	
Alkalinity, Total as CaCO3	980	mg/L	5.0	98	90	110			
Sample ID: MBLK1_100330A	Method Blank				Run: PH_COND1-R_100330A			03/30/10 09:36	
Alkalinity, Total as CaCO3	ND	mg/L	3						
Sample ID: R10030220-005AMS	Sample Matrix Spike				Run: PH_COND1-R_100330A			03/30/10 10:26	
Alkalinity, Total as CaCO3	210	mg/L	5.0	91	80	120			
Sample ID: R10030220-005AMSD	Sample Matrix Spike Duplicate				Run: PH_COND1-R_100330A			03/30/10 10:27	
Alkalinity, Total as CaCO3	212	mg/L	5.0	92	80	120	0.9	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Batch: 100319_1_COND-PROBE-W	
Sample ID: LCS1-1_100319	Laboratory Control Sample				Run: PH_COND2-R_100319B			03/19/10 10:39	
Conductivity @ 25 C	150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_100319	Laboratory Control Sample				Run: PH_COND2-R_100319B			03/19/10 10:43	
Conductivity @ 25 C	5000	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_100319	Laboratory Control Sample				Run: PH_COND2-R_100319B			03/19/10 10:48	
Conductivity @ 25 C	1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100319	Method Blank				Run: PH_COND2-R_100319B			03/19/10 10:50	
Conductivity @ 25 C	ND	umhos/cm	5						
Sample ID: R10030165-001ADUP	Sample Duplicate				Run: PH_COND2-R_100319B			03/19/10 10:55	
Conductivity @ 25 C	3430	umhos/cm	5.0				2.1	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 100319A-SLDS-TDS-W	
Sample ID: LCS1_100319A	Laboratory Control Sample				Run: BAL-4-R_100322A			03/19/10 11:50	
Solids, Total Dissolved TDS @ 180 C	210	mg/L	10	105	90	110			
Sample ID: MBLK1_100319A	Method Blank				Run: BAL-4-R_100322A			03/19/10 11:52	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	5						
Sample ID: R10030220-003AMS	Sample Matrix Spike				Run: BAL-4-R_100322A			03/19/10 14:07	
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	10	107	90	110			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B								Batch: 100322-ORP-ISE-W	
Sample ID: LCS	Laboratory Control Sample				Run: PH_COND1-R_100322A			03/22/10 15:30	
Oxidation-Reduction Potential	470	mV		99	95	105			
Sample ID: R10030205-001FDUP	Sample Duplicate				Run: PH_COND1-R_100322A			03/22/10 15:30	
Oxidation-Reduction Potential	200	mV					0.6	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B								Batch: C_SE3114-100322A	
Sample ID: MBLK	Method Blank				Run: SUB-C130847			03/22/10 12:52	
Selenium-IV	ND	mg/L	0.0003						
Sample ID: As/Se 1.0ppm-Q 03121	Laboratory Control Sample				Run: SUB-C130847			03/22/10 12:54	
Selenium-IV	0.050	mg/L	0.0010	101	90	110			
Sample ID: R10030205-003E	Sample Matrix Spike				Run: SUB-C130847			03/22/10 13:06	
Selenium-IV	0.050	mg/L	0.0010	100	85	115			
Sample ID: R10030205-003E	Sample Matrix Spike Duplicate				Run: SUB-C130847			03/22/10 13:08	
Selenium-IV	0.049	mg/L	0.0010	98	85	115	1.5	10	
Method: A3114 B								Batch: C_SE3114-100322B	
Sample ID: MBLK	Method Blank				Run: SUB-C130854			03/22/10 14:27	
Selenium	0.0007	mg/L	0.0002						
Sample ID: As/Se 1.0ppm-Q 03121	Laboratory Control Sample				Run: SUB-C130854			03/22/10 14:29	
Selenium	0.049	mg/L	0.0010	98	90	110			
Sample ID: R10030205-003E	Sample Matrix Spike				Run: SUB-C130854			03/22/10 14:41	
Selenium	0.048	mg/L	0.0010	95	85	115			
Sample ID: R10030205-003E	Sample Matrix Spike Duplicate				Run: SUB-C130854			03/22/10 14:43	
Selenium	0.050	mg/L	0.0010	99	85	115	4.2	15	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Batch: 100319_1_PH-W	
Sample ID: LCS_pH-1_100319	Laboratory Control Sample				Run: PH_COND2-R_100319A			03/19/10 09:57	
pH	7.44	s.u.	0.010	100	98.55	101.45			
Sample ID: R10030205-001ADUP	Sample Duplicate				Run: PH_COND2-R_100319A			03/19/10 10:06	
pH	7.93	s.u.	0.010				0	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G								Batch: A2010-03-23_2_NH3_01	
Sample ID: MBLK-2	Method Blank				Run: TECHAA2-R_100323A			03/23/10 09:52	
Nitrogen, Ammonia as N	ND	mg/L	0.01						
Sample ID: LFB-3	Laboratory Fortified Blank				Run: TECHAA2-R_100323A			03/23/10 09:54	
Nitrogen, Ammonia as N	0.24	mg/L	0.10	97	90	110			
Sample ID: R10030217-001AMS	Sample Matrix Spike				Run: TECHAA2-R_100323A			03/23/10 11:34	
Nitrogen, Ammonia as N	0.28	mg/L	0.10	93	80	120			
Sample ID: R10030217-001AMSD	Sample Matrix Spike Duplicate				Run: TECHAA2-R_100323A			03/23/10 11:35	
Nitrogen, Ammonia as N	0.27	mg/L	0.10	88	80	120	4.7	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R130823
Sample ID: MB-100319A	Method Blank				Run: SUB-C130823				03/19/10 10:46
Silicon	ND	mg/L	0.007						
Aluminum	ND	mg/L	0.01						
Barium	ND	mg/L	0.0005						
Boron	0.01	mg/L	0.009						
Calcium	ND	mg/L	0.2						
Chromium	ND	mg/L	0.002						
Copper	ND	mg/L	0.001						
Iron	ND	mg/L	0.002						
Magnesium	ND	mg/L	0.05						
Manganese	ND	mg/L	0.0004						
Molybdenum	ND	mg/L	0.005						
Nickel	ND	mg/L	0.003						
Potassium	ND	mg/L	0.02						
Sodium	ND	mg/L	0.3						
Zinc	ND	mg/L	0.001						
Sample ID: LFB-100319A	Laboratory Fortified Blank				Run: SUB-C130823				03/19/10 10:50
Silicon	0.47	mg/L	0.0075	100	85	115			
Aluminum	0.92	mg/L	0.10	92	85	115			
Barium	0.94	mg/L	0.10	94	85	115			
Boron	0.96	mg/L	0.10	95	85	115			
Calcium	48	mg/L	0.50	95	85	115			
Chromium	0.93	mg/L	0.050	93	85	115			
Copper	0.95	mg/L	0.010	95	85	115			
Iron	0.95	mg/L	0.030	95	85	115			
Magnesium	47	mg/L	0.50	95	85	115			
Manganese	0.92	mg/L	0.010	92	85	115			
Molybdenum	0.96	mg/L	0.10	96	85	115			
Nickel	0.92	mg/L	0.050	92	85	115			
Potassium	44	mg/L	0.50	89	85	115			
Sodium	47	mg/L	0.50	93	85	115			
Zinc	0.94	mg/L	0.010	94	85	115			
Sample ID: C10030544-001BMS2	Sample Matrix Spike				Run: SUB-C130823				03/19/10 12:50
Aluminum	1.98	mg/L	0.10	97	70	130			
Barium	1.96	mg/L	0.10	93	70	130			
Boron	2.00	mg/L	0.10	96	70	130			
Chromium	1.92	mg/L	0.050	94	70	130			
Copper	1.95	mg/L	0.010	96	70	130			
Iron	1.97	mg/L	0.030	95	70	130			
Manganese	1.91	mg/L	0.010	92	70	130			
Molybdenum	1.91	mg/L	0.10	94	70	130			
Nickel	1.89	mg/L	0.050	93	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R130823
Sample ID: C10030544-001BMS2	Sample Matrix Spike				Run: SUB-C130823				03/19/10 12:50
Silicon	7.39	mg/L	0.10		70	130			A
Zinc	2.00	mg/L	0.010	97	70	130			
Calcium	157	mg/L	1.0	96	70	130			
Magnesium	105	mg/L	1.0	93	70	130			
Potassium	102	mg/L	1.0	91	70	130			
Sodium	127	mg/L	1.0	94	70	130			
Sample ID: C10030544-001BMSD2	Sample Matrix Spike Duplicate				Run: SUB-C130823				03/19/10 12:54
Aluminum	1.99	mg/L	0.10	98	70	130	0.8	20	
Barium	1.99	mg/L	0.10	94	70	130	1.3	20	
Boron	2.01	mg/L	0.10	96	70	130	0.5	20	
Chromium	1.91	mg/L	0.050	93	70	130	1	20	
Copper	1.94	mg/L	0.010	95	70	130	0.9	20	
Iron	1.92	mg/L	0.030	93	70	130	2.5	20	
Manganese	1.90	mg/L	0.010	92	70	130	0.1	20	
Molybdenum	1.93	mg/L	0.10	94	70	130	0.7	20	
Nickel	1.88	mg/L	0.050	92	70	130	0.6	20	
Silicon	7.28	mg/L	0.10		70	130	1.5	20	A
Zinc	1.97	mg/L	0.010	96	70	130	1.3	20	
Calcium	155	mg/L	1.0	94	70	130	1.3	20	
Magnesium	105	mg/L	1.0	93	70	130	0.2	20	
Potassium	103	mg/L	1.0	92	70	130	0.6	20	
Sodium	125	mg/L	1.0	93	70	130	1.1	20	
Method: E200.7									Batch: C_R130908
Sample ID: MB-100323A	Method Blank				Run: SUB-C130908				03/23/10 10:49
Boron	ND	mg/L	0.009						
Iron	ND	mg/L	0.002						
Sample ID: LFB-100323A	Laboratory Fortified Blank				Run: SUB-C130908				03/23/10 10:53
Boron	0.98	mg/L	0.10	98	85	115			
Iron	0.96	mg/L	0.030	96	85	115			
Sample ID: R10030205-002D	Sample Matrix Spike				Run: SUB-C130908				03/23/10 14:22
Boron	5.17	mg/L	0.10	100	70	130			
Iron	5.35	mg/L	0.042	98	70	130			
Sample ID: R10030205-002D	Sample Matrix Spike Duplicate				Run: SUB-C130908				03/23/10 14:26
Boron	5.14	mg/L	0.10	99	70	130	0.7	20	
Iron	5.33	mg/L	0.042	98	70	130	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7_8									Batch: C_R130917
Sample ID: LRB	Method Blank				Run: SUB-C130917				03/23/10 13:18
Silver	ND	mg/L	8E-05						
Thorium 232	ND	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C130917				03/23/10 13:25
Silver	0.0215	mg/L	0.0010	108	85	115			
Thorium 232	0.0531	mg/L	0.0010	106	85	115			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R130826
Sample ID: LRB	Method Blank				Run: SUB-C130826				03/19/10 12:49
Arsenic	ND	mg/L	0.0003						
Cadmium	ND	mg/L	6E-05						
Lead	ND	mg/L	2E-05						
Mercury	ND	mg/L	4E-05						
Silver	0.0003	mg/L	2E-05						
Thorium 232	0.0002	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Vanadium	ND	mg/L	9E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C130826				03/19/10 12:56
Arsenic	0.0499	mg/L	0.0010	100	85	115			
Cadmium	0.0500	mg/L	0.0010	100	85	115			
Lead	0.0497	mg/L	0.0010	99	85	115			
Mercury	0.00501	mg/L	0.0010	100	85	115			
Silver	0.0196	mg/L	0.0010	97	85	115			
Thorium 232	0.0426	mg/L	0.0010	85	85	115			
Uranium	0.0478	mg/L	0.00030	96	85	115			
Vanadium	0.0497	mg/L	0.0010	99	85	115			
Sample ID: C10030605-002BMS4	Post Digestion Spike				Run: SUB-C130826				03/20/10 01:27
Arsenic	0.0512	mg/L	0.0010	98	70	130			
Cadmium	0.0469	mg/L	0.010	94	70	130			
Lead	0.0481	mg/L	0.050	96	70	130			
Mercury	0.00474	mg/L	0.0010	95	70	130			
Silver	0.0147	mg/L	0.010	73	70	130			
Thorium 232	0.0371	mg/L	0.0010	74	70	130			
Uranium	0.0685	mg/L	0.00030	101	70	130			
Vanadium	0.0533	mg/L	0.10	96	70	130			
Sample ID: C10030605-002BMSD4	Post Digestion Spike Duplicate				Run: SUB-C130826				03/20/10 01:33
Arsenic	0.0513	mg/L	0.0010	98	70	130	0.2	20	
Cadmium	0.0471	mg/L	0.010	94	70	130	0.6	20	
Lead	0.0482	mg/L	0.0010	96	70	130	0.1	20	
Mercury	0.00486	mg/L	0.0010	98	70	130	2.4	20	
Silver	0.0158	mg/L	0.010	79	70	130	7.2	20	
Thorium 232	0.0431	mg/L	0.0010	86	70	130	15	20	
Uranium	0.0687	mg/L	0.00030	101	70	130	0.3	20	
Vanadium	0.0538	mg/L	0.0010	97	70	130	0.9	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R130867
Sample ID: LRB	Method Blank				Run: SUB-C130867				03/22/10 12:15
Antimony	0.0001	mg/L	0.0001						
Arsenic	ND	mg/L	0.0003						
Barium	ND	mg/L	3E-05						
Beryllium	ND	mg/L	6E-05						
Cadmium	ND	mg/L	6E-05						
Chromium	ND	mg/L	8E-05						
Copper	ND	mg/L	4E-05						
Lead	ND	mg/L	2E-05						
Manganese	ND	mg/L	5E-05						
Molybdenum	9E-05	mg/L	4E-05						
Nickel	ND	mg/L	9E-05						
Selenium	ND	mg/L	0.001						
Silver	0.0002	mg/L	2E-05						
Strontium	ND	mg/L	2E-05						
Thallium	ND	mg/L	3E-05						
Uranium	ND	mg/L	8E-06						
Zinc	0.001	mg/L	6E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-C130867				03/22/10 12:21
Antimony	0.0514	mg/L	0.0010	102	85	115			
Arsenic	0.0520	mg/L	0.0010	104	85	115			
Barium	0.0519	mg/L	0.0010	104	85	115			
Beryllium	0.0535	mg/L	0.0010	107	85	115			
Cadmium	0.0516	mg/L	0.0010	103	85	115			
Chromium	0.0514	mg/L	0.0010	103	85	115			
Copper	0.0522	mg/L	0.0010	104	85	115			
Lead	0.0523	mg/L	0.0010	105	85	115			
Manganese	0.0519	mg/L	0.0010	104	85	115			
Molybdenum	0.0524	mg/L	0.0010	105	85	115			
Nickel	0.0518	mg/L	0.0010	104	85	115			
Selenium	0.0528	mg/L	0.0014	106	85	115			
Silver	0.0198	mg/L	0.0010	98	85	115			
Strontium	0.0517	mg/L	0.0010	103	85	115			
Thallium	0.0522	mg/L	0.0010	104	85	115			
Uranium	0.0515	mg/L	0.00030	103	85	115			
Zinc	0.0544	mg/L	0.0010	107	85	115			
Sample ID: C10030680-001BMS4	Post Digestion Spike				Run: SUB-C130867				03/22/10 13:09
Antimony	0.284	mg/L	0.050	113	70	130			
Arsenic	0.266	mg/L	0.0010	104	70	130			
Barium	0.583	mg/L	0.10	98	70	130			
Beryllium	0.244	mg/L	0.010	98	70	130			
Cadmium	0.241	mg/L	0.010	97	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R130867
Sample ID: C10030680-001BMS4	Post Digestion Spike				Run: SUB-C130867				03/22/10 13:09
Chromium	0.256	mg/L	0.050	97	70	130			
Copper	0.244	mg/L	0.010	95	70	130			
Lead	0.265	mg/L	0.050	106	70	130			
Manganese	0.869	mg/L	0.010	47	70	130			S
Molybdenum	0.300	mg/L	0.10	109	70	130			
Nickel	0.258	mg/L	0.050	94	70	130			
Selenium	0.274	mg/L	0.0012	94	70	130			
Silver	0.0765	mg/L	0.010	73	70	130			
Strontium	2.35	mg/L	0.10		70	130			A
Thallium	0.259	mg/L	0.10	104	70	130			
Uranium	4.33	mg/L	0.00030		70	130			A
Zinc	0.236	mg/L	0.010	63	70	130			S
Sample ID: C10030680-001BMSD4	Post Digestion Spike Duplicate				Run: SUB-C130867				03/22/10 13:43
Antimony	0.303	mg/L	0.050	121	70	130	6.5	20	
Arsenic	0.278	mg/L	0.0010	109	70	130	4.3	20	
Barium	0.621	mg/L	0.10	113	70	130	6.4	20	
Beryllium	0.249	mg/L	0.010	100	70	130	1.8	20	
Cadmium	0.256	mg/L	0.010	102	70	130	5.8	20	
Chromium	0.266	mg/L	0.050	101	70	130	3.9	20	
Copper	0.251	mg/L	0.010	98	70	130	2.8	20	
Lead	0.278	mg/L	0.050	111	70	130	5	20	
Manganese	0.923	mg/L	0.010	68	70	130	6	20	S
Molybdenum	0.314	mg/L	0.10	115	70	130	4.5	20	
Nickel	0.268	mg/L	0.050	98	70	130	3.9	20	
Selenium	0.289	mg/L	0.0012	100	70	130	5.5	20	
Silver	0.0815	mg/L	0.010	78	70	130	6.3	20	
Strontium	2.48	mg/L	0.10		70	130	5.4	20	A
Thallium	0.273	mg/L	0.10	109	70	130	5.3	20	
Uranium	4.55	mg/L	0.00030		70	130	5.1	20	A
Zinc	0.245	mg/L	0.010	67	70	130	3.4	20	S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_25594
Sample ID: MB-25594	Method Blank				Run: SUB-C130913				03/23/10 23:26
Uranium	0.0001	mg/L	6E-05						
Sample ID: LCS2-25594	Laboratory Control Sample				Run: SUB-C130913				03/23/10 23:31
Uranium	0.105	mg/L	0.00030	105	85	115			
Sample ID: R10030205-003I	Post Digestion Spike				Run: SUB-C130913				03/23/10 23:47
Uranium	0.00656	mg/L	0.00030	104	70	130			
Sample ID: R10030205-003I	Post Digestion Spike Duplicate				Run: SUB-C130913				03/23/10 23:51
Uranium	0.00656	mg/L	0.00030	104	70	130	0.1	20	
Method: E200.8									Batch: C_R130917
Sample ID: C10030663-005BMS4	Post Digestion Spike				Run: SUB-C130917				03/23/10 15:41
Silver	0.0161	mg/L	0.010	80	70	130			
Thorium 232	0.0547	mg/L	0.0010	109	70	130			
Sample ID: C10030663-005BMSD4	Post Digestion Spike Duplicate				Run: SUB-C130917				03/23/10 16:15
Silver	0.0169	mg/L	0.010	84	70	130	5	20	
Thorium 232	0.0560	mg/L	0.0010	112	70	130	2.4	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1								Analytical Run: SUB-B144938	
Sample ID: QCS	Initial Calibration Verification Standard							03/22/10 11:10	
Mercury	0.0020	mg/L	0.0010	100	90	110			
Method: E245.1								Batch: B_45135	
Sample ID: MB-45135	Method Blank				Run: SUB-B144938			03/22/10 11:16	
Mercury	ND	mg/L	5E-05						
Sample ID: LCS-45135	Laboratory Control Sample				Run: SUB-B144938			03/22/10 11:18	
Mercury	0.0021	mg/L	0.0010	105	85	115			
Sample ID: B10031588-004EMS	Sample Matrix Spike				Run: SUB-B144938			03/22/10 11:52	
Mercury	0.0020	mg/L	0.0010	101	70	130			
Sample ID: B10031588-004EMSD	Sample Matrix Spike Duplicate				Run: SUB-B144938			03/22/10 11:54	
Mercury	0.0020	mg/L	0.0010	101	70	130	0.5	30	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Batch: R45163
Sample ID: LFB031810-10	Laboratory Fortified Blank				Run: DIONEX_100318A				03/18/10 17:28
Chloride	9.90	mg/L	1.0	99	90	110			
Fluoride	3.96	mg/L	0.10	99	90	110			
Nitrogen, Nitrate as N	4.85	mg/L	0.10	97	90	110			
Nitrogen, Nitrite as N	5.29	mg/L	0.10	106	90	110			
Sulfate	28.2	mg/L	1.0	94	90	110			
Sample ID: R10030205-001AMS	Sample Matrix Spike				Run: DIONEX_100318A				03/18/10 18:17
Chloride	204	mg/L	2.2	76	90	110			S
Fluoride	80.6	mg/L	0.22	101	90	110			
Nitrogen, Nitrate as N	97.2	mg/L	0.50	97	90	110			
Nitrogen, Nitrite as N	106	mg/L	1.2	106	90	110			
Sulfate	1000	mg/L	1.3	83	90	110			S
Sample ID: R10030205-001AMSD	Sample Matrix Spike Duplicate				Run: DIONEX_100318A				03/18/10 18:34
Chloride	202	mg/L	2.2	74	90	110	1.2	10	S
Fluoride	79.8	mg/L	0.22	100	90	110	1.1	10	
Nitrogen, Nitrate as N	96.1	mg/L	0.50	96	90	110	1.1	10	
Nitrogen, Nitrite as N	105	mg/L	1.2	105	90	110	1.4	10	
Sulfate	996	mg/L	1.3	81	90	110	0.8	10	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0								Batch: C_GrAB-0873	
Sample ID: MB-GrAB-0873	Method Blank				Run: SUB-C131111			03/29/10 23:12	
Gross Alpha	0.2	pCi/L							U
Gross Alpha precision (±)	0.7	pCi/L							
Gross Alpha MDC	0.8	pCi/L							
Gross Beta	-0.8	pCi/L							U
Gross Beta precision (±)	2	pCi/L							
Gross Beta MDC	2	pCi/L							
Sample ID: Th230-GrAB-0873	Laboratory Control Sample				Run: SUB-C131111			03/29/10 23:12	
Gross Alpha	110	pCi/L		107	70	130			
Sample ID: Cs137-GrAB-0873	Laboratory Control Sample				Run: SUB-C131111			03/29/10 23:12	
Gross Beta	94	pCi/L		105	70	130			
Sample ID: C10030544-001DDUP	Sample Duplicate				Run: SUB-C131111			03/29/10 23:12	
Gross Alpha	4.9	pCi/L					28	72.3	
Gross Alpha precision (±)	1.7	pCi/L							
Gross Alpha MDC	2.4	pCi/L							
Gross Beta	12	pCi/L					11	41.9	
Gross Beta precision (±)	2.0	pCi/L							
Gross Beta MDC	3.1	pCi/L							
Sample ID: C10030685-003AMS	Sample Matrix Spike				Run: SUB-C131111			03/30/10 11:56	
Gross Alpha	107	pCi/L		105	70	130			
Sample ID: C10030685-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C131111			03/30/10 11:56	
Gross Alpha	95.4	pCi/L		94	70	130	11	18.2	
Sample ID: C10030685-003AMS	Sample Matrix Spike				Run: SUB-C131111			03/30/10 11:56	
Gross Beta	99.3	pCi/L		113	70	130			
Sample ID: C10030685-003AMSD	Sample Matrix Spike Duplicate				Run: SUB-C131111			03/30/10 11:56	
Gross Beta	107	pCi/L		122	70	130	7.9	16.1	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0								Batch: C_GrAB-0885	
Sample ID: MB-GrAB-0885	Method Blank				Run: SUB-C131733			04/16/10 22:20	
Gross Alpha	-0.1	pCi/L							U
Gross Alpha precision (±)	0.7	pCi/L							
Gross Alpha MDC	0.7	pCi/L							
Gross Beta	1	pCi/L							U
Gross Beta precision (±)	2	pCi/L							
Gross Beta MDC	2	pCi/L							
Sample ID: Th230-GrAB-0885	Laboratory Control Sample				Run: SUB-C131733			04/16/10 22:20	
Gross Alpha	97	pCi/L		95	70	130			
Sample ID: Cs137-GrAB-0885	Laboratory Control Sample				Run: SUB-C131733			04/16/10 22:20	
Gross Beta	91	pCi/L		100	70	130			
Sample ID: C10040184-005AMS	Sample Matrix Spike				Run: SUB-C131733			04/16/10 22:20	
Gross Alpha	92.2	pCi/L		90	70	130			
Sample ID: C10040184-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C131733			04/16/10 22:20	
Gross Alpha	107	pCi/L		105	70	130	15	16.7	
Sample ID: C10040184-005AMS	Sample Matrix Spike				Run: SUB-C131733			04/16/10 22:20	
Gross Beta	96.0	pCi/L		106	70	130			
Sample ID: C10040184-005AMSD	Sample Matrix Spike Duplicate				Run: SUB-C131733			04/16/10 22:20	
Gross Beta	95.8	pCi/L		105	70	130	0.2	15.9	
Sample ID: C10040305-001ADUP	Sample Duplicate				Run: SUB-C131733			04/17/10 10:27	
Gross Alpha	18.7	pCi/L					23	46.5	
Gross Alpha precision (±)	3.21	pCi/L							
Gross Alpha MDC	3.48	pCi/L							
Gross Beta	9.59	pCi/L					53	63.1	
Gross Beta precision (±)	2.12	pCi/L							
Gross Beta MDC	3.26	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R130928
Sample ID: LCS-R130928	Laboratory Control Sample				Run: SUB-C130928				03/22/10 09:00
Americium 241	710	pCi/L	20	80	70	130			
Barium 133	540	pCi/L	20	98	70	130			
Cesium 137	900	pCi/L	20	98	70	130			
Potassium 40	2500	pCi/L	20	76	70	130			
Sample ID: MB-R130928	Method Blank				Run: SUB-C130928				03/22/10 09:00
Gross Gamma	ND	pCi/L							U
Sample ID: R10030205-003H	Sample Duplicate				Run: SUB-C130928				03/22/10 09:00
Gross Gamma	780	pCi/L	20				25	30	
Gross Gamma precision (±)	130	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4424
Sample ID: R10030205-001H	Sample Matrix Spike				Run: SUB-C131089				03/29/10 17:02
Radium 226	20	pCi/L		114	70	130			
Sample ID: R10030205-001H	Sample Matrix Spike Duplicate				Run: SUB-C131089				03/29/10 17:02
Radium 226	19	pCi/L		109	70	130	5.2	21.9	
Sample ID: MB-RA226-4424	Method Blank				Run: SUB-C131089				03/29/10 22:05
Radium 226	0.03	pCi/L							U
Radium 226 precision (±)	0.09	pCi/L							
Radium 226 MDC	0.1	pCi/L							
Sample ID: LCS-RA226-4424	Laboratory Control Sample				Run: SUB-C131089				03/29/10 22:05
Radium 226	8.2	pCi/L		103	70	130			
Method: E903.0									Batch: C_R131112
Sample ID: LCS-25594	Laboratory Control Sample				Run: SUB-C131112				03/29/10 23:54
Radium 226	15	pCi/L		97	70	130			
Sample ID: MB-25594	Method Blank				Run: SUB-C131112				03/29/10 23:54
Radium 226	0.4	pCi/L							
Radium 226 precision (±)	0.2	pCi/L							
Radium 226 MDC	0.2	pCi/L							
Sample ID: C10030615-001AMS	Sample Matrix Spike				Run: SUB-C131112				03/29/10 23:54
Radium 226	1400	pCi/g-dry		4340	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The two LCSs and the MB meet acceptance criteria; this batch is approved.									
Sample ID: C10030615-001AMSD	Sample Matrix Spike Duplicate				Run: SUB-C131112				03/29/10 23:54
Radium 226	2700	pCi/g-dry		22100	70	130	65	10.6	SR

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									Batch: C_RA-TH-ISO-1125
Sample ID: LCS-RA-TH-ISO-1125	Laboratory Control Sample				Run: SUB-C130898				03/23/10 08:45
Thorium 230	5.3	pCi/L		101	70	130			
Sample ID: R10030205-003H	Sample Matrix Spike				Run: SUB-C130898				03/23/10 08:45
Thorium 230	15	pCi/L		113	70	130			
Sample ID: R10030205-003H	Sample Matrix Spike Duplicate				Run: SUB-C130898				03/23/10 08:45
Thorium 230	13	pCi/L		97	70	130	17	39.7	
Sample ID: MB-RA-TH-ISO-1125	Method Blank				Run: SUB-C130898				03/23/10 08:45
Thorium 230	0.01	pCi/L							U
Thorium 230 MDC	0.2	pCi/L							
Thorium 230 precision (±)	0.09	pCi/L							
Method: E907.0									Batch: C_25594
Sample ID: R10030205-003I	Sample Matrix Spike				Run: SUB-C130981				03/23/10 17:02
Thorium 230	5.9	pCi/L		116	70	130			
Sample ID: R10030205-003I	Sample Matrix Spike Duplicate				Run: SUB-C130981				03/23/10 17:02
Thorium 230	5.1	pCi/L		106	70	130	15	35.1	
Sample ID: LCS-25594	Laboratory Control Sample				Run: SUB-C130981				03/23/10 17:02
Thorium 230	4.9	pCi/L		102	70	130			
Sample ID: MB-25594	Method Blank				Run: SUB-C130981				03/23/10 17:02
Thorium 230	-0.07	pCi/L							U
Thorium 230 MDC	0.1	pCi/L							
Thorium 230 precision (±)	0.09	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_PB-210-0677
Sample ID: C09100378-001BMS	Sample Matrix Spike				Run: SUB-C131275				04/04/10 04:36
Lead 210	240	pCi/L		109	70	130			
Sample ID: C09100378-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-C131275				04/04/10 06:38
Lead 210	240	pCi/L		109	70	130	0	17.4	
Sample ID: MB-PB-210-0677	Method Blank				Run: SUB-C131275				04/04/10 08:39
Lead 210	-0.2	pCi/L							U
Lead 210 precision (±)	3	pCi/L							
Lead 210 MDC	6	pCi/L							
Sample ID: LCS-PB-210-0677	Laboratory Control Sample				Run: SUB-C131275				04/04/10 10:41
Lead 210	92	pCi/L		83	70	130			
Sample ID: LCS-PB-210-0677	Laboratory Control Sample				Run: SUB-C131275				04/04/10 12:42
Lead 210	130	pCi/L		115	70	130			
Method: E909.0M									Batch: C_PB-210-0679
Sample ID: R10030205-001I	Sample Matrix Spike				Run: SUB-C131286				04/02/10 05:59
Lead 210	110	pCi/L		86	70	130			
Sample ID: R10030205-001I	Sample Matrix Spike Duplicate				Run: SUB-C131286				04/02/10 08:00
Lead 210	120	pCi/L		90	70	130	5.1	17.8	
Sample ID: MB-25594	Method Blank				Run: SUB-C131286				04/02/10 14:05
Lead 210	3	pCi/L							U
Lead 210 precision (±)	3	pCi/L							
Lead 210 MDC	5	pCi/L							
Sample ID: LCS-25594	Laboratory Control Sample				Run: SUB-C131286				04/02/10 16:07
Lead 210	500	pCi/L		95	70	130			
Sample ID: LCS-PB-210-0679	Laboratory Control Sample				Run: SUB-C131286				04/02/10 18:09
Lead 210	450	pCi/L		81	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES, INC. * 2821 Plant St * Rapid City, SD 57702
Toll Free 888.672.1225 * 605.342.1225 * FAX 605.342.1397 * rapid_city@energylab.com

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 05/03/10
Work Order: R10030205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0									Batch: C_PO210-0289
Sample ID: C10030544-003EMS	Sample Matrix Spike				Run: SUB-C131016				03/26/10 08:55
Polonium 210	34	pCi/L		104	70	130			
Sample ID: C10030544-003EMSD	Sample Matrix Spike Duplicate				Run: SUB-C131016				03/26/10 08:55
Polonium 210	32	pCi/L		98	70	130	7.1	56.9	
Sample ID: LCS-PO210-0289	Laboratory Control Sample				Run: SUB-C131016				03/26/10 11:35
Polonium 210	19	pCi/L		113	70	130			
Sample ID: MB-PO210-0289	Method Blank				Run: SUB-C131016				03/26/10 11:35
Polonium 210	-0.04	pCi/L							U
Polonium 210 MDC	0.5	pCi/L							
Polonium 210 precision (±)	0.2	pCi/L							
Method: E912.0									Batch: C_R131341
Sample ID: R10030205-002I	Sample Matrix Spike				Run: SUB-C131341				04/06/10 08:44
Polonium 210	15	pCi/L		78	70	130			
Sample ID: R10030205-002I	Sample Matrix Spike Duplicate				Run: SUB-C131341				04/06/10 08:44
Polonium 210	20	pCi/L		103	70	130	28	52.1	
Sample ID: LCS-25594	Laboratory Control Sample				Run: SUB-C131341				04/06/10 11:37
Polonium 210	74	pCi/L		95	70	130			
Sample ID: MB-25594	Method Blank				Run: SUB-C131341				04/06/10 11:37
Polonium 210	-0.2	pCi/L							U
Polonium 210 precision (±)	1	pCi/L							
Polonium 210 MDC	3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT - Provide as much information as possible.

Company Name: Scott Env.	Project Name, PWS, Permit, Etc.: Powertech Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Powertech	Contact Name: Allen Scott Phone/Fax:	Email:	Sampler (Please Print)
Invoice Address: Same	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED: Re Per Quote

SEE ATTACHED

Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 2.9 °C

On Ice: Yes No

Custody Seal Y N

Bottles/Coolers B C

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers / Sample Type: A W S V B O / Air Water Soils/Solids Vegetation Bioassay Other	MATRIX	LABORATORY USE ONLY
1	DB-09-21-01	3-15-10			Water	B100302205-001
2	DB-09-21-01 Dup.	3-15-10			"	002
3	DB-09-21-02	3-15-10			"	003
4						
5						
6						
7						
8						
9						
10						

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	3-17-10 8:45	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Troiland	Date/Time: 3-17-10 8:45	Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

June 15, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10040303

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 4/22/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10040303-001	DB-09-21-01	04/21/10 0:00	04/22/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10040303-002	DB-09-21-02	04/21/10 0:00	04/22/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.06.15 16:13:03 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10040303

Report Date: 06/15/10

CASE NARRATIVE

Tests Associated with Analyst identified as ELI-CA were subcontracted to Energy Laboratories Casper Branch, EPA Number WY00002.

Tests Associated with Analyst identified as ELI-B were subcontracted to Energy Laboratories Billings Branch, EPA Number MT00005.

Radon analysis was subbed to the South Dakota State Health Lab.
Comments imported for SUBBED Workorder: C10040835
PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10040835

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-001
Client Sample ID: DB-09-21-01

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	104	mg/L		5		1	A2320 B	04/29/10 17:19/ch
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/29/10 17:19/ch
Bicarbonate as HCO3	127	mg/L		5		1	A2320 B	04/29/10 17:19/ch
Calcium	76	mg/L	D	1		5	E200.7	04/26/10 19:11/eli-c
Chloride	7	mg/L		1		1	E300.0	04/22/10 22:16/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	04/22/10 22:16/jmh
Magnesium	28.0	mg/L		0.5		5	E200.7	04/26/10 19:11/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	05/04/10 16:50/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/22/10 22:16/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/22/10 22:16/jmh
Potassium	12.7	mg/L		0.5		5	E200.7	04/26/10 19:11/eli-c
Sodium	168	mg/L	D	1		5	E200.7	04/26/10 19:11/eli-c
Sulfate	521	mg/L		1		20	E300.0	05/07/10 03:03/jmh
Silica	10.3	mg/L		0.2		5	E200.7	04/26/10 19:11/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm		5.0		1	A2510 B	04/27/10 10:44/tb
Oxidation-Reduction Potential	230	mV				1	A2580 B	04/28/10 16:00/jmh
pH	8.04	s.u.		0.01		1	A4500-H B	04/23/10 10:54/tb
Sodium Adsorption Ratio (SAR)	4.2	unitless		0.10		1	Calculation	05/03/10 10:11/ADM
Solids, Total Dissolved TDS @ 180 C	970	mg/L		5		1	A2540 C	04/26/10 15:16/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	04/26/10 19:11/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/26/10 17:24/eli-c
Barium	ND	mg/L		0.1		5	E200.7	04/26/10 19:11/eli-c
Boron	0.2	mg/L		0.1		5	E200.7	04/26/10 19:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/10 17:24/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	04/26/10 19:11/eli-c
Copper	ND	mg/L		0.01		5	E200.7	04/26/10 19:11/eli-c
Iron	ND	mg/L		0.03		5	E200.7	04/26/10 19:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/10 17:24/eli-c
Manganese	0.02	mg/L		0.01		5	E200.7	04/26/10 19:11/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/26/10 17:24/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	04/26/10 19:11/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	04/26/10 19:11/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/26/10 14:23/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	04/26/10 17:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/27/10 22:51/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-001
Client Sample ID: DB-09-21-01

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/26/10 17:24/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/26/10 17:24/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/27/10 22:51/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/28/10 22:31/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/26/10 10:27/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/26/10 15:45/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	7.5	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Alpha MDC	4.6	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta	12.8	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta MDC	3.7	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Lead 210	-2	pCi/L	U			1	E909.0M	05/07/10 12:59/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	05/07/10 12:59/eli-c
Lead 210 MDC	2.6	pCi/L				1	E909.0M	05/07/10 12:59/eli-c
Polonium 210	-0.039	pCi/L	U			1	E912.0	05/04/10 15:33/eli-ca
Polonium 210 MDC	0.56	pCi/L				1	E912.0	05/04/10 15:33/eli-ca
Polonium 210 precision (±)	0.20	pCi/L				1	E912.0	05/04/10 15:33/eli-ca
Radium 226	1.8	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Thorium 230	0.1	pCi/L	U			1	E907.0	04/27/10 16:58/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	04/27/10 16:58/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/27/10 16:58/eli-c
Gross Gamma	1000	pCi/L				1	E901.1	04/27/10 09:00/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	04/27/10 09:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.1	pCi/L	U			1	E909.0M	05/08/10 23:12/eli-c
Lead 210 precision (±)	3.1	pCi/L				1	E909.0M	05/08/10 23:12/eli-c
Lead 210 MDC	5.2	pCi/L				1	E909.0M	05/08/10 23:12/eli-c
Polonium 210	0.18	pCi/L	U			1	E912.0	05/04/10 13:24/eli-ca
Polonium 210 precision (±)	0.60	pCi/L				1	E912.0	05/04/10 13:24/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-001
Client Sample ID: DB-09-21-01

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	1.2	pCi/L				1	E912.0	05/04/10 13:24/eli-ca
Radium 226	-0.01	pCi/L	U			1	E903.0	05/05/10 17:03/eli-ca
Radium 226 precision (±)	0.07	pCi/L				1	E903.0	05/05/10 17:03/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/05/10 17:03/eli-ca
Thorium 230	-0.1	pCi/L	U			1	E907.0	04/30/10 08:55/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/30/10 08:55/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	ND	pCi/L		100		1	D5072-92	04/23/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/26/10 18:12/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/26/10 18:12/eli-c
Barium	ND	mg/L		0.1		5	E200.7	04/26/10 22:44/eli-c
Beryllium	ND	mg/L		0.001		5	E200.7	04/26/10 22:44/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	04/26/10 22:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/10 18:12/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	04/26/10 22:44/eli-c
Copper	ND	mg/L		0.01		5	E200.7	04/26/10 22:44/eli-c
Iron	0.11	mg/L	D	0.04		5	E200.7	04/26/10 22:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/10 18:12/eli-c
Manganese	0.02	mg/L		0.01		5	E200.7	04/26/10 22:44/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/26/10 12:06/eli-b
Molybdenum	ND	mg/L		0.1		5	E200.7	04/26/10 22:44/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	04/26/10 22:44/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/26/10 18:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/26/10 18:12/eli-c
Strontium	2.6	mg/L		0.1		5	E200.7	04/26/10 22:44/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/26/10 18:12/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/26/10 18:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/27/10 22:57/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.20	%				1	A1030 E	06/15/10 00:00/lkl
Anions	13.2	meq/L				1	A1030 E	06/15/10 00:00/lkl
Cations	13.7	meq/L				1	A1030 E	06/15/10 00:00/lkl
Solids, Total Dissolved Calculated	903	mg/L				1	A1030 E	06/15/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.07					1	A1030 E	06/15/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-002
Client Sample ID: DB-09-21-02

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	198	mg/L		5		1	A2320 B	04/29/10 17:22/ch
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/29/10 17:22/ch
Bicarbonate as HCO3	241	mg/L		5		1	A2320 B	04/29/10 17:22/ch
Calcium	173	mg/L	D	1		5	E200.7	04/26/10 19:23/eli-c
Chloride	9	mg/L		1		1	E300.0	04/22/10 23:54/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	04/22/10 23:54/jmh
Magnesium	48.6	mg/L		0.5		5	E200.7	04/26/10 19:23/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/04/10 16:51/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/22/10 23:54/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	04/22/10 23:54/jmh
Potassium	11.9	mg/L		0.5		5	E200.7	04/26/10 19:23/eli-c
Sodium	134	mg/L	D	1		5	E200.7	04/26/10 19:23/eli-c
Sulfate	659	mg/L		1		20	E300.0	05/07/10 03:19/jmh
Silica	9.0	mg/L		0.2		5	E200.7	04/26/10 19:23/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1600	umhos/cm		5.0		1	A2510 B	04/27/10 10:48/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	04/28/10 16:00/jmh
pH	7.50	s.u.		0.01		1	A4500-H B	04/23/10 10:58/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	05/03/10 10:11/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L		5		1	A2540 C	04/26/10 15:18/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	04/26/10 19:23/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/26/10 18:18/eli-c
Barium	ND	mg/L		0.1		5	E200.7	04/26/10 19:23/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	04/26/10 19:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/10 18:18/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	04/26/10 19:23/eli-c
Copper	ND	mg/L		0.01		5	E200.7	04/26/10 19:23/eli-c
Iron	ND	mg/L		0.03		5	E200.7	04/26/10 19:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/10 18:18/eli-c
Manganese	0.56	mg/L		0.01		5	E200.7	04/26/10 19:23/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/26/10 18:18/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	04/26/10 19:23/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	04/26/10 19:23/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	04/26/10 14:30/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	04/26/10 18:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/27/10 23:32/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-002
Client Sample ID: DB-09-21-02

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0084	mg/L		0.0003		1	E200.8	04/26/10 18:18/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/26/10 18:18/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/27/10 23:32/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	04/28/10 22:35/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/26/10 10:34/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/26/10 15:45/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	56.3	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Alpha precision (±)	7.1	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Alpha MDC	6.2	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta	32.7	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Gross Beta MDC	5.1	pCi/L				1	E900.0	05/04/10 00:09/eli-ca
Lead 210	-2	pCi/L	U			1	E909.0M	05/07/10 15:03/eli-c
Lead 210 precision (±)	1.6	pCi/L				1	E909.0M	05/07/10 15:03/eli-c
Lead 210 MDC	2.7	pCi/L				1	E909.0M	05/07/10 15:03/eli-c
Polonium 210	-0.0025	pCi/L	U			1	E912.0	05/04/10 15:33/eli-ca
Polonium 210 MDC	0.60	pCi/L				1	E912.0	05/04/10 15:33/eli-ca
Polonium 210 precision (±)	0.24	pCi/L				1	E912.0	05/04/10 15:33/eli-ca
Radium 226	4.3	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	05/01/10 18:26/eli-ca
Thorium 230	0.004	pCi/L	U			1	E907.0	04/27/10 16:58/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	04/27/10 16:58/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	04/27/10 16:58/eli-c
Gross Gamma	960	pCi/L				1	E901.1	04/27/10 09:00/eli-c
Gross Gamma precision (±)	200	pCi/L				1	E901.1	04/27/10 09:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.7	pCi/L	U			1	E909.0M	05/09/10 05:17/eli-c
Lead 210 precision (±)	3.1	pCi/L				1	E909.0M	05/09/10 05:17/eli-c
Lead 210 MDC	5.2	pCi/L				1	E909.0M	05/09/10 05:17/eli-c
Polonium 210	0.14	pCi/L	U			1	E912.0	05/04/10 13:24/eli-ca
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	05/04/10 13:24/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10040303-002
Client Sample ID: DB-09-21-02

Report Date: 06/15/10
Collection Date: 04/21/10
Date Received: 04/22/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.48	pCi/L				1	E912.0	05/04/10 13:24/eli-ca
Radium 226	0.03	pCi/L	U			1	E903.0	05/05/10 17:03/eli-ca
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	05/05/10 17:03/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	05/05/10 17:03/eli-ca
Thorium 230	0.1	pCi/L	U			1	E907.0	04/30/10 08:55/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	04/30/10 08:55/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	303	pCi/L		100		1	D5072-92	04/23/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	04/26/10 18:25/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/26/10 18:25/eli-c
Barium	ND	mg/L		0.1		5	E200.7	04/26/10 22:48/eli-c
Beryllium	ND	mg/L		0.001		5	E200.7	04/26/10 22:48/eli-c
Boron	ND	mg/L		0.1		5	E200.7	04/26/10 22:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/10 18:25/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	04/26/10 22:48/eli-c
Copper	ND	mg/L		0.01		5	E200.7	04/26/10 22:48/eli-c
Iron	ND	mg/L	D	0.04		5	E200.7	04/26/10 22:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/10 18:25/eli-c
Manganese	0.57	mg/L		0.01		5	E200.7	04/26/10 22:48/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	04/26/10 12:08/eli-b
Molybdenum	ND	mg/L		0.1		5	E200.7	04/26/10 22:48/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	04/26/10 22:48/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	04/26/10 18:25/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/26/10 18:25/eli-c
Strontium	2.4	mg/L		0.1		5	E200.7	04/26/10 22:48/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	04/26/10 18:25/eli-c
Uranium	0.0083	mg/L		0.0003		1	E200.8	04/26/10 18:25/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/27/10 23:39/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.25	%				1	A1030 E	06/15/10 00:00/lkl
Anions	18.0	meq/L				1	A1030 E	06/15/10 00:00/lkl
Cations	18.8	meq/L				1	A1030 E	06/15/10 00:00/lkl
Solids, Total Dissolved Calculated	1180	mg/L				1	A1030 E	06/15/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.06					1	A1030 E	06/15/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 100429A-ALK-SEL-W	
Sample ID: LCS1_100429A		Laboratory Control Sample				Run: PH_COND1-R_100429A			04/29/10 15:07	
Alkalinity, Total as CaCO3		976	mg/L	5.0	98	90	110			
Sample ID: MBLK1_100429A		Method Blank				Run: PH_COND1-R_100429A			04/29/10 15:29	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10040273-001AMS		Sample Matrix Spike				Run: PH_COND1-R_100429A			04/29/10 15:56	
Alkalinity, Total as CaCO3		326	mg/L	5.0	106	80	120			
Sample ID: R10040273-001AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_100429A			04/29/10 16:01	
Alkalinity, Total as CaCO3		326	mg/L	5.0	106	80	120	0	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Batch: 100427_1_COND-PROBE-W		
Sample ID: LCS1-1_100427		Laboratory Control Sample				Run: PH_COND2-R_100427B			04/27/10 10:29	
Conductivity @ 25 C		150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_100427		Laboratory Control Sample				Run: PH_COND2-R_100427B			04/27/10 10:37	
Conductivity @ 25 C		5230	umhos/cm	5.0	105	90	110			
Sample ID: LCS_COND-1_100427		Laboratory Control Sample				Run: PH_COND2-R_100427B			04/27/10 10:40	
Conductivity @ 25 C		1420	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100427		Method Blank				Run: PH_COND2-R_100427B			04/27/10 10:42	
Conductivity @ 25 C		ND	umhos/cm	5						
Sample ID: R10040303-001ADUP		Sample Duplicate				Run: PH_COND2-R_100427B			04/27/10 10:46	
Conductivity @ 25 C		1300	umhos/cm	5.0				0	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 100426A-SLDS-TDS-W		
Sample ID: LCS1_100426A		Laboratory Control Sample				Run: BAL-4-R_100426A			04/26/10 15:11	
Solids, Total Dissolved TDS @ 180 C		210	mg/L	10	101	90	110			
Sample ID: MBLK1_100426A		Method Blank				Run: BAL-4-R_100426A			04/26/10 15:12	
Solids, Total Dissolved TDS @ 180 C		10	mg/L	5						
Sample ID: R10040305-002AMS		Sample Matrix Spike				Run: BAL-4-R_100426A			04/26/10 15:20	
Solids, Total Dissolved TDS @ 180 C		16000	mg/L	10	77	90	110			S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 100428-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND2-R_100428A			04/28/10 16:00	
Oxidation-Reduction Potential		470	mV		99	95	105			
Sample ID: R10040303-001FDUP		Sample Duplicate				Run: PH_COND2-R_100428A			04/28/10 16:00	
Oxidation-Reduction Potential		230	mV					0.3	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									Analytical Run: SUB-C131969	
Sample ID: As/Se 1.0mg/L-Q 0415		Initial Calibration Verification Standard							04/26/10 10:13	
Selenium-IV		0.053	mg/L	0.0010	107	90	110			
Method: A3114 B									Batch: C_SE3114-100426A	
Sample ID: MBLK		Method Blank				Run: SUB-C131969			04/26/10 10:20	
Selenium-IV		0.0005	mg/L	0.0003						
Sample ID: As/Se 1.0ppm-Q 04151		Laboratory Control Sample				Run: SUB-C131969			04/26/10 10:23	
Selenium-IV		0.053	mg/L	0.0010	104	90	110			
Sample ID: R10040303-001E		Sample Matrix Spike				Run: SUB-C131969			04/26/10 10:29	
Selenium-IV		0.038	mg/L	0.0010	75	85	115			S
Sample ID: R10040303-001E		Sample Matrix Spike Duplicate				Run: SUB-C131969			04/26/10 10:32	
Selenium-IV		0.038	mg/L	0.0010	76	85	115	1.5	10	S
Method: A3114 B									Analytical Run: SUB-C131994	
Sample ID: As/Se 1.0mg/L-Q 0415		Initial Calibration Verification Standard							04/26/10 14:02	
Selenium		0.052	mg/L	0.0010	104	90	110			
Method: A3114 B									Batch: C_SE3114-100426B	
Sample ID: As/Se 1.0ppm-Q 04151		Laboratory Control Sample				Run: SUB-C131994			04/26/10 14:11	
Selenium		0.050	mg/L	0.0010	99	90	110			
Sample ID: MBLK		Method Blank				Run: SUB-C131994			04/26/10 14:16	
Selenium		0.0009	mg/L	0.0002						
Sample ID: R10040303-001E		Sample Matrix Spike				Run: SUB-C131994			04/26/10 14:25	
Selenium		0.044	mg/L	0.0010	87	85	115			
Sample ID: R10040303-001E		Sample Matrix Spike Duplicate				Run: SUB-C131994			04/26/10 14:28	
Selenium		0.046	mg/L	0.0010	91	85	115	5	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 100423_1_PH-W	
Sample ID: LCS_pH-1_100423		Laboratory Control Sample				Run: PH_COND2-R_100423A			04/23/10 10:31	
pH		7.43	s.u.	0.010	100	98.55	101.45			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-05-04_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100504A			05/04/10 14:11	
Nitrogen, Ammonia as N		0.03	mg/L	0.01						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100504A			05/04/10 14:12	
Nitrogen, Ammonia as N		0.24	mg/L	0.10	94	90	110			
Sample ID: R10040323-002BMS		Sample Matrix Spike				Run: TECHAA2-R_100504A			05/04/10 16:57	
Nitrogen, Ammonia as N		0.22	mg/L	0.10	88	80	120			
Sample ID: R10040323-002BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100504A			05/04/10 16:58	
Nitrogen, Ammonia as N		0.22	mg/L	0.10	90	80	120	1.8	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: SUB-C132003	
Sample ID: ICV	17	Initial Calibration Verification Standard							04/26/10 11:32	
Silicon		5.1	mg/L	0.0073	103	95	105			
Aluminum		2.4	mg/L	0.10	96	95	105			
Barium		2.5	mg/L	0.10	99	95	105			
Beryllium		1.2	mg/L	0.010	96	95	105			
Boron		2.5	mg/L	0.10	100	95	105			
Calcium		26	mg/L	0.50	104	95	105			
Chromium		2.5	mg/L	0.050	99	95	105			
Copper		2.5	mg/L	0.010	99	95	105			
Iron		2.6	mg/L	0.030	104	95	105			
Magnesium		25	mg/L	0.50	101	95	105			
Manganese		2.5	mg/L	0.010	98	95	105			
Molybdenum		2.5	mg/L	0.10	100	95	105			
Nickel		2.5	mg/L	0.050	102	95	105			
Potassium		24	mg/L	0.50	97	95	105			
Sodium		25	mg/L	0.50	101	95	105			
Strontium		2.5	mg/L	0.10	98	95	105			
Silica		11	mg/L	0.016	103	95	105			
Sample ID: ICSA	17	Interference Check Sample A							04/26/10 11:48	
Silicon		0.0068	mg/L	0.0073		0	0			
Aluminum		520	mg/L	0.10	103	90	110			
Barium		0.00020	mg/L	0.10		0	0			
Beryllium		0.00010	mg/L	0.010		0	0			
Boron		0.0048	mg/L	0.61		0	0			
Calcium		500	mg/L	0.50	100	90	110			
Chromium		0.00070	mg/L	0.050		0	0			
Copper		0.0081	mg/L	0.010		0	0			
Iron		190	mg/L	0.030	94	90	110			
Magnesium		520	mg/L	0.50	105	90	110			
Manganese		-0.0038	mg/L	0.010		0	0			
Molybdenum		-0.0056	mg/L	0.10		0	0			
Nickel		-0.00070	mg/L	0.050		0	0			
Potassium		0.0023	mg/L	0.50		0	0			
Sodium		0.17	mg/L	0.50		0	0			
Strontium		-0.00050	mg/L	0.10		0	0			
Silica		0.015	mg/L	0.016		0	0			
Sample ID: ICSAB	17	Interference Check Sample AB							04/26/10 11:52	
Silicon		0.010	mg/L	0.0073		0	0			
Aluminum		510	mg/L	0.10	103	90	120			
Barium		0.51	mg/L	0.10	103	90	110			
Beryllium		0.48	mg/L	0.010	97	90	110			
Boron		0.0053	mg/L	0.61		0	0			
Calcium		490	mg/L	0.50	99	90	110			
Chromium		0.49	mg/L	0.050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: SUB-C132003	
Sample ID: ICSAB	17	Interference Check Sample AB							04/26/10 11:52	
Copper		0.53	mg/L	0.010	105	90	110			
Iron		180	mg/L	0.030	92	90	110			
Magnesium		520	mg/L	0.50	103	90	110			
Manganese		0.48	mg/L	0.010	95	90	110			
Molybdenum		-0.0043	mg/L	0.10		0	0			
Nickel		0.96	mg/L	0.050	96	90	110			
Potassium		0.0032	mg/L	0.50		0	0			
Sodium		0.028	mg/L	0.50		0	0			
Strontium		-0.00050	mg/L	0.10		0	0			
Silica		0.022	mg/L	0.016		0	0			
Method: E200.7									Batch: C_R132003	
Sample ID: MB-100426A	16	Method Blank				Run: SUB-C132003			04/26/10 12:18	
Silicon		ND	mg/L	0.06						
Aluminum		ND	mg/L	0.01						
Barium		ND	mg/L	0.0005						
Beryllium		ND	mg/L	0.0002						
Boron		ND	mg/L	0.009						
Calcium		ND	mg/L	0.2						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.05						
Manganese		ND	mg/L	0.0004						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Strontium		ND	mg/L	0.0002						
Sample ID: LFB-100426A	17	Laboratory Fortified Blank				Run: SUB-C132003			04/26/10 12:22	
Silicon		0.45	mg/L	0.0075	95	85	115			
Aluminum		0.90	mg/L	0.10	90	85	115			
Barium		0.92	mg/L	0.10	92	85	115			
Beryllium		0.90	mg/L	0.010	90	85	115			
Boron		0.93	mg/L	0.10	93	85	115			
Calcium		49	mg/L	0.50	97	85	115			
Chromium		0.92	mg/L	0.050	92	85	115			
Copper		0.91	mg/L	0.010	91	85	115			
Iron		0.94	mg/L	0.030	94	85	115			
Magnesium		49	mg/L	0.50	98	85	115			
Manganese		0.89	mg/L	0.010	89	85	115			
Molybdenum		0.93	mg/L	0.10	93	85	115			
Nickel		0.93	mg/L	0.050	93	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R132003	
Sample ID: LFB-100426A	17	Laboratory Fortified Blank				Run: SUB-C132003			04/26/10 12:22	
Potassium		46	mg/L	0.50	92	85	115			
Sodium		47	mg/L	0.50	94	85	115			
Strontium		0.91	mg/L	0.10	91	85	115			
Silica		0.96	mg/L	0.016	96	85	125			
Sample ID: C10040844-006BMS2	16	Sample Matrix Spike				Run: SUB-C132003			04/26/10 20:20	
Aluminum		2.03	mg/L	0.10	99	70	130			
Barium		2.00	mg/L	0.10	96	70	130			
Beryllium		1.91	mg/L	0.010	94	70	130			
Boron		2.03	mg/L	0.10	97	70	130			
Chromium		1.92	mg/L	0.050	94	70	130			
Copper		1.95	mg/L	0.010	96	70	130			
Iron		4.43	mg/L	0.030	93	70	130			
Manganese		2.28	mg/L	0.010	92	70	130			
Molybdenum		1.91	mg/L	0.10	94	70	130			
Nickel		1.88	mg/L	0.050	92	70	130			
Silicon		9.58	mg/L	0.10		70	130			A
Strontium		3.27	mg/L	0.10	94	70	130			
Calcium		205	mg/L	1.0	93	70	130			
Magnesium		114	mg/L	1.0	91	70	130			
Potassium		102	mg/L	1.0	91	70	130			
Sodium		123	mg/L	1.0	95	70	130			
Sample ID: C10040844-006BMSD2	16	Sample Matrix Spike Duplicate				Run: SUB-C132003			04/26/10 20:24	
Aluminum		2.05	mg/L	0.10	100	70	130	1.1	20	
Barium		1.99	mg/L	0.10	95	70	130	0.8	20	
Beryllium		1.92	mg/L	0.010	94	70	130	0.9	20	
Boron		2.05	mg/L	0.10	98	70	130	0.8	20	
Chromium		1.93	mg/L	0.050	95	70	130	0.4	20	
Copper		1.95	mg/L	0.010	96	70	130	0.1	20	
Iron		4.48	mg/L	0.030	95	70	130	1.1	20	
Manganese		2.28	mg/L	0.010	92	70	130	0.1	20	
Molybdenum		1.94	mg/L	0.10	95	70	130	1.4	20	
Nickel		1.90	mg/L	0.050	93	70	130	1.1	20	
Silicon		9.63	mg/L	0.10		70	130	0.5	20	A
Strontium		3.32	mg/L	0.10	96	70	130	1.3	20	
Calcium		208	mg/L	1.0	95	70	130	1.2	20	
Magnesium		117	mg/L	1.0	94	70	130	2.5	20	
Potassium		103	mg/L	1.0	92	70	130	1.3	20	
Sodium		125	mg/L	1.0	97	70	130	1.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 06/15/10
Work Order: R10040303

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: SUB-C132016	
Sample ID: ICV	10	Initial Calibration Verification Standard							04/26/10 14:21	
Antimony		0.0488	mg/L	0.0010	98	90	110			
Arsenic		0.0480	mg/L	0.0010	96	90	110			
Cadmium		0.0497	mg/L	0.0010	99	90	110			
Lead		0.0493	mg/L	0.0010	99	90	110			
Mercury		0.00516	mg/L	0.0010	103	90	110			
Selenium		0.247	mg/L	0.0014	99	90	110			
Silver		0.0518	mg/L	0.0010	104	90	110			
Thallium		0.0480	mg/L	0.0010	96	90	110			
Uranium		0.0481	mg/L	0.00030	96	90	110			
Vanadium		0.0497	mg/L	0.0010	99	90	110			
Sample ID: ICSA	10	Interference Check Sample A							04/26/10 14:28	
Antimony		0.000619	mg/L	0.0010		0	0			
Arsenic		0.000117	mg/L	0.0010		0	0			
Cadmium		2.80E-06	mg/L	0.0010		0	0			
Lead		5.01E-05	mg/L	0.0010		0	0			
Mercury		6.10E-05	mg/L	0.0010		0	0			
Selenium		0.000209	mg/L	0.0014		0	0			
Silver		0.000180	mg/L	0.0010		0	0			
Thallium		2.81E-05	mg/L	0.0010		0	0			
Uranium		2.84E-05	mg/L	0.00030		0	0			
Vanadium		2.45E-05	mg/L	0.0010		0	0			
Sample ID: ICSAB	10	Interference Check Sample AB							04/26/10 14:35	
Antimony		0.000157	mg/L	0.0010		0	0			
Arsenic		0.0111	mg/L	0.0010	111	70	130			
Cadmium		0.0109	mg/L	0.0010	109	70	130			
Lead		2.62E-05	mg/L	0.0010		0	0			
Mercury		4.01E-05	mg/L	0.0010		0	0			
Selenium		3.50E-06	mg/L	0.0014		0	0			
Silver		0.0106	mg/L	0.0010	106	70	130			
Thallium		1.78E-05	mg/L	0.0010		0	0			
Uranium		1.05E-05	mg/L	0.00030		0	0			
Vanadium		-0.000133	mg/L	0.0010		0	0			
Method: E200.8									Batch: C_R132016	
Sample ID: LRB	10	Method Blank				Run: SUB-C132016			04/26/10 15:09	
Antimony		0.0001	mg/L	0.0001						
Arsenic		ND	mg/L	0.0003						
Cadmium		ND	mg/L	6E-05						
Lead		ND	mg/L	2E-05						
Mercury		ND	mg/L	4E-05						
Selenium		ND	mg/L	0.001						
Silver		0.0001	mg/L	2E-05						
Thallium		ND	mg/L	3E-05						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT- Provide as much information as possible.

Company Name: Scott Eng.	Project Name, PWS, Permit, Etc.: Powertech Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Powertech	Contact Name: Allen Scott Phone/Fax: 473-9079	Email:	Sampler: (Please Print)
Invoice Address: Powertech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ A2LA ☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other

ANALYSIS REQUESTED: As per Quote

SEE ATTACHED

Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 3.6 °C

On Ice: Yes No

Custody Seal Y N

Bottles/Coolers B C

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX												
1	DB-09-21-1	4-21-10		water												
2	DB-09-21-2	4-21-10		water												
3																
4																
5																
6																
7																
8																
9																
10																

LABORATORY USE ONLY: R1004030 3-001 002

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	4-22-10 7:40	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Froiland	Date/Time: 4-22-10 8:00	Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

September 10, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10050253

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 5/18/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10050253-001	DB-09-21-01	05/17/10 0:00	05/18/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10050253-002	DB-09-21-02	05/17/10 0:00	05/18/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.09.10 10:33:22 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10050253

Revised Date: 09/10/10
Report Date: 06/29/10

CASE NARRATIVE

Tests Associated with Analyst identified as ELI-CA were subcontracted to Energy Laboratories Casper Branch, EPA Number WY00002.

Tests Associated with Analyst identified as ELI-B were subcontracted to Energy Laboratories Billings Branch, EPA Number MT00005.
Comments imported for SUBBED Workorder: C10050710
RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes

PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

TH230 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10050710
This case narrative is used to explain any exceptions to the analyses performed for your sample(s). In accordance with Good Analytical Laboratory Practices (GALP), samples requiring data qualifiers or analytical modifications are explained herein.

This report is being re-issued due to a change in the report that was made following the original issuance of the report. The reason for this re-issuance is due to the following.
- The Gross Gamma was re-reported

All samples were analyzed in accordance with prescribed methodology, except were noted. Samples are accompanied by appropriate quality assurance/quality control (QA/QC) samples throughout the analytical process.

If you have questions regarding this information, please feel free to contact us at (888)672-1225, (605)342-1225 or rapid_city@energylab.com.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	130	mg/L		5		1	A2320 B	05/27/10 11:00/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/27/10 11:00/mb
Bicarbonate as HCO3	158	mg/L		5		1	A2320 B	05/27/10 11:00/mb
Calcium	81	mg/L	D	1		5	E200.7	05/25/10 14:33/eli-c
Chloride	8	mg/L		5		1	E300.0	05/22/10 12:17/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	05/19/10 01:35/jmh
Magnesium	29.4	mg/L		0.5		5	E200.7	05/25/10 14:33/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	06/02/10 13:55/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/19/10 01:35/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/19/10 01:35/jmh
Potassium	11.7	mg/L		0.5		5	E200.7	05/25/10 14:33/eli-c
Sodium	166	mg/L	D	1		5	E200.7	05/25/10 14:33/eli-c
Sulfate	542	mg/L		1		20	E300.0	05/19/10 01:18/jmh
Silica	7.5	mg/L		0.2		1	E200.8	05/24/10 23:15/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm	B	5.0		1	A2510 B	05/20/10 17:14/tb
Oxidation-Reduction Potential	260	mV				1	A2580 B	05/24/10 17:30/jmh
pH	7.91	s.u.		0.01		1	A4500-H B	05/20/10 16:29/tb
Sodium Adsorption Ratio (SAR)	4.0	unitless		0.10		1	Calculation	06/28/10 17:08/ADM
Solids, Total Dissolved TDS @ 180 C	840	mg/L		5		1	A2540 C	05/24/10 16:41/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	05/24/10 23:15/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/24/10 23:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/24/10 23:15/eli-c
Boron	ND	mg/L		0.1		1	E200.8	05/24/10 23:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/24/10 23:15/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/24/10 23:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/24/10 23:15/eli-c
Iron	ND	mg/L		0.03		1	E200.8	05/24/10 23:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/24/10 23:15/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	05/24/10 23:15/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/24/10 23:15/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/24/10 23:15/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/24/10 23:15/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/26/10 18:13/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/24/10 23:15/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/24/10 23:15/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	05/24/10 23:15/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	05/24/10 23:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/24/10 23:15/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/02/10 08:37/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/26/10 16:34/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/26/10 18:41/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	3.9	pCi/L	U			1	E900.0	05/29/10 13:27/eli-ca
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Alpha MDC	5.2	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta	8.4	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta MDC	3.7	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Lead 210	0.02	pCi/L	U			1	E909.0M	06/11/10 15:59/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	06/11/10 15:59/eli-c
Lead 210 MDC	2.9	pCi/L				1	E909.0M	06/11/10 15:59/eli-c
Polonium 210	-0.060	pCi/L	U			1	E912.0	06/07/10 08:47/eli-ca
Polonium 210 MDC	1.1	pCi/L				1	E912.0	06/07/10 08:47/eli-ca
Polonium 210 precision (±)	0.40	pCi/L				1	E912.0	06/07/10 08:47/eli-ca
Radium 226	1.6	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Thorium 230	0.03	pCi/L	U			1	E907.0	05/27/10 08:45/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	05/27/10 08:45/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	05/27/10 08:45/eli-c
Gross Gamma	420	pCi/L				1	E901.1	05/27/10 06:15/eli-c
Gross Gamma precision (±)	110	pCi/L				1	E901.1	05/27/10 06:15/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.3	pCi/L	U			1	E909.0M	06/13/10 16:36/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	06/13/10 16:36/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	06/13/10 16:36/eli-c
Polonium 210	0.077	pCi/L	U			1	E912.0	06/07/10 08:49/eli-ca
Polonium 210 precision (±)	0.31	pCi/L				1	E912.0	06/07/10 08:49/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.62	pCi/L				1	E912.0	06/07/10 08:49/eli-ca
Radium 226	0.3	pCi/L	U			1	E903.0	06/18/10 08:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/18/10 08:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	06/18/10 08:33/eli-c
Thorium 230	-0.4	pCi/L	U			1	E907.0	06/04/10 10:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/04/10 10:06/eli-c
- See Case Narrative regarding Pb210 analysis.								
- See Case Narrative regarding Ra226 analysis.								
- See Case Narrative regarding Th230 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	157	pCi/L		100		1	D5072-92	05/19/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/14/10 18:45/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/24/10 16:30/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/24/10 16:30/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/24/10 16:30/eli-c
Boron	ND	mg/L		0.1		1	E200.8	05/24/10 16:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/24/10 16:30/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/24/10 16:30/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/24/10 16:30/eli-c
Iron	0.22	mg/L		0.03		1	E200.8	05/24/10 16:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/24/10 16:30/eli-c
Manganese	0.03	mg/L		0.01		1	E200.8	05/24/10 16:30/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/26/10 13:24/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/24/10 16:30/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/24/10 16:30/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/24/10 16:30/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/24/10 16:30/eli-c
Strontium	2.4	mg/L		0.1		1	E200.8	05/24/10 16:30/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/24/10 16:30/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/24/10 16:30/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/24/10 16:30/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.470	%				1	A1030 E	06/29/10 00:00/lkl
Anions	14.1	meq/L				1	A1030 E	06/29/10 00:00/lkl
Cations	14.0	meq/L				1	A1030 E	06/29/10 00:00/lkl
Solids, Total Dissolved Calculated	937	mg/L				1	A1030 E	06/29/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								
TDS Balance (0.80 - 1.20)	0.900					1	A1030 E	06/29/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	200	mg/L		5		1	A2320 B	05/27/10 11:08/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	05/27/10 11:08/mb
Bicarbonate as HCO3	244	mg/L		5		1	A2320 B	05/27/10 11:08/mb
Calcium	168	mg/L	D	1		5	E200.7	05/25/10 14:37/eli-c
Chloride	10	mg/L		5		1	E300.0	05/22/10 12:35/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/19/10 02:07/jmh
Magnesium	47.2	mg/L		0.5		5	E200.7	05/25/10 14:37/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/02/10 13:58/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	05/19/10 02:07/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	05/19/10 02:07/jmh
Potassium	11.7	mg/L		0.5		5	E200.7	05/25/10 14:37/eli-c
Sodium	130	mg/L	D	1		5	E200.7	05/25/10 14:37/eli-c
Sulfate	694	mg/L		1		20	E300.0	05/19/10 01:51/jmh
Silica	6.7	mg/L		0.2		1	E200.8	05/24/10 23:21/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1520	umhos/cm	B	5.0		1	A2510 B	05/20/10 17:15/tb
Oxidation-Reduction Potential	260	mV				1	A2580 B	05/24/10 17:30/jmh
pH	7.47	s.u.		0.01		1	A4500-H B	05/20/10 16:32/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	06/28/10 17:08/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	05/24/10 16:43/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	05/24/10 23:21/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/24/10 23:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/24/10 23:21/eli-c
Boron	ND	mg/L		0.1		1	E200.8	05/24/10 23:21/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/24/10 23:21/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/24/10 23:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/24/10 23:21/eli-c
Iron	ND	mg/L		0.03		1	E200.8	05/24/10 23:21/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/24/10 23:21/eli-c
Manganese	0.54	mg/L		0.01		1	E200.8	05/24/10 23:21/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/24/10 23:21/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	05/24/10 23:21/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/24/10 23:21/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	05/26/10 18:20/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	05/24/10 23:21/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/24/10 23:21/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0086	mg/L		0.0003		1	E200.8	05/24/10 23:21/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	05/24/10 23:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/24/10 23:21/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/02/10 08:42/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	05/26/10 16:41/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	05/27/10 10:48/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	40.1	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Alpha precision (±)	6.3	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Alpha MDC	6.7	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta	25.7	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta precision (±)	3.3	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Gross Beta MDC	4.7	pCi/L				1	E900.0	05/29/10 13:27/eli-ca
Lead 210	2.2	pCi/L	U			1	E909.0M	06/11/10 18:01/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	06/11/10 18:01/eli-c
Lead 210 MDC	2.9	pCi/L				1	E909.0M	06/11/10 18:01/eli-c
Polonium 210	-0.060	pCi/L	U			1	E912.0	06/07/10 08:47/eli-ca
Polonium 210 MDC	1.1	pCi/L				1	E912.0	06/07/10 08:47/eli-ca
Polonium 210 precision (±)	0.39	pCi/L				1	E912.0	06/07/10 08:47/eli-ca
Radium 226	1.9	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	06/02/10 12:29/eli-ca
Thorium 230	0.006	pCi/L	U			1	E907.0	05/27/10 08:45/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	05/27/10 08:45/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	05/27/10 08:45/eli-c
Gross Gamma	ND	pCi/L		20		1	E901.1	05/27/10 06:15/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	05/27/10 06:15/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	06/13/10 18:37/eli-c
Lead 210 precision (±)	3.6	pCi/L				1	E909.0M	06/13/10 18:37/eli-c
Lead 210 MDC	6.1	pCi/L				1	E909.0M	06/13/10 18:37/eli-c
Polonium 210	0.061	pCi/L	U			1	E912.0	06/07/10 08:49/eli-ca
Polonium 210 precision (±)	0.37	pCi/L				1	E912.0	06/07/10 08:49/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 09/10/10
Report Date: 06/29/10
Collection Date: 05/17/10
Date Received: 05/18/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10050253-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.80	pCi/L				1	E912.0	06/07/10 08:49/eli-ca
Radium 226	0.6	pCi/L				1	E903.0	06/18/10 08:33/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	06/18/10 08:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	06/18/10 08:33/eli-c
Thorium 230	-0.1	pCi/L	U			1	E907.0	06/04/10 10:06/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/04/10 10:06/eli-c
- See Case Narrative regarding Pb210 analysis.								
- See Case Narrative regarding Th230 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	303	pCi/L		100		1	D5072-92	05/19/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	06/03/10 13:29/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/25/10 09:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	05/25/10 09:15/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	05/25/10 09:15/eli-c
Boron	ND	mg/L		0.1		1	E200.8	05/25/10 09:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/25/10 09:15/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	05/25/10 09:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	05/25/10 09:15/eli-c
Iron	ND	mg/L		0.03		1	E200.8	05/25/10 09:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/25/10 09:15/eli-c
Manganese	0.55	mg/L		0.01		1	E200.8	05/25/10 09:15/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	05/26/10 13:26/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	05/25/10 09:15/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	05/25/10 09:15/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	05/25/10 09:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/03/10 01:15/eli-c
Strontium	2.3	mg/L		0.1		1	E200.8	05/25/10 09:15/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	05/25/10 09:15/eli-c
Uranium	0.0088	mg/L		0.0003		1	E200.8	05/25/10 09:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	05/25/10 09:15/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.36	%				1	A1030 E	06/29/10 00:00/lkl
Anions	18.8	meq/L				1	A1030 E	06/29/10 00:00/lkl
Cations	18.3	meq/L				1	A1030 E	06/29/10 00:00/lkl
Solids, Total Dissolved Calculated	1200	mg/L				1	A1030 E	06/29/10 00:00/lkl
TDS Balance (0.80 - 1.20)	0.930					1	A1030 E	06/29/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 100527A-ALK-SEL-W	
Sample ID: LCS1_100527A		Laboratory Control Sample				Run: PH_COND1-R_100527A			05/27/10 10:12	
Alkalinity, Total as CaCO3		960	mg/L	5.0	96	90	110			
Sample ID: MBLK1_100527A		Method Blank				Run: PH_COND1-R_100527A			05/27/10 10:17	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10050253-001AMS		Sample Matrix Spike				Run: PH_COND1-R_100527A			05/27/10 11:03	
Alkalinity, Total as CaCO3		230	mg/L	5.0	94	80	120			
Sample ID: R10050253-001AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_100527A			05/27/10 11:06	
Alkalinity, Total as CaCO3		232	mg/L	5.0	96	80	120	0.9	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 06/29/10
Project: Dewey Groundwater Sampling
Work Order: R10050253

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 100520_1_COND-PROBE-W	
Sample ID: LCS1-1_100520		Laboratory Control Sample				Run: PH_COND2-R_100520B			05/20/10 16:50	
Conductivity @ 25 C		148	umhos/cm	5.0	99	90	110			
Sample ID: LCS2-1_100520		Laboratory Control Sample				Run: PH_COND2-R_100520B			05/20/10 16:52	
Conductivity @ 25 C		4980	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100520		Method Blank				Run: PH_COND2-R_100520B			05/20/10 16:56	
Conductivity @ 25 C		400	umhos/cm	5						
Sample ID: LCS_COND-1_100520		Laboratory Control Sample				Run: PH_COND2-R_100520B			05/20/10 17:01	
Conductivity @ 25 C		1420	umhos/cm	5.0	100	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 100524A-SLDS-TDS-W		
Sample ID: LCS1_100524A		Laboratory Control Sample				Run: BAL-4-R_100524B			05/24/10 16:34	
Solids, Total Dissolved TDS @ 180 C		200	mg/L	10	98	90	110			
Sample ID: MBLK1_100524A		Method Blank				Run: BAL-4-R_100524B			05/24/10 16:34	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	5						
Sample ID: R10050253-001ADUP		Sample Duplicate				Run: BAL-4-R_100524B			05/24/10 16:42	
Solids, Total Dissolved TDS @ 180 C		840	mg/L	10					5	
Sample ID: R10050253-002AMS		Sample Matrix Spike				Run: BAL-4-R_100524B			05/24/10 16:45	
Solids, Total Dissolved TDS @ 180 C		2100	mg/L	10	97	90	110			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 100524-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_100524A			05/24/10 17:30	
Oxidation-Reduction Potential		470	mV		99	95	105			
Sample ID: R10050253-001F		Sample Duplicate				Run: PH_COND1-R_100524A			05/24/10 17:30	
Oxidation-Reduction Potential		250	mV					1.4	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B										Batch: C_26210
Sample ID: MB-26210		Method Blank				Run: SUB-C133182				05/26/10 16:27
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LCS-26210		Laboratory Control Sample				Run: SUB-C133182				05/26/10 16:30
Selenium-IV		0.049	mg/L	0.0010	98	90	110			
Sample ID: R10050253-001E		Sample Matrix Spike				Run: SUB-C133182				05/26/10 16:36
Selenium-IV		0.047	mg/L	0.0010	94	85	115			
Sample ID: R10050253-001E		Sample Matrix Spike Duplicate				Run: SUB-C133182				05/26/10 16:39
Selenium-IV		0.046	mg/L	0.0010	92	85	115	1.3	10	
Method: A3114 B										Batch: C_26210
Sample ID: MB-26210		Method Blank				Run: SUB-C133188				05/26/10 18:06
Selenium		ND	mg/L	0.0002						
Sample ID: LCS-26210		Laboratory Control Sample				Run: SUB-C133188				05/26/10 18:08
Selenium		0.052	mg/L	0.0010	104	90	110			
Sample ID: R10050253-001E		Sample Matrix Spike				Run: SUB-C133188				05/26/10 18:15
Selenium		0.052	mg/L	0.0010	104	85	115			
Sample ID: R10050253-001E		Sample Matrix Spike Duplicate				Run: SUB-C133188				05/26/10 18:18
Selenium		0.052	mg/L	0.0010	104	85	115	0.2	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 100520_1_PH-W	
Sample ID: LCS_pH-1_100520		Laboratory Control Sample				Run: PH_COND2-R_100520A			05/20/10 16:21	
pH		7.43	s.u.	0.010	100	98.55	101.45			
Sample ID: R10050237-003BDUP		Sample Duplicate				Run: PH_COND2-R_100520A			05/20/10 16:27	
pH		8.87	s.u.	0.010				0	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-06-02_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100602A			06/02/10 12:12	
Nitrogen, Ammonia as N		0.03	mg/L	0.01						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100602A			06/02/10 12:13	
Nitrogen, Ammonia as N		0.27	mg/L	0.10	96	90	110			
Sample ID: R10050253-001BMS		Sample Matrix Spike				Run: TECHAA2-R_100602A			06/02/10 13:56	
Nitrogen, Ammonia as N		0.40	mg/L	0.10	96	80	120			
Sample ID: R10050253-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100602A			06/02/10 13:57	
Nitrogen, Ammonia as N		0.38	mg/L	0.10	90	80	120	3.6	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R133131
Sample ID: MB-100525A	4	Method Blank				Run: SUB-C133131				05/25/10 12:44
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-100525A	4	Laboratory Fortified Blank				Run: SUB-C133131				05/25/10 12:48
Calcium		50	mg/L	0.50	100	85	115			
Magnesium		50	mg/L	0.50	99	85	115			
Potassium		49	mg/L	0.82	97	85	115			
Sodium		47	mg/L	0.50	94	85	115			
Sample ID: C10040979-001BMS2	4	Sample Matrix Spike				Run: SUB-C133131				05/25/10 13:44
Calcium		110	mg/L	1.0	96	70	130			
Magnesium		111	mg/L	1.0	94	70	130			
Potassium		96.1	mg/L	1.0	90	70	130			
Sodium		260	mg/L	1.0	99	70	130			
Sample ID: C10040979-001BMSD2	4	Sample Matrix Spike Duplicate				Run: SUB-C133131				05/25/10 13:49
Calcium		113	mg/L	1.0	99	70	130	2.2	20	
Magnesium		116	mg/L	1.0	99	70	130	4.5	20	
Potassium		98.6	mg/L	1.0	93	70	130	2.5	20	
Sodium		264	mg/L	1.0	103	70	130	1.6	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R133067A	
Sample ID: R10050253-002D	23	Post Digestion Spike				Run: SUB-C133067			05/24/10 16:44	
Aluminum		0.0527	mg/L	0.10	58	70	130			S
Arsenic		0.0535	mg/L	0.0010	104	70	130			
Barium		0.0626	mg/L	0.0010	103	70	130			
Beryllium		0.0430	mg/L	0.010	86	70	130			
Boron		0.108	mg/L	0.10	90	70	130			
Cadmium		0.0498	mg/L	0.010	100	70	130			
Chromium		0.0488	mg/L	0.0010	97	70	130			
Copper		0.0458	mg/L	0.010	91	70	130			
Iron		1.24	mg/L	0.030	97	70	130			
Lead		0.0517	mg/L	0.050	103	70	130			
Manganese		0.589	mg/L	0.010		70	130			A
Mercury		0.00537	mg/L	0.0010	107	70	130			
Molybdenum		0.0475	mg/L	0.0010	95	70	130			
Nickel		0.0468	mg/L	0.0010	93	70	130			
Selenium		0.0549	mg/L	0.0010	110	70	130			
Silicon		3.24	mg/L	0.10		70	130			A
Silver		0.0139	mg/L	0.010	70	70	130			
Strontium		2.28	mg/L	0.10		70	130			A
Thallium		0.0525	mg/L	0.0010	104	70	130			
Thorium 232		0.0539	mg/L	0.0010	107	70	130			
Uranium		0.0626	mg/L	0.00030	108	70	130			
Vanadium		0.0500	mg/L	0.0010	99	70	130			
Zinc		0.0521	mg/L	0.010	97	70	130			
Sample ID: R10050253-002D	23	Post Digestion Spike Duplicate				Run: SUB-C133067			05/24/10 16:50	
Aluminum		0.0519	mg/L	0.10	56	70	130		20	S
Arsenic		0.0523	mg/L	0.0010	102	70	130	2.4	20	
Barium		0.0602	mg/L	0.0010	98	70	130	3.9	20	
Beryllium		0.0438	mg/L	0.010	87	70	130	1.7	20	
Boron		0.111	mg/L	0.10	97	70	130	2.9	20	
Cadmium		0.0484	mg/L	0.010	97	70	130	2.9	20	
Chromium		0.0460	mg/L	0.0010	92	70	130	5.9	20	
Copper		0.0449	mg/L	0.010	90	70	130	2	20	
Iron		1.27	mg/L	0.030	99	70	130	2.4	20	
Lead		0.0510	mg/L	0.050	102	70	130	1.5	20	
Manganese		0.596	mg/L	0.010		70	130	1	20	A
Mercury		0.00523	mg/L	0.0010	105	70	130	2.7	20	
Molybdenum		0.0460	mg/L	0.0010	92	70	130	3.2	20	
Nickel		0.0448	mg/L	0.0010	89	70	130	4.5	20	
Selenium		0.0570	mg/L	0.0010	114	70	130	3.7	20	
Silicon		3.36	mg/L	0.10		70	130	3.9	20	A
Silver		0.0120	mg/L	0.010	60	70	130	15	20	S
Strontium		2.18	mg/L	0.10		70	130	4.7	20	A
Thallium		0.0516	mg/L	0.0010	102	70	130	1.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R133067A	
Sample ID: R10050253-002D	23	Post Digestion Spike Duplicate				Run: SUB-C133067			05/24/10 16:50	
Thorium 232		0.0529	mg/L	0.0010	105	70	130	1.9	20	
Uranium		0.0626	mg/L	0.00030	108	70	130	0	20	
Vanadium		0.0470	mg/L	0.0010	93	70	130	6.2	20	
Zinc		0.0519	mg/L	0.010	97	70	130	0.5	20	
Sample ID: C10050737-004BMS4	23	Post Digestion Spike				Run: SUB-C133067			05/25/10 00:17	
Aluminum		0.0456	mg/L	0.0010	91	70	130			
Arsenic		0.0515	mg/L	0.0010	103	70	130			
Barium		0.131	mg/L	0.10	87	70	130			
Beryllium		0.0454	mg/L	0.010	91	70	130			
Boron		0.0863	mg/L	0.0010	86	70	130			
Cadmium		0.0476	mg/L	0.010	95	70	130			
Chromium		0.0486	mg/L	0.0010	97	70	130			
Copper		0.0499	mg/L	0.010	96	70	130			
Iron		1.20	mg/L	0.030	96	70	130			
Lead		0.0491	mg/L	0.0010	98	70	130			
Manganese		0.0479	mg/L	0.010	95	70	130			
Mercury		0.00490	mg/L	0.0010	98	70	130			
Molybdenum		0.0842	mg/L	0.0010	92	70	130			
Nickel		0.0494	mg/L	0.0010	95	70	130			
Selenium		0.0516	mg/L	0.0010	102	70	130			
Silicon		5.51	mg/L	0.10		70	130			A
Silver		0.0120	mg/L	0.010	60	70	130			S
Strontium		0.642	mg/L	0.10		70	130			A
Thallium		0.0497	mg/L	0.0010	99	70	130			
Thorium 232		0.0496	mg/L	0.0010	99	70	130			
Uranium		2.47	mg/L	0.00030		70	130			A
Vanadium		0.0498	mg/L	0.0010	99	70	130			
Zinc		0.0654	mg/L	0.010	99	70	130			
Sample ID: C10050737-004BMSD4	23	Post Digestion Spike Duplicate				Run: SUB-C133067			05/25/10 00:23	
Aluminum		0.0460	mg/L	0.0010	92	70	130	0.9	20	
Arsenic		0.0521	mg/L	0.0010	104	70	130	1.1	20	
Barium		0.134	mg/L	0.10	94	70	130	2.6	20	
Beryllium		0.0467	mg/L	0.010	93	70	130	2.8	20	
Boron		0.0876	mg/L	0.0010	88	70	130	1.4	20	
Cadmium		0.0496	mg/L	0.010	99	70	130	4.2	20	
Chromium		0.0497	mg/L	0.0010	99	70	130	2.3	20	
Copper		0.0502	mg/L	0.010	97	70	130	0.5	20	
Iron		1.23	mg/L	0.030	98	70	130	2.8	20	
Lead		0.0509	mg/L	0.0010	102	70	130	3.7	20	
Manganese		0.0501	mg/L	0.010	99	70	130	4.5	20	
Mercury		0.00509	mg/L	0.0010	102	70	130	3.8	20	
Molybdenum		0.0880	mg/L	0.0010	100	70	130	4.4	20	
Nickel		0.0500	mg/L	0.0010	97	70	130	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R133067A	
Sample ID: C10050737-004BMSD4	23	Post Digestion Spike Duplicate				Run: SUB-C133067			05/25/10 00:23	
Selenium		0.0527	mg/L	0.0010	104	70	130	2.1	20	
Silicon		5.44	mg/L	0.10		70	130	1.4	20	A
Silver		0.0125	mg/L	0.010	63	70	130	4.2	20	S
Strontium		0.654	mg/L	0.10		70	130	1.9	20	A
Thallium		0.0516	mg/L	0.0010	103	70	130	3.8	20	
Thorium 232		0.0518	mg/L	0.0010	104	70	130	4.3	20	
Uranium		2.52	mg/L	0.00030		70	130	2	20	A
Vanadium		0.0504	mg/L	0.0010	100	70	130	1.2	20	
Zinc		0.0646	mg/L	0.010	98	70	130	1.3	20	
Sample ID: LRB	23	Method Blank				Run: SUB-C133067			05/24/10 15:14	
Silicon		ND	mg/L	0.0005						
Aluminum		0.0006	mg/L	8E-05						
Arsenic		ND	mg/L	4E-05						
Barium		ND	mg/L	3E-05						
Beryllium		ND	mg/L	3E-05						
Boron		-0.0005	mg/L							
Cadmium		ND	mg/L	7E-05						
Chromium		ND	mg/L	5E-05						
Copper		ND	mg/L	6E-05						
Iron		0.0002	mg/L	0.0001						
Lead		4E-05	mg/L	2E-05						
Manganese		3E-05	mg/L	2E-05						
Mercury		ND	mg/L	2E-05						
Molybdenum		0.0001	mg/L	8E-05						
Nickel		ND	mg/L	5E-05						
Selenium		ND	mg/L	5E-05						
Silver		ND	mg/L	8E-05						
Strontium		ND	mg/L	6E-05						
Thallium		ND	mg/L	2E-05						
Thorium 232		ND	mg/L	3E-05						
Uranium		ND	mg/L	8E-06						
Vanadium		ND	mg/L	1E-05						
Zinc		0.0005	mg/L	0.0001						
Sample ID: LFB	23	Laboratory Fortified Blank				Run: SUB-C133067			05/24/10 15:21	
Silicon		0.487	mg/L	0.0010	93	85	115			
Aluminum		0.0490	mg/L	0.0010	97	85	115			
Arsenic		0.0515	mg/L	0.0010	103	85	115			
Barium		0.0507	mg/L	0.0010	101	85	115			
Beryllium		0.0509	mg/L	0.0010	102	85	115			
Boron		0.0514	mg/L	0.0010	104	85	115			
Cadmium		0.0517	mg/L	0.0010	103	85	115			
Chromium		0.0510	mg/L	0.0010	102	85	115			
Copper		0.0524	mg/L	0.0010	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R133067A	
Sample ID: LFB	23	Laboratory Fortified Blank				Run: SUB-C133067			05/24/10 15:21	
Iron		1.20	mg/L	0.0010	96	85	115			
Lead		0.0512	mg/L	0.0010	102	85	115			
Manganese		0.0512	mg/L	0.0010	102	85	115			
Mercury		0.00512	mg/L	0.0010	102	85	115			
Molybdenum		0.0501	mg/L	0.0010	100	85	115			
Nickel		0.0519	mg/L	0.0010	104	85	115			
Selenium		0.0524	mg/L	0.0010	105	85	115			
Silver		0.0200	mg/L	0.0010	100	85	115			
Strontium		0.0511	mg/L	0.0010	102	85	115			
Thallium		0.0515	mg/L	0.0010	103	85	115			
Thorium 232		0.0507	mg/L	0.0010	101	85	115			
Uranium		0.0502	mg/L	0.00030	100	85	115			
Vanadium		0.0506	mg/L	0.0010	101	85	115			
Zinc		0.0570	mg/L	0.0010	113	85	115			
Method: E200.8									Batch: C_26223	
Sample ID: MB-26223		Method Blank				Run: SUB-C133358			06/02/10 08:01	
Uranium		0.0001	mg/L	6E-05						
Sample ID: LCS2-26223		Laboratory Control Sample				Run: SUB-C133358			06/02/10 08:27	
Uranium		0.0999	mg/L	0.00030	100	85	115			
Sample ID: C10050737-005CMS4		Post Digestion Spike				Run: SUB-C133358			06/02/10 09:09	
Uranium		0.0559	mg/L	0.00030	109	70	130			
Sample ID: C10050737-005CMSD4		Post Digestion Spike Duplicate				Run: SUB-C133358			06/02/10 09:14	
Uranium		0.0562	mg/L	0.00030	110	70	130	0.5	20	
Method: E200.8									Batch: C_R133403A	
Sample ID: C10050908-003BMS4		Post Digestion Spike				Run: SUB-C133403			06/03/10 04:35	
Silver		0.0162	mg/L	0.010	81	70	130			
Sample ID: C10050908-003BMSD4		Post Digestion Spike Duplicate				Run: SUB-C133403			06/03/10 04:41	
Silver		0.0157	mg/L	0.010	78	70	130	3.4	20	
Sample ID: LRB		Method Blank				Run: SUB-C133403			06/02/10 15:00	
Silver		ND	mg/L	8E-05						
Sample ID: LFB		Laboratory Fortified Blank				Run: SUB-C133403			06/02/10 15:07	
Silver		0.0206	mg/L	0.0010	103	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_R133470
Sample ID: LRB		Method Blank				Run: SUB-C133470				06/03/10 12:41
Antimony		0.0001	mg/L	0.0001						
Sample ID: LFB		Laboratory Fortified Blank				Run: SUB-C133470				06/03/10 12:48
Antimony		0.0530	mg/L	0.0010	106	85	115			
Sample ID: C10050684-001BMS4		Post Digestion Spike				Run: SUB-C133470				06/03/10 13:15
Antimony		0.0560	mg/L	0.0010	112	70	130			
Sample ID: C10050684-001BMSD4		Post Digestion Spike Duplicate				Run: SUB-C133470				06/03/10 13:22
Antimony		0.0561	mg/L	0.0010	112	70	130	0.3	20	
Method: E200.8										Batch: C_R133814
Sample ID: LRB		Method Blank				Run: SUB-C133814				06/14/10 12:44
Antimony		ND	mg/L	0.0001						
Sample ID: LFB		Laboratory Fortified Blank				Run: SUB-C133814				06/14/10 12:51
Antimony		0.0509	mg/L	0.0010	102	85	115			
Sample ID: R10050253-001D		Post Digestion Spike				Run: SUB-C133814				06/14/10 18:52
Antimony		0.0577	mg/L	0.050	115	70	130			
Sample ID: R10050253-001D		Post Digestion Spike Duplicate				Run: SUB-C133814				06/14/10 18:59
Antimony		0.0577	mg/L	0.050	115	70	130	0	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B148233	
Sample ID: QCS		Initial Calibration Verification Standard							05/26/10 13:07	
Mercury		0.0019	mg/L	0.0010	97	90	110			
Method: E245.1									Batch: B_46506	
Sample ID: MB-46506		Method Blank				Run: SUB-B148233			05/26/10 13:11	
Mercury		ND	mg/L	5E-05						
Sample ID: LCS-46506		Laboratory Control Sample				Run: SUB-B148233			05/26/10 13:13	
Mercury		0.0019	mg/L	0.0010	93	85	115			
Sample ID: B10051125-001BMS		Sample Matrix Spike				Run: SUB-B148233			05/26/10 13:16	
Mercury		0.0019	mg/L	0.0010	96	70	130			
Sample ID: B10051125-001BMSD		Sample Matrix Spike Duplicate				Run: SUB-B148233			05/26/10 13:18	
Mercury		0.0018	mg/L	0.0010	91	70	130	5.3	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: DIONEX_100518A	
Sample ID: CCV051810-22	4	Continuing Calibration Verification Standard							05/18/10 22:34	
Fluoride		7.20	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N		7.12	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N		7.44	mg/L	0.10	99	90	110			
Sulfate		75.6	mg/L	1.0	101	90	110			
Method: E300.0									Batch: R46049	
Sample ID: LFB051810-10	4	Laboratory Fortified Blank				Run: DIONEX_100518A			05/18/10 18:44	
Fluoride		4.61	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N		4.52	mg/L	0.10	90	90	110			
Nitrogen, Nitrite as N		5.38	mg/L	0.10	108	90	110			
Sulfate		45.9	mg/L	1.0	92	90	110			
Sample ID: R10050251-003AMS	4	Sample Matrix Spike				Run: DIONEX_100518A			05/18/10 23:23	
Fluoride		24.1	mg/L	0.10	91	90	110			
Nitrogen, Nitrate as N		65.4	mg/L	0.13	57	90	110			S
Nitrogen, Nitrite as N		24.7	mg/L	0.29	99	90	110			
Sulfate		726	mg/L	1.0	57	90	110			S
Sample ID: R10050251-003AMSD	4	Sample Matrix Spike Duplicate				Run: DIONEX_100518A			05/18/10 23:40	
Fluoride		24.7	mg/L	0.10	94	90	110	2.8	10	
Nitrogen, Nitrate as N		66.4	mg/L	0.13	61	90	110	1.5	10	S
Nitrogen, Nitrite as N		25.3	mg/L	0.29	101	90	110	2.4	10	
Sulfate		737	mg/L	1.0	61	90	110	1.5	10	S
Sample ID: R10050264-001CMS	4	Sample Matrix Spike				Run: DIONEX_100518A			05/19/10 03:13	
Fluoride		5.15	mg/L	0.10	93	90	110			
Nitrogen, Nitrate as N		4.92	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N		5.16	mg/L	0.10	103	90	110			
Sulfate		73.0	mg/L	1.0	98	90	110			
Sample ID: R10050264-001CMSD	4	Sample Matrix Spike Duplicate				Run: DIONEX_100518A			05/19/10 03:29	
Fluoride		5.13	mg/L	0.10	92	90	110	0.4	10	
Nitrogen, Nitrate as N		4.87	mg/L	0.10	97	90	110	1	10	
Nitrogen, Nitrite as N		5.10	mg/L	0.10	102	90	110	1.1	10	
Sulfate		72.5	mg/L	1.0	97	90	110	0.7	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: DIONEX_100521A	
Sample ID: CCV052110-46		Continuing Calibration Verification Standard							05/22/10 09:00	
Chloride		72.7	mg/L	5.0	97	90	110			
Method: E300.0									Batch: R46121	
Sample ID: LFB052110-10		Laboratory Fortified Blank				Run: DIONEX_100521A			05/21/10 20:46	
Chloride		22.5	mg/L	5.0	90	90	110			
Sample ID: R10050162-001BMS		Sample Matrix Spike				Run: DIONEX_100521A			05/22/10 09:54	
Chloride		1150	mg/L	5.4	79	90	110			S
Sample ID: R10050162-001BMSD		Sample Matrix Spike Duplicate				Run: DIONEX_100521A			05/22/10 10:12	
Chloride		1160	mg/L	5.4	80	90	110	0.4	10	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Revised Date: 09/10/10
Client: Powertech USA Inc
Report Date: 06/29/10
Project: Dewey Groundwater Sampling
Work Order: R10050253

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0909	
Sample ID: MB-GrAB-0909	6	Method Blank				Run: SUB-C133323			05/28/10 03:36	
Gross Alpha		-1	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.8	pCi/L							
Gross Beta		-3	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-0909		Laboratory Control Sample				Run: SUB-C133323			05/28/10 03:36	
Gross Alpha		94	pCi/L		93	70	130			
Sample ID: Cs137-GrAB-0909		Laboratory Control Sample				Run: SUB-C133323			05/28/10 03:36	
Gross Beta		87	pCi/L		100	70	130			
Sample ID: C10050458-009AMS		Sample Matrix Spike				Run: SUB-C133323			05/29/10 01:18	
Gross Alpha		120	pCi/L		119	70	130			
Sample ID: C10050458-009AMSD		Sample Matrix Spike Duplicate				Run: SUB-C133323			05/29/10 01:18	
Gross Alpha		120	pCi/L		113	70	130	5.1	20.1	
Sample ID: C10050458-009AMS		Sample Matrix Spike				Run: SUB-C133323			05/29/10 01:18	
Gross Beta		82	pCi/L		88	70	130			
Sample ID: C10050458-009AMSD		Sample Matrix Spike Duplicate				Run: SUB-C133323			05/29/10 01:18	
Gross Beta		86	pCi/L		92	70	130	4.5	16.4	
Sample ID: C10050705-001DDUP	6	Sample Duplicate				Run: SUB-C133323			05/29/10 01:18	
Gross Alpha		820	pCi/L					6.7	14.2	
Gross Alpha precision (±)		18	pCi/L							
Gross Alpha MDC		4.1	pCi/L							
Gross Beta		200	pCi/L					4	14	
Gross Beta precision (±)		3.9	pCi/L							
Gross Beta MDC		2.9	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R133449	
Sample ID: LCS-R133449	3	Laboratory Control Sample				Run: SUB-C133449			05/27/10 06:15	
Americium 241		690	pCi/L	20	85	70	130			
Cesium 137		990	pCi/L	20	97	70	130			
Potassium 40		6300	pCi/L	20	94	70	130			
Sample ID: MB-R133449	4	Method Blank				Run: SUB-C133449			05/27/10 06:15	
Bismuth 214		ND	pCi/L							U
Lead 214		ND	pCi/L							U
Potassium 40		ND	pCi/L							U
Gross Gamma		ND	pCi/L							U
Sample ID: R10050253-002H	2	Sample Duplicate				Run: SUB-C133449			05/27/10 06:15	
Bismuth 214		ND	pCi/L	20					30	U
Gross Gamma		ND	pCi/L					0	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4544	
Sample ID: C10050641-007AMS		Sample Matrix Spike				Run: SUB-C133373			06/02/10 10:57	
Radium 226		18	pCi/L		110	70	130			
Sample ID: C10050641-007AMSD		Sample Matrix Spike Duplicate				Run: SUB-C133373			06/02/10 12:29	
Radium 226		17	pCi/L		109	70	130	0.9	23.4	
Sample ID: MB-RA226-4544	3	Method Blank				Run: SUB-C133373			06/02/10 12:29	
Radium 226		-0.1	pCi/L							U
Radium 226 precision (±)		0.08	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4544		Laboratory Control Sample				Run: SUB-C133373			06/02/10 12:29	
Radium 226		8.8	pCi/L		113	70	130			
Method: E903.0									Batch: C_R133983	
Sample ID: C10050920-002AMS		Sample Matrix Spike				Run: SUB-C133983			06/18/10 08:32	
Radium 226		8.7	pCi/g-dry		112	70	130			
Sample ID: C10050920-002AMSD		Sample Matrix Spike Duplicate				Run: SUB-C133983			06/18/10 08:32	
Radium 226		8.6	pCi/g-dry		112	70	130	0.4	23.7	
Sample ID: LCS-26223		Laboratory Control Sample				Run: SUB-C133983			06/18/10 08:32	
Radium 226		18	pCi/L		116	70	130			
Sample ID: MB-26223	3	Method Blank				Run: SUB-C133983			06/18/10 08:32	
Radium 226		0.3	pCi/L							U
Radium 226 precision (±)		0.3	pCi/L							
Radium 226 MDC		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									Batch: C_RA-TH-ISO-1179	
Sample ID: LCS-RA-TH-ISO-1179		Laboratory Control Sample				Run: SUB-C133256			05/27/10 08:45	
Thorium 230		4.9	pCi/L		93	70	130			
Sample ID: R10050253-002H		Sample Matrix Spike				Run: SUB-C133256			05/27/10 08:45	
Thorium 230		12	pCi/L		95	70	130			
Sample ID: R10050253-002H		Sample Matrix Spike Duplicate				Run: SUB-C133256			05/27/10 08:45	
Thorium 230		11	pCi/L		86	70	130	10	38.3	
Sample ID: MB-RA-TH-ISO-1179	3	Method Blank				Run: SUB-C133256			05/27/10 08:45	
Thorium 230		0.006	pCi/L							U
Thorium 230 MDC		0.1	pCi/L							
Thorium 230 precision (±)		0.06	pCi/L							
Method: E907.0									Batch: C_R133616	
Sample ID: LCS-26223		Laboratory Control Sample				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		4.6	pCi/L		98	70	130			
Sample ID: MB-26223	3	Method Blank				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		-0.2	pCi/L							U
Thorium 230 MDC		0.2	pCi/L							
Thorium 230 precision (±)		0.1	pCi/L							
Sample ID: C10050803-001DMS		Sample Matrix Spike				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		4.7	pCi/L		108	70	130			
Sample ID: C10050803-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		5.6	pCi/L		125	70	130	16	45.6	
Sample ID: LCS-26241		Laboratory Control Sample				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		4.9	pCi/L		101	70	130			
Sample ID: MB-26241	3	Method Blank				Run: SUB-C133616			06/04/10 10:06	
Thorium 230		-0.06	pCi/L							U
Thorium 230 MDC		0.2	pCi/L							
Thorium 230 precision (±)		0.1	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_PB-210-0712	
Sample ID: C10050659-006AMS		Sample Matrix Spike				Run: SUB-C133793			06/13/10 12:33	
Lead 210		113	pCi/g-dry		109	70	130			
Sample ID: C10050659-006AMSD		Sample Matrix Spike Duplicate				Run: SUB-C133793			06/13/10 14:34	
Lead 210		108	pCi/g-dry		104	70	130	4.8	17	
Sample ID: MB-26211	3	Method Blank				Run: SUB-C133793			06/13/10 20:39	
Lead 210		ND	pCi/g-dry							U
Lead 210 precision (±)		0.02	pCi/g-dry							
Lead 210 MDC		0.03	pCi/g-dry							
Sample ID: MB-26223	3	Method Blank				Run: SUB-C133793			06/13/10 22:40	
Lead 210		5	pCi/L							U
Lead 210 precision (±)		20	pCi/L							
Lead 210 MDC		30	pCi/L							
Sample ID: LCS-26211		Laboratory Control Sample				Run: SUB-C133793			06/14/10 00:42	
Lead 210		60.7	pCi/g-dry		116	70	130			
Sample ID: LCS-26223		Laboratory Control Sample				Run: SUB-C133793			06/14/10 02:44	
Lead 210		650	pCi/L		124	70	130			
Method: E909.0M									Batch: C_PB-210-0710	
Sample ID: C09110441-001GMS		Sample Matrix Spike				Run: SUB-C133803			06/12/10 06:10	
Lead 210		240	pCi/L		107	70	130			
Sample ID: C09110441-001GMSD		Sample Matrix Spike Duplicate				Run: SUB-C133803			06/12/10 08:11	
Lead 210		230	pCi/L		102	70	130	4.6	17.8	
Sample ID: MB-PB-210-0710	3	Method Blank				Run: SUB-C133803			06/12/10 10:13	
Lead 210		ND	pCi/L							U
Lead 210 precision (±)		3	pCi/L							
Lead 210 MDC		6	pCi/L							
Sample ID: LCS-PB-210-0710		Laboratory Control Sample				Run: SUB-C133803			06/12/10 14:16	
Lead 210		100	pCi/L		94	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 09/10/10
Report Date: 06/29/10
Work Order: R10050253

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_R133609
Sample ID: LCS-26223		Laboratory Control Sample				Run: SUB-C133609				06/07/10 08:48
Polonium 210		76	pCi/L		97	70	130			
Sample ID: MB-26223	3	Method Blank				Run: SUB-C133609				06/07/10 08:48
Polonium 210		0.7	pCi/L							U
Polonium 210 precision (±)		2	pCi/L							
Polonium 210 MDC		3	pCi/L							
Sample ID: C10050803-004DMS		Sample Matrix Spike				Run: SUB-C133609				06/07/10 11:03
Polonium 210		15	pCi/L		104	70	130			
Sample ID: C10050803-004DMSD		Sample Matrix Spike Duplicate				Run: SUB-C133609				06/07/10 11:03
Polonium 210		12	pCi/L		89	70	130	15	58	
Sample ID: LCS-26241		Laboratory Control Sample				Run: SUB-C133609				06/07/10 11:03
Polonium 210		92	pCi/L		118	70	130			
Sample ID: MB-26241	3	Method Blank				Run: SUB-C133609				06/07/10 11:03
Polonium 210		0.3	pCi/L							U
Polonium 210 precision (±)		1	pCi/L							
Polonium 210 MDC		3	pCi/L							
Method: E912.0										Batch: C_PO210-0301
Sample ID: R10050253-002K		Sample Matrix Spike				Run: SUB-C133610				06/07/10 08:47
Polonium 210		36	pCi/L		110	70	130			
Sample ID: R10050253-002K		Sample Matrix Spike Duplicate				Run: SUB-C133610				06/07/10 08:47
Polonium 210		32	pCi/L		97	70	130	13	65.4	
Sample ID: LCS-PO210-0301		Laboratory Control Sample				Run: SUB-C133610				06/07/10 08:47
Polonium 210		16	pCi/L		99	70	130			
Sample ID: MB-PO210-0301	3	Method Blank				Run: SUB-C133610				06/07/10 08:47
Polonium 210		-0.05	pCi/L							U
Polonium 210 MDC		0.7	pCi/L							
Polonium 210 precision (±)		0.2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

Chain of Custody and Analytical Request Record

Page _____ of _____

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Scott Env.	Powertech Dewey Burdock	State:	Yes ☐ No ☐
Report Mail Address:	**Contact Name:** Phone/Fax:	**Email:**	**Sampler: (Please Print)**
Scott Env., Powertech	Allen Scott		
Invoice Address:	**Invoice Contact & Phone:**	**Purchase Order:**	**Quote/Bottle Order:**

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other)	As per Quote	SEE ATTACHED	Normal Turnaround (TAT)	RUSH
1 DB-09-21-01	5-17-10		Water				
2 DB-09-21-02	5-17-10		Water				
3							
4							
5							
6							
7							
8							
9							
10							

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 3.1 °C

On Ice: Yes No

Custody Seal Y N

Bottles/Coolers B C

Intact Y N

Signature Match Y N

LABORATORY USE ONLY: R0050253-001 002

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	5-17-10 10:38 Am				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Troiland	Date/Time: 5-18-10 1038	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

August 23, 2010

Mark Hollenbeck
Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10060444

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 6/23/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10060444-001	DB-09-21-01	06/22/10 0:00	06/23/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10060444-002	DB-09-21-02	06/22/10 0:00	06/23/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.08.23 09:35:58 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10060444

Report Date: 08/23/10

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002.

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.
Comments imported for SUBBED Workorder: C10061034
RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10061034

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-001
Client Sample ID: DB-09-21-01

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	152	mg/L		5		1	A2320 B	07/01/10 11:16/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/01/10 11:16/mb
Bicarbonate as HCO3	185	mg/L		5		1	A2320 B	07/01/10 11:16/mb
Calcium	92	mg/L	D	1		5	E200.7	07/01/10 15:12/eli-c
Chloride	7	mg/L		1		1	E300.0	06/24/10 13:07/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/24/10 13:07/jmh
Magnesium	33.6	mg/L		0.5		5	E200.7	07/01/10 15:12/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/02/10 16:22/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/24/10 13:07/jmh
Nitrogen, Nitrite as N	0.3	mg/L		0.1		1	E300.0	06/24/10 13:07/jmh
Potassium	11.8	mg/L		0.5		5	E200.7	07/01/10 15:12/eli-c
Sodium	159	mg/L	D	1		5	E200.7	07/01/10 15:12/eli-c
Sulfate	524	mg/L	D	20		20	E300.0	06/24/10 12:49/jmh
Silica	8.2	mg/L		0.2		1	E200.8	06/29/10 00:27/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1320	umhos/cm		5.0		1	A2510 B	07/01/10 12:59/tb
Oxidation-Reduction Potential	330	mV				1	A2580 B	06/29/10 16:30/jmh
pH	7.86	s.u.		0.01		1	A4500-H B	06/28/10 13:09/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	08/12/10 16:22/ADM
Solids, Total Dissolved TDS @ 180 C	910	mg/L	D	10		1	A2540 C	06/28/10 12:45/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/01/10 04:08/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/29/10 00:27/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/29/10 00:27/eli-c
Boron	ND	mg/L		0.1		5	E200.7	07/01/10 15:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/29/10 00:27/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/29/10 00:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/29/10 00:27/eli-c
Iron	ND	mg/L		0.03		1	E200.8	06/29/10 00:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/29/10 00:27/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	06/29/10 00:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/29/10 00:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	06/29/10 00:27/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/29/10 00:27/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/01/10 16:39/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	07/01/10 04:08/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/29/10 00:27/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-001
Client Sample ID: DB-09-21-01

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	06/29/10 00:27/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	06/29/10 00:27/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/29/10 00:27/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/11/10 07:36/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/01/10 14:55/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/02/10 07:18/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.2	pCi/L	U			1	E900.0	07/19/10 22:35/eli-ca
Gross Alpha precision (±)	4.7	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Alpha MDC	7.1	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta	13.4	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta MDC	4.2	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Lead 210	0.8	pCi/L	U			1	E909.0M	07/11/10 20:11/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	07/11/10 20:11/eli-c
Lead 210 MDC	2.3	pCi/L				1	E909.0M	07/11/10 20:11/eli-c
Polonium 210	0.11	pCi/L	U			1	E912.0	07/06/10 09:18/eli-ca
Polonium 210 MDC	0.54	pCi/L				1	E912.0	07/06/10 09:18/eli-ca
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	07/06/10 09:18/eli-ca
Radium 226	1.8	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Thorium 230	1.2	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Gross Gamma	500	pCi/L				1	E901.1	06/28/10 10:55/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	06/28/10 10:55/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	2.7	pCi/L	U			1	E909.0M	07/07/10 08:46/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	07/07/10 08:46/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	07/07/10 08:46/eli-c
Polonium 210	-0.036	pCi/L	U			1	E912.0	07/08/10 09:12/eli-ca
Polonium 210 precision (±)	0.24	pCi/L				1	E912.0	07/08/10 09:12/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-001
Client Sample ID: DB-09-21-01

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.64	pCi/L				1	E912.0	07/08/10 09:12/eli-ca
Radium 226	-0.3	pCi/L	U			1	E903.0	07/12/10 22:14/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/12/10 22:14/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	07/12/10 22:14/eli-c
Thorium 230	-0.4	pCi/L	U			1	E907.0	07/07/10 11:11/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	07/07/10 11:11/eli-c
- See Case Narrative regarding Pb210 analysis.								
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	243	pCi/L		100		1	D5072-92	06/25/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/02/10 01:52/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	07/02/10 01:52/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/01/10 23:22/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	07/01/10 23:22/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/01/10 23:22/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	07/01/10 23:22/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/01/10 23:22/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/01/10 23:22/eli-c
Iron	0.31	mg/L		0.03		2	E200.7	07/01/10 23:22/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/02/10 01:52/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	07/01/10 23:22/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	06/28/10 11:41/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/01/10 23:22/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/01/10 23:22/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	07/02/10 01:52/eli-c
Silver	ND	mg/L		0.005		2	E200.7	07/01/10 23:22/eli-c
Strontium	2.8	mg/L		0.1		2	E200.7	07/01/10 23:22/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/02/10 01:52/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/02/10 01:52/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/02/10 01:52/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.50	%				1	A1030 E	08/19/10 00:00/jmh
Anions	14.2	meq/L				1	A1030 E	08/19/10 00:00/jmh
Cations	14.6	meq/L				1	A1030 E	08/19/10 00:00/jmh
Solids, Total Dissolved Calculated	944	mg/L				1	A1030 E	08/19/10 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	08/19/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-002
Client Sample ID: DB-09-21-02

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	210	mg/L		5		1	A2320 B	07/01/10 11:19/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/01/10 11:19/mb
Bicarbonate as HCO3	256	mg/L		5		1	A2320 B	07/01/10 11:19/mb
Calcium	165	mg/L	D	1		5	E200.7	07/01/10 15:16/eli-c
Chloride	9	mg/L		1		1	E300.0	06/24/10 13:42/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	06/24/10 13:42/jmh
Magnesium	47.4	mg/L		0.5		5	E200.7	07/01/10 15:16/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	07/02/10 16:25/jmh
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	06/24/10 13:42/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	06/24/10 13:42/jmh
Potassium	11.8	mg/L		0.5		5	E200.7	07/01/10 15:16/eli-c
Sodium	130	mg/L	D	1		5	E200.7	07/01/10 15:16/eli-c
Sulfate	640	mg/L	D	20		20	E300.0	06/24/10 13:25/jmh
Silica	7.6	mg/L		0.2		1	E200.8	06/29/10 00:33/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1520	umhos/cm		5.0		1	A2510 B	07/01/10 13:02/tb
Oxidation-Reduction Potential	340	mV				1	A2580 B	06/29/10 16:30/jmh
pH	7.50	s.u.		0.01		1	A4500-H B	06/28/10 13:15/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	08/12/10 16:22/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	D	10		1	A2540 C	06/28/10 12:47/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	07/01/10 04:15/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	06/29/10 00:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	06/29/10 00:33/eli-c
Boron	ND	mg/L		0.1		5	E200.7	07/01/10 15:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/29/10 00:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	06/29/10 00:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/29/10 00:33/eli-c
Iron	ND	mg/L		0.03		1	E200.8	06/29/10 00:33/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/29/10 00:33/eli-c
Manganese	0.56	mg/L		0.01		1	E200.8	06/29/10 00:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/29/10 00:33/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	06/29/10 00:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	06/29/10 00:33/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	07/01/10 16:45/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	07/01/10 04:15/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/29/10 00:33/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-002
Client Sample ID: DB-09-21-02

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0087	mg/L		0.0003		1	E200.8	06/29/10 00:33/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	06/29/10 00:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	06/29/10 00:33/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	07/11/10 07:40/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/01/10 15:02/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/02/10 07:18/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	34.0	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Alpha precision (±)	7.2	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Alpha MDC	8.8	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta	19.6	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta precision (±)	3.3	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Gross Beta MDC	5.0	pCi/L				1	E900.0	07/19/10 22:35/eli-ca
Lead 210	0.7	pCi/L	U			1	E909.0M	07/11/10 22:13/eli-c
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	07/11/10 22:13/eli-c
Lead 210 MDC	2.3	pCi/L				1	E909.0M	07/11/10 22:13/eli-c
Polonium 210	-0.042	pCi/L	U			1	E912.0	07/06/10 09:18/eli-ca
Polonium 210 MDC	0.60	pCi/L				1	E912.0	07/06/10 09:18/eli-ca
Polonium 210 precision (±)	0.22	pCi/L				1	E912.0	07/06/10 09:18/eli-ca
Radium 226	2.5	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	07/06/10 17:27/eli-ca
Thorium 230	0.8	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	07/01/10 13:14/eli-c
Gross Gamma	1300	pCi/L				1	E901.1	06/28/10 10:55/eli-c
Gross Gamma precision (±)	310	pCi/L				1	E901.1	06/28/10 10:55/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.05	pCi/L	U			1	E909.0M	07/07/10 08:46/eli-c
Lead 210 precision (±)	3.4	pCi/L				1	E909.0M	07/07/10 08:46/eli-c
Lead 210 MDC	5.7	pCi/L				1	E909.0M	07/07/10 08:46/eli-c
Polonium 210	-0.047	pCi/L	U			1	E912.0	07/08/10 09:12/eli-ca
Polonium 210 precision (±)	0.31	pCi/L				1	E912.0	07/08/10 09:12/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10060444-002
Client Sample ID: DB-09-21-02

Report Date: 08/23/10
Collection Date: 06/22/10
Date Received: 06/23/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.85	pCi/L				1	E912.0	07/08/10 09:12/eli-ca
Radium 226	-0.2	pCi/L	U			1	E903.0	07/12/10 22:14/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	07/12/10 22:14/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	07/12/10 22:14/eli-c
Thorium 230	-0.2	pCi/L	U			1	E907.0	07/07/10 11:12/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/07/10 11:12/eli-c
- See Case Narrative regarding Ra226 analysis.								
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	338	pCi/L		100		1	D5072-92	06/25/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	07/12/10 18:14/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/12/10 18:14/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/02/10 19:00/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	07/02/10 19:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	07/02/10 19:00/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	07/02/10 19:00/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/02/10 19:00/eli-c
Copper	ND	mg/L		0.01		2	E200.7	07/02/10 19:00/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/02/10 19:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/12/10 18:14/eli-c
Manganese	0.57	mg/L		0.01		2	E200.7	07/02/10 19:00/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	06/28/10 11:42/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	07/02/10 19:00/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/02/10 19:00/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	07/12/10 18:14/eli-c
Silver	ND	mg/L		0.005		2	E200.7	07/02/10 19:00/eli-c
Strontium	2.4	mg/L		0.1		2	E200.7	07/02/10 19:00/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	07/12/10 18:14/eli-c
Uranium	0.0081	mg/L		0.0003		1	E200.8	07/12/10 18:14/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	07/12/10 18:14/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.900	%				1	A1030 E	08/19/10 00:00/jmh
Anions	17.8	meq/L				1	A1030 E	08/19/10 00:00/jmh
Cations	18.2	meq/L				1	A1030 E	08/19/10 00:00/jmh
Solids, Total Dissolved Calculated	1150	mg/L				1	A1030 E	08/19/10 00:00/jmh
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	08/19/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 100701A-ALK-SEL-W	
Sample ID: LCS1_100701A		Laboratory Control Sample				Run: PH_COND1-R_100701A			07/01/10 10:06	
Alkalinity, Total as CaCO3		972	mg/L	5.0	97	90	110			
Sample ID: MBLK1_100701A		Method Blank				Run: PH_COND1-R_100701A			07/01/10 10:07	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10060398-009AMS		Sample Matrix Spike				Run: PH_COND1-R_100701A			07/01/10 10:58	
Alkalinity, Total as CaCO3		290	mg/L	5.0	89	80	120			
Sample ID: R10060398-009AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_100701A			07/01/10 11:00	
Alkalinity, Total as CaCO3		296	mg/L	5.0	94	80	120	2	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 100701_1_COND-PROBE-W	
Sample ID: LCS1-1_100701		Laboratory Control Sample				Run: PH_COND2-R_100701B			07/01/10 12:43	
Conductivity @ 25 C		151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_100701		Laboratory Control Sample				Run: PH_COND2-R_100701B			07/01/10 12:45	
Conductivity @ 25 C		5010	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_100701		Laboratory Control Sample				Run: PH_COND2-R_100701B			07/01/10 12:47	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100701		Method Blank				Run: PH_COND2-R_100701B			07/01/10 12:49	
Conductivity @ 25 C		8	umhos/cm	5						
Sample ID: R10060424-001JDUP		Sample Duplicate				Run: PH_COND2-R_100701B			07/01/10 12:53	
Conductivity @ 25 C		101	umhos/cm	5.0				0	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 100628A-SLDS-TDS-W	
Sample ID: LCS1_100628A		Laboratory Control Sample				Run: BAL-4-R_100628A			06/28/10 12:31	
Solids, Total Dissolved TDS @ 180 C		190	mg/L	10	95	90	110			
Sample ID: MBLK1_100628A		Method Blank				Run: BAL-4-R_100628A			06/28/10 12:32	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	5						
Sample ID: R10060444-001ADUP		Sample Duplicate				Run: BAL-4-R_100628A			06/28/10 12:45	
Solids, Total Dissolved TDS @ 180 C		910	mg/L	10					5	
Sample ID: R10060444-002ADUP		Sample Duplicate				Run: BAL-4-R_100628A			06/28/10 12:48	
Solids, Total Dissolved TDS @ 180 C		1100	mg/L	10				0.9	5	
Sample ID: R10060477-001CMS		Sample Matrix Spike				Run: BAL-4-R_100628A			06/28/10 12:51	
Solids, Total Dissolved TDS @ 180 C		2300	mg/L	10	105	90	110			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 100629-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_100629B			06/29/10 16:30	
Oxidation-Reduction Potential		490	mV		103	95	105			
Sample ID: R10050321-011A		Sample Duplicate				Run: PH_COND1-R_100629B			06/29/10 16:30	
Oxidation-Reduction Potential		510	mV					0.9	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									Analytical Run: SUB-C134466	
Sample ID: As/Se 1.0mg/L-Q 0622		Initial Calibration Verification Standard							07/01/10 14:33	
Selenium-IV		0.052	mg/L	0.0010	104	90	110			
Method: A3114 B									Batch: C_26567	
Sample ID: MB-26567		Method Blank				Run: SUB-C134466			07/01/10 14:40	
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LCS-26567		Laboratory Control Sample				Run: SUB-C134466			07/01/10 14:42	
Selenium-IV		0.051	mg/L	0.0010	102	90	110			
Sample ID: R10060444-001E		Sample Matrix Spike				Run: SUB-C134466			07/01/10 14:57	
Selenium-IV		0.049	mg/L	0.0010	98	85	115			
Sample ID: R10060444-001E		Sample Matrix Spike Duplicate				Run: SUB-C134466			07/01/10 14:59	
Selenium-IV		0.049	mg/L	0.0010	98	85	115	0	10	
Method: A3114 B									Batch: C_26567	
Sample ID: MB-26567		Method Blank				Run: SUB-C134475			07/01/10 16:25	
Selenium		ND	mg/L	0.0002						
Sample ID: LCS-26567		Laboratory Control Sample				Run: SUB-C134475			07/01/10 16:27	
Selenium		0.051	mg/L	0.0010	103	90	110			
Sample ID: R10060444-001E		Sample Matrix Spike				Run: SUB-C134475			07/01/10 16:41	
Selenium		0.053	mg/L	0.0010	105	85	115			
Sample ID: R10060444-001E		Sample Matrix Spike Duplicate				Run: SUB-C134475			07/01/10 16:43	
Selenium		0.052	mg/L	0.0010	103	85	115	2.2	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B										Batch: 100628_1_PH-W
Sample ID: LCS_pH-1_100628		Laboratory Control Sample				Run: PH_COND2-R_100628A				06/28/10 13:03
pH		7.42	s.u.	0.010	100	98.55	101.45			
Sample ID: R10060444-001ADUP		Sample Duplicate				Run: PH_COND2-R_100628A				06/28/10 13:13
pH		7.82	s.u.	0.010				0.5	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-07-02_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100702A			07/02/10 12:29	
Nitrogen, Ammonia as N		ND	mg/L	0.02						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100702A			07/02/10 12:31	
Nitrogen, Ammonia as N		0.27	mg/L	0.10	107	90	110			
Sample ID: R10060444-001BMS		Sample Matrix Spike				Run: TECHAA2-R_100702A			07/02/10 16:23	
Nitrogen, Ammonia as N		0.35	mg/L	0.10	104	80	120			
Sample ID: R10060444-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100702A			07/02/10 16:24	
Nitrogen, Ammonia as N		0.35	mg/L	0.10	102	80	120	0.9	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_26553
Sample ID: MB-26553	12	Method Blank				Run: SUB-C134477				07/01/10 23:14
Barium		ND	mg/L	0.002						
Beryllium		ND	mg/L	0.0001						
Boron		0.02	mg/L	0.008						
Cadmium		ND	mg/L	0.001						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.008						
Manganese		ND	mg/L	0.0008						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Silver		ND	mg/L	0.001						
Strontium		ND	mg/L	0.0002						
Sample ID: LCS3-26553	12	Laboratory Control Sample				Run: SUB-C134477				07/01/10 23:18
Barium		0.501	mg/L	0.10	100	85	115			
Beryllium		0.255	mg/L	0.010	102	85	115			
Boron		0.515	mg/L	0.10	98	85	115			
Cadmium		0.256	mg/L	0.010	102	85	115			
Chromium		0.502	mg/L	0.050	100	85	115			
Copper		0.504	mg/L	0.010	101	85	115			
Iron		2.51	mg/L	0.030	100	85	115			
Manganese		2.48	mg/L	0.010	99	85	115			
Molybdenum		0.499	mg/L	0.10	100	85	115			
Nickel		0.494	mg/L	0.050	99	85	115			
Silver		0.0493	mg/L	0.010	99	85	115			
Strontium		0.509	mg/L	0.10	102	85	115			
Sample ID: C10061061-001CMS3	12	Sample Matrix Spike				Run: SUB-C134477				07/01/10 23:38
Barium		0.645	mg/L	0.10	108	70	130			
Beryllium		0.268	mg/L	0.010	107	70	130			
Boron		0.748	mg/L	0.10	107	70	130			
Cadmium		0.274	mg/L	0.010	110	70	130			
Chromium		0.540	mg/L	0.050	108	70	130			
Copper		0.598	mg/L	0.010	107	70	130			
Iron		3.71	mg/L	0.030	108	70	130			
Manganese		2.69	mg/L	0.010	104	70	130			
Molybdenum		0.549	mg/L	0.10	105	70	130			
Nickel		0.537	mg/L	0.050	105	70	130			
Silver		0.0486	mg/L	0.010	97	70	130			
Strontium		1.18	mg/L	0.10	109	70	130			
Sample ID: C10061061-001CMSD3	12	Sample Matrix Spike Duplicate				Run: SUB-C134477				07/01/10 23:42
Barium		0.639	mg/L	0.10	107	70	130	0.9	20	
Beryllium		0.265	mg/L	0.010	106	70	130	1.3	20	
Boron		0.754	mg/L	0.10	108	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_26553
Sample ID: C10061061-001CMSD3	12	Sample Matrix Spike Duplicate				Run: SUB-C134477				07/01/10 23:42
Cadmium		0.264	mg/L	0.010	106	70	130	3.7	20	
Chromium		0.533	mg/L	0.050	107	70	130	1.3	20	
Copper		0.571	mg/L	0.010	102	70	130	4.8	20	
Iron		3.62	mg/L	0.030	105	70	130	2.6	20	
Manganese		2.66	mg/L	0.010	103	70	130	1	20	
Molybdenum		0.549	mg/L	0.10	105	70	130	0	20	
Nickel		0.532	mg/L	0.050	104	70	130	0.9	20	
Silver		0.0506	mg/L	0.010	101	70	130	4	20	
Strontium		1.18	mg/L	0.10	107	70	130	0.5	20	
Method: E200.7										Batch: C_R134477
Sample ID: MB-100701A	5	Method Blank				Run: SUB-C134477				07/01/10 10:51
Boron		0.02	mg/L	0.009						
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-100701A	5	Laboratory Fortified Blank				Run: SUB-C134477				07/01/10 10:55
Boron		0.96	mg/L	0.10	94	85	115			
Calcium		49	mg/L	0.50	98	85	115			
Magnesium		49	mg/L	0.50	98	85	115			
Potassium		45	mg/L	0.50	89	85	115			
Sodium		47	mg/L	0.50	94	85	115			
Sample ID: C10060982-005BMS2	5	Sample Matrix Spike				Run: SUB-C134477				07/01/10 13:03
Boron		1.92	mg/L	0.10	94	70	130			
Calcium		98.3	mg/L	1.0	94	70	130			
Magnesium		95.0	mg/L	1.0	93	70	130			
Potassium		98.4	mg/L	1.0	96	70	130			
Sodium		97.6	mg/L	1.0	95	70	130			
Sample ID: C10060982-005BMSD2	5	Sample Matrix Spike Duplicate				Run: SUB-C134477				07/01/10 13:07
Boron		1.94	mg/L	0.10	95	70	130	1.3	20	
Calcium		99.1	mg/L	1.0	95	70	130	0.7	20	
Magnesium		96.9	mg/L	1.0	95	70	130	2	20	
Potassium		97.3	mg/L	1.0	95	70	130	1.1	20	
Sodium		98.6	mg/L	1.0	96	70	130	1	20	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R134533
Sample ID: C10060999-001DMS2	12	Sample Matrix Spike				Run: SUB-C134533			07/02/10 18:52	
Barium		2.41	mg/L	0.10	98	70	130			
Beryllium		2.00	mg/L	0.010	98	70	130			
Boron		2.04	mg/L	0.10	99	70	130			
Cadmium		2.00	mg/L	0.010	98	70	130			
Chromium		2.00	mg/L	0.050	98	70	130			
Copper		2.04	mg/L	0.010	100	70	130			
Iron		2.04	mg/L	0.030	98	70	130			
Manganese		2.08	mg/L	0.010	97	70	130			
Molybdenum		1.99	mg/L	0.10	98	70	130			
Nickel		2.02	mg/L	0.050	99	70	130			
Silver		1.94	mg/L	0.010	95	70	130			
Strontium		3.19	mg/L	0.10	100	70	130			
Sample ID: C10060999-001DMSD2	12	Sample Matrix Spike Duplicate				Run: SUB-C134533			07/02/10 18:56	
Barium		2.39	mg/L	0.10	97	70	130	0.9	20	
Beryllium		1.98	mg/L	0.010	97	70	130	0.7	20	
Boron		2.04	mg/L	0.10	99	70	130	0.2	20	
Cadmium		1.95	mg/L	0.010	96	70	130	2.4	20	
Chromium		1.95	mg/L	0.050	96	70	130	2.2	20	
Copper		1.99	mg/L	0.010	98	70	130	2.1	20	
Iron		1.99	mg/L	0.030	96	70	130	2.3	20	
Manganese		2.04	mg/L	0.010	95	70	130	1.7	20	
Molybdenum		1.98	mg/L	0.10	97	70	130	0.5	20	
Nickel		2.03	mg/L	0.050	99	70	130	0.5	20	
Silver		1.91	mg/L	0.010	93	70	130	1.6	20	
Strontium		3.16	mg/L	0.10	98	70	130	1.1	20	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R134311A	
Sample ID: R10060444-002C	16	Post Digestion Spike				Run: SUB-C134311			06/29/10 01:08	
Arsenic		0.0547	mg/L	0.0010	107	70	130			
Barium		0.0631	mg/L	0.0010	104	70	130			
Cadmium		0.0502	mg/L	0.010	100	70	130			
Chromium		0.0522	mg/L	0.050	104	70	130			
Copper		0.0504	mg/L	0.010	101	70	130			
Iron		1.28	mg/L	0.030	102	70	130			
Lead		0.0535	mg/L	0.050	107	70	130			
Manganese		0.603	mg/L	0.010		70	130			A
Mercury		0.00543	mg/L	0.0010	109	70	130			
Molybdenum		0.0534	mg/L	0.0010	105	70	130			
Nickel		0.0512	mg/L	0.050	101	70	130			
Silicon		4.30	mg/L	0.10		70	130			A
Thorium 232		0.0541	mg/L	0.0010	108	70	130			
Uranium		0.0608	mg/L	0.00030	104	70	130			
Vanadium		0.0536	mg/L	0.0010	106	70	130			
Zinc		0.0536	mg/L	0.010	100	70	130			
Sample ID: R10060444-002C	16	Post Digestion Spike Duplicate				Run: SUB-C134311			06/29/10 01:15	
Arsenic		0.0560	mg/L	0.0010	110	70	130	2.3	20	
Barium		0.0650	mg/L	0.0010	108	70	130	2.9	20	
Cadmium		0.0518	mg/L	0.010	104	70	130	3.2	20	
Chromium		0.0537	mg/L	0.050	107	70	130	2.8	20	
Copper		0.0516	mg/L	0.010	103	70	130	2.2	20	
Iron		1.29	mg/L	0.030	103	70	130	0.6	20	
Lead		0.0551	mg/L	0.050	110	70	130	2.9	20	
Manganese		0.612	mg/L	0.010		70	130	1.6	20	A
Mercury		0.00559	mg/L	0.0010	112	70	130	2.9	20	
Molybdenum		0.0566	mg/L	0.0010	112	70	130	5.7	20	
Nickel		0.0525	mg/L	0.050	104	70	130	2.5	20	
Silicon		4.32	mg/L	0.10		70	130	0.4	20	A
Thorium 232		0.0558	mg/L	0.0010	112	70	130	3.1	20	
Uranium		0.0627	mg/L	0.00030	108	70	130	3.1	20	
Vanadium		0.0551	mg/L	0.0010	109	70	130	2.8	20	
Zinc		0.0542	mg/L	0.010	101	70	130	1.1	20	
Sample ID: LRB	16	Method Blank				Run: SUB-C134311			06/28/10 11:52	
Silicon		0.03	mg/L	0.0005						
Arsenic		8E-05	mg/L	4E-05						
Barium		7E-05	mg/L	3E-05						
Cadmium		7E-05	mg/L	7E-05						
Chromium		7E-05	mg/L	5E-05						
Copper		ND	mg/L	6E-05						
Iron		0.002	mg/L	0.0001						
Lead		6E-05	mg/L	2E-05						
Manganese		ND	mg/L	2E-05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R134311A	
Sample ID: LRB	16	Method Blank				Run: SUB-C134311			06/28/10 11:52	
Mercury		3E-05	mg/L	2E-05						
Molybdenum		0.0004	mg/L	8E-05						
Nickel		8E-05	mg/L	5E-05						
Thorium 232		5E-05	mg/L	3E-05						
Uranium		6E-05	mg/L	8E-06						
Vanadium		5E-05	mg/L	1E-05						
Zinc		0.006	mg/L	0.0001						
Sample ID: LFB	16	Laboratory Fortified Blank				Run: SUB-C134311			06/28/10 11:59	
Silicon		0.584	mg/L	0.0050	106	85	115			
Arsenic		0.0533	mg/L	0.0010	106	85	115			
Barium		0.0541	mg/L	0.0010	108	85	115			
Cadmium		0.0551	mg/L	0.0010	110	85	115			
Chromium		0.0530	mg/L	0.0010	106	85	115			
Copper		0.0537	mg/L	0.0010	107	85	115			
Iron		1.30	mg/L	0.012	104	85	115			
Lead		0.0536	mg/L	0.0010	107	85	115			
Manganese		0.0542	mg/L	0.0010	108	85	115			
Mercury		0.00538	mg/L	0.0010	107	85	115			
Molybdenum		0.0537	mg/L	0.0010	107	85	115			
Nickel		0.0534	mg/L	0.0010	107	85	115			
Thorium 232		0.0525	mg/L	0.0010	105	85	115			
Uranium		0.0518	mg/L	0.00030	103	85	115			
Vanadium		0.0524	mg/L	0.0010	105	85	115			
Zinc		0.0564	mg/L	0.0010	101	85	115			
Method: E200.8									Batch: C_R134408	
Sample ID: LRB	2	Method Blank				Run: SUB-C134408			06/30/10 11:16	
Aluminum		0.0003	mg/L	8E-05						
Silver		0.0003	mg/L	8E-05						
Sample ID: LFB	2	Laboratory Fortified Blank				Run: SUB-C134408			06/30/10 11:23	
Aluminum		0.0505	mg/L	0.0010	100	85	115			
Silver		0.0207	mg/L	0.0010	102	85	115			
Sample ID: C10061078-005BMS4	2	Post Digestion Spike				Run: SUB-C134408			07/01/10 05:24	
Aluminum		0.0563	mg/L	0.0010	90	70	130			
Silver		0.0191	mg/L	0.010	96	70	130			
Sample ID: C10061078-005BMSD4	2	Post Digestion Spike Duplicate				Run: SUB-C134408			07/01/10 05:30	
Aluminum		0.0543	mg/L	0.0010	86	70	130	3.7	20	
Silver		0.0187	mg/L	0.010	93	70	130	2.2	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_26553
Sample ID: MB-26553	7	Method Blank				Run: SUB-C134490				07/02/10 01:12
Antimony		0.0002	mg/L	0.0002						
Arsenic		0.0008	mg/L	0.0003						
Lead		0.0002	mg/L	5E-05						
Selenium		ND	mg/L	0.0007						
Thallium		ND	mg/L	5E-05						
Uranium		ND	mg/L	4E-05						
Zinc		0.003	mg/L	0.001						
Sample ID: LCS3-26553	7	Laboratory Control Sample				Run: SUB-C134490				07/02/10 01:19
Antimony		0.557	mg/L	0.050	111	85	115			
Arsenic		0.500	mg/L	0.0010	100	85	115			
Lead		0.515	mg/L	0.050	103	85	115			
Selenium		0.508	mg/L	0.0010	102	85	115			
Thallium		0.495	mg/L	0.10	99	85	115			
Uranium		0.550	mg/L	0.00030	110	85	115			
Zinc		0.474	mg/L	0.010	94	85	115			
Sample ID: C10061061-001CMS3	7	Sample Matrix Spike				Run: SUB-C134490				07/02/10 02:39
Antimony		0.589	mg/L	0.050	117	70	130			
Arsenic		0.519	mg/L	0.0010	103	70	130			
Lead		0.558	mg/L	0.050	110	70	130			
Selenium		0.306	mg/L	0.0010	61	70	130			S
Thallium		0.525	mg/L	0.10	105	70	130			
Uranium		0.601	mg/L	0.00030	119	70	130			
Zinc		0.590	mg/L	0.010	91	70	130			
Sample ID: C10061061-001CMSD3	7	Sample Matrix Spike Duplicate				Run: SUB-C134490				07/02/10 02:46
Antimony		0.583	mg/L	0.050	116	70	130	1.1	20	
Arsenic		0.518	mg/L	0.0010	103	70	130	0.1	20	
Lead		0.552	mg/L	0.050	109	70	130	1	20	
Selenium		0.301	mg/L	0.0010	60	70	130	1.9	20	S
Thallium		0.517	mg/L	0.10	103	70	130	1.5	20	
Uranium		0.590	mg/L	0.00030	117	70	130	1.8	20	
Zinc		0.582	mg/L	0.010	89	70	130	1.3	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_26535
Sample ID: MB-26535		Method Blank				Run: SUB-C134738				07/11/10 07:07
Uranium		0.0003	mg/L	6E-05						
Sample ID: LCS2-26535		Laboratory Control Sample				Run: SUB-C134738				07/11/10 07:11
Uranium		0.110	mg/L	0.00030	110	85	115			
Sample ID: R10060444-002I		Post Digestion Spike				Run: SUB-C134738				07/11/10 07:44
Uranium		0.0138	mg/L	0.00030	111	70	130			
Sample ID: R10060444-002I		Post Digestion Spike Duplicate				Run: SUB-C134738				07/11/10 07:49
Uranium		0.0138	mg/L	0.00030	110	70	130	0.5	20	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_R134782
Sample ID: LRB	7	Method Blank				Run: SUB-C134782				07/12/10 17:40
Antimony		ND	mg/L	7E-05						
Arsenic		ND	mg/L	6E-05						
Lead		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Zinc		0.0005	mg/L	0.0003						
Sample ID: LFB	7	Laboratory Fortified Blank				Run: SUB-C134782				07/12/10 17:47
Antimony		0.0502	mg/L	0.0010	100	85	115			
Arsenic		0.0513	mg/L	0.0010	103	85	115			
Lead		0.0505	mg/L	0.0010	101	85	115			
Selenium		0.0510	mg/L	0.0010	102	85	115			
Thallium		0.0491	mg/L	0.0010	98	85	115			
Uranium		0.0489	mg/L	0.00030	98	85	115			
Zinc		0.0574	mg/L	0.0010	114	85	115			
Sample ID: C10070031-001BMS4	7	Post Digestion Spike				Run: SUB-C134782				07/12/10 19:15
Antimony		0.0554	mg/L	0.0010	111	70	130			
Arsenic		0.0528	mg/L	0.0010	102	70	130			
Lead		0.0510	mg/L	0.0010	102	70	130			
Selenium		0.0532	mg/L	0.0010	101	70	130			
Thallium		0.0500	mg/L	0.00040	100	70	130			
Uranium		0.0520	mg/L	0.00030	100	70	130			
Zinc		0.0542	mg/L	0.010	105	70	130			
Sample ID: C10070031-001BMSD4	7	Post Digestion Spike Duplicate				Run: SUB-C134782				07/12/10 19:22
Antimony		0.0556	mg/L	0.0010	111	70	130	0.4	20	
Arsenic		0.0540	mg/L	0.0010	104	70	130	2.2	20	
Lead		0.0512	mg/L	0.0010	102	70	130	0.5	20	
Selenium		0.0534	mg/L	0.0010	102	70	130	0.3	20	
Thallium		0.0504	mg/L	0.00040	101	70	130	0.9	20	
Uranium		0.0525	mg/L	0.00030	102	70	130	1.1	20	
Zinc		0.0541	mg/L	0.010	104	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B149826	
Sample ID: QCS		Initial Calibration Verification Standard							06/28/10 11:23	
Mercury		0.0019	mg/L	0.0010	93	90	110			
Method: E245.1									Batch: B_47296	
Sample ID: MB-47296		Method Blank				Run: SUB-B149826			06/28/10 11:28	
Mercury		ND	mg/L	5E-05						
Sample ID: LCS-47296		Laboratory Control Sample				Run: SUB-B149826			06/28/10 11:29	
Mercury		0.0019	mg/L	0.0010	95	85	115			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: DIONEX_100622A	
Sample ID: CCV062210-104	5	Continuing Calibration Verification Standard							06/24/10 11:03	
Chloride		70.9	mg/L	1.00	95	90	110			
Fluoride		7.19	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N		6.98	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N		7.10	mg/L	0.10	95	90	110			
Sulfate		69.7	mg/L	1.0	93	90	110			
Method: E300.0									Batch: R46582	
Sample ID: LFB062210-10	5	Laboratory Fortified Blank				Run: DIONEX_100622A			06/22/10 20:31	
Chloride		37.5	mg/L	1.00	94	90	110			
Fluoride		3.91	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N		3.85	mg/L	0.10	96	90	110			
Nitrogen, Nitrite as N		3.85	mg/L	0.10	96	90	110			
Sulfate		37.0	mg/L	1.0	93	90	110			
Sample ID: R10060452-001BMS	5	Sample Matrix Spike				Run: DIONEX_100622A			06/24/10 12:14	
Chloride		98.5	mg/L	1.00	106	90	110			
Fluoride		5.51	mg/L	0.10	99	90	110			
Nitrogen, Nitrate as N		7.87	mg/L	0.10	191	90	110			S
Nitrogen, Nitrite as N		ND	mg/L	0.10		90	110			S
Sulfate		236	mg/L	1.0		90	110			A
Sample ID: R10060452-001BMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_100622A			06/24/10 12:32	
Chloride		98.1	mg/L	1.00	105	90	110	0.4	10	
Fluoride		5.51	mg/L	0.10	99	90	110	0	10	
Nitrogen, Nitrate as N		7.82	mg/L	0.10	190	90	110	0.6	10	S
Nitrogen, Nitrite as N		ND	mg/L	0.10		90	110		10	S
Sulfate		236	mg/L	1.0		90	110	0.3	10	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0931	
Sample ID: MB-GrAB-0931	6	Method Blank				Run: SUB-C135115			07/19/10 22:35	
Gross Alpha		-1	pCi/L							U
Gross Alpha precision (±)		0.9	pCi/L							
Gross Alpha MDC		1	pCi/L							
Gross Beta		-1	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		2	pCi/L							
Sample ID: Th230-GrAB-0931		Laboratory Control Sample				Run: SUB-C135115			07/19/10 22:35	
Gross Alpha		120	pCi/L		116	70	130			
Sample ID: Cs137-GrAB-0931		Laboratory Control Sample				Run: SUB-C135115			07/19/10 22:35	
Gross Beta		83	pCi/L		94	70	130			
Sample ID: C10061049-001DDUP	6	Sample Duplicate				Run: SUB-C135115			07/19/10 22:35	
Gross Alpha		152	pCi/L					12	20.6	
Gross Alpha precision (±)		7.81	pCi/L							
Gross Alpha MDC		4.18	pCi/L							
Gross Beta		51.4	pCi/L					2.6	20.5	
Gross Beta precision (±)		2.67	pCi/L							
Gross Beta MDC		3.15	pCi/L							
Sample ID: C10070025-001EMS		Sample Matrix Spike				Run: SUB-C135115			07/21/10 04:16	
Gross Alpha		420	pCi/L		83	70	130			
Sample ID: C10070025-001EMSD		Sample Matrix Spike Duplicate				Run: SUB-C135115			07/21/10 04:16	
Gross Alpha		460	pCi/L		119	70	130	8.5	15.3	
Sample ID: C10070025-001EMS		Sample Matrix Spike				Run: SUB-C135115			07/21/10 04:16	
Gross Beta		190	pCi/L		100	70	130			
Sample ID: C10070025-001EMSD		Sample Matrix Spike Duplicate				Run: SUB-C135115			07/21/10 04:16	
Gross Beta		180	pCi/L		95	70	130	2.8	14	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R134585	
Sample ID: LCS-R134585	4	Laboratory Control Sample				Run: SUB-C134585			06/28/10 10:55	
Americium 241		640	pCi/L	20	73	70	130			
Barium 133		550	pCi/L	20	102	70	130			
Cesium 137		860	pCi/L	20	94	70	130			
Potassium 40		2800	pCi/L	20	82	70	130			
Sample ID: MB-R134585	5	Method Blank				Run: SUB-C134585			06/28/10 10:55	
Bismuth 214		ND	pCi/L							U
Cesium 137		ND	pCi/L							U
Lead 214		ND	pCi/L							U
Potassium 40		ND	pCi/L							U
Gross Gamma		ND	pCi/L							U
Sample ID: C10061076-001ADUP	3	Sample Duplicate				Run: SUB-C134585			06/28/10 10:55	
Cesium 137		ND	pCi/L	20					30	U
Potassium 40		ND	pCi/L	20					30	U
Gross Gamma		ND	pCi/L	20					30	U

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: C_RA226-4620
Sample ID: C10060993-002DMS		Sample Matrix Spike				Run: SUB-C134637				07/06/10 15:51
Radium 226		54	pCi/L		81	70	130			
Sample ID: C10060993-002DMSD		Sample Matrix Spike Duplicate				Run: SUB-C134637				07/06/10 15:51
Radium 226		57	pCi/L		99	70	130	5.2	17.6	
Sample ID: MB-RA226-4620	3	Method Blank				Run: SUB-C134637				07/06/10 17:27
Radium 226		-0.10	pCi/L							U
Radium 226 precision (±)		0.07	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4620		Laboratory Control Sample				Run: SUB-C134637				07/06/10 17:27
Radium 226		9.7	pCi/L		123	70	130			
Method: E903.0										Batch: C_R134801
Sample ID: C10060905-001FMS		Sample Matrix Spike				Run: SUB-C134801				07/12/10 15:23
Radium 226		19	pCi/L		100	70	130			
Sample ID: C10060905-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C134801				07/12/10 15:23
Radium 226		16	pCi/L		90	70	130	20	24	
Sample ID: LCS-26518		Laboratory Control Sample				Run: SUB-C134801				07/12/10 22:14
Radium 226		13	pCi/L		88	70	130			
Sample ID: MB-26518	3	Method Blank				Run: SUB-C134801				07/12/10 22:14
Radium 226		-0.2	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									Batch: C_RA-TH-ISO-1197	
Sample ID: LCS-RA-TH-ISO-1197		Laboratory Control Sample				Run: SUB-C134520			07/01/10 08:45	
Thorium 230		4.7	pCi/L		88	70	130			
Sample ID: C10061072-002CMS		Sample Matrix Spike				Run: SUB-C134520			07/01/10 13:14	
Thorium 230		9.0	pCi/L		67	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS, MSD, and all tracer recoveries are acceptable the batch is approved.										
Sample ID: C10061072-002CMSD		Sample Matrix Spike Duplicate				Run: SUB-C134520			07/01/10 13:14	
Thorium 230		13	pCi/L		101	70	130	38	41.1	
Sample ID: MB-RA-TH-ISO-1197	3	Method Blank				Run: SUB-C134520			07/02/10 08:32	
Thorium 230		0.02	pCi/L							U
Thorium 230 MDC		0.2	pCi/L							
Thorium 230 precision (±)		0.07	pCi/L							
Method: E907.0									Batch: C_26535	
Sample ID: R10060444-001I		Sample Matrix Spike				Run: SUB-C134650			07/07/10 11:11	
Thorium 230		9.1	pCi/L		79	70	130			
Sample ID: R10060444-001I		Sample Matrix Spike Duplicate				Run: SUB-C134650			07/07/10 11:12	
Thorium 230		11	pCi/L		94	70	130	17	54.2	
Sample ID: MB-26535	3	Method Blank				Run: SUB-C134650			07/07/10 11:12	
Thorium 230		-0.1	pCi/L							U
Thorium 230 MDC		0.4	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Sample ID: LCS1-26535		Laboratory Control Sample				Run: SUB-C134650			07/07/10 11:12	
Thorium 230		5.4	pCi/L		114	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_PB-210-0729	
Sample ID: R10060444-002I		Sample Matrix Spike				Run: SUB-C134719			07/07/10 08:46	
Lead 210		210	pCi/L		82	70	130			
Sample ID: R10060444-002I		Sample Matrix Spike Duplicate				Run: SUB-C134719			07/07/10 08:46	
Lead 210		210	pCi/L		83	70	130	0.3	18.3	
Sample ID: MB-26518	3	Method Blank				Run: SUB-C134719			07/07/10 08:46	
Lead 210		-1	pCi/L							U
Lead 210 precision (±)		10	pCi/L							
Lead 210 MDC		20	pCi/L							
Sample ID: LCS-26518		Laboratory Control Sample				Run: SUB-C134719			07/07/10 08:46	
Lead 210		350	pCi/L		71	70	130			
Sample ID: LCS1-26535		Laboratory Control Sample				Run: SUB-C134719			07/07/10 08:46	
Lead 210		410	pCi/L		76	70	130			
Method: E909.0M									Batch: C_PB-210-0728	
Sample ID: C09120066-001AMS		Sample Matrix Spike				Run: SUB-C134817			07/12/10 10:22	
Lead 210		210	pCi/L		92	70	130			
Sample ID: C09120066-001AMSD		Sample Matrix Spike Duplicate				Run: SUB-C134817			07/12/10 12:24	
Lead 210		190	pCi/L		81	70	130	13	17.3	
Sample ID: MB-PB-210-0728	3	Method Blank				Run: SUB-C134817			07/12/10 14:25	
Lead 210		2	pCi/L							U
Lead 210 precision (±)		3	pCi/L							
Lead 210 MDC		5	pCi/L							
Sample ID: LCS-PB-210-0728		Laboratory Control Sample				Run: SUB-C134817			07/12/10 16:27	
Lead 210		110	pCi/L		94	70	130			
Sample ID: LCS-PB-210-0728		Laboratory Control Sample				Run: SUB-C134817			07/12/10 18:28	
Lead 210		98	pCi/L		87	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 08/23/10
Work Order: R10060444

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_PO210-0306
Sample ID: R10060444-002K		Sample Matrix Spike				Run: SUB-C134590				07/06/10 09:18
Polonium 210		31	pCi/L		95	70	130			
Sample ID: R10060444-002K		Sample Matrix Spike Duplicate				Run: SUB-C134590				07/06/10 09:18
Polonium 210		31	pCi/L		96	70	130	0.5	57.1	
Sample ID: MB-PO210-0306	3	Method Blank				Run: SUB-C134590				07/06/10 09:18
Polonium 210		-0.01	pCi/L							U
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.2	pCi/L							
Sample ID: LCS-PO210-0306		Laboratory Control Sample				Run: SUB-C134590				07/06/10 09:18
Polonium 210		11	pCi/L		70	70	130			
Method: E912.0										Batch: C_PO210-0307
Sample ID: MB-26518	3	Method Blank				Run: SUB-C134649				07/08/10 09:12
Polonium 210		0.2	pCi/L							U
Polonium 210 precision (±)		1	pCi/L							
Polonium 210 MDC		3	pCi/L							
Sample ID: LCS-26518		Laboratory Control Sample				Run: SUB-C134649				07/08/10 09:12
Polonium 210		52	pCi/L		66	70	130			US
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, second LCS, and all tracer recoveries are acceptable the batch is approved.										
Sample ID: C10060928-003GMS		Sample Matrix Spike				Run: SUB-C134649				07/08/10 09:12
Polonium 210		12	pCi/L		90	70	130			
Sample ID: C10060928-003GMSD		Sample Matrix Spike Duplicate				Run: SUB-C134649				07/08/10 09:12
Polonium 210		16	pCi/L		117	70	130	25	60.5	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT- Provide as much information as possible.

Company Name: Scott Env.	Project Name, PWS, Permit, Etc. Powertech, Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Powertech Inc, Scott Env.	Contact Name: Allen Scott Phone/Fax:	Email:	Sampler: (Please Print)
Invoice Address: Powertech, Inc.	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

ANALYSIS REQUESTED: Argon Radon

SEE ATTACHED

Normal Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 4.4 °C

On Ice: Yes No

Custody Seal Y N

Bottles/Coolers B C

Intact Y N

Signature Match Y N

LABORATORY USE ONLY: L10060444-001 002

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O; Air Water Soils/Solids Vegetation Bioassay Other)
1	DB-09-21-01	6-22-10		water
2	DB-09-21-02	6-22-10		water
3				
4				
5				
6				
7				
8				
9				
10				

Custody Record MUST be Signed

Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
Allen Scott	6-23-10 11:35				
			Received by Laboratory: Steve Troiland	6-23-10 1135	

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

October 19, 2010

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10070459

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 3 samples for Powertech USA Inc on 7/27/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10070459-001	DB-09-21-01	07/27/10 0:00	07/27/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10070459-002	DB-09-21-02	07/27/10 0:00	07/27/10	Aqueous	Same As Above
R10070459-003	DB-09-21-02-Dup	07/27/10 0:00	07/27/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.10.19 14:44:53 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10070459

Revised Date: 10/19/10
Report Date: 09/25/10

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002.

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Radon analysis was preformed by the SDSHL
Comments imported for SUBBED Workorder: C10071156
PB210 ANALYSIS
The MDC for Pb-210 per RG 4.14 is 1 pCi/L. The current technique can achieve an MDC of about 2 pCi/L to 5 pCi/L if we have sufficient sample to process 1.0 L, and this is reported on a sample specific basis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.
End of comments imported for SUBBED Workorder: C10071156

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	08/05/10 11:59/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/05/10 11:59/mb
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	08/05/10 11:59/mb
Calcium	94	mg/L	D	1		5	E200.7	08/02/10 16:26/eli-c
Chloride	7	mg/L		1		1	E300.0	07/28/10 23:00/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	07/28/10 23:00/jmh
Magnesium	34.9	mg/L		0.5		5	E200.7	08/02/10 16:26/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	08/04/10 13:51/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/28/10 23:00/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/28/10 23:00/jmh
Potassium	11.3	mg/L		0.5		5	E200.7	08/02/10 16:26/eli-c
Sodium	169	mg/L	D	1		5	E200.7	08/02/10 16:26/eli-c
Sulfate	534	mg/L	D	20		20	E300.0	07/28/10 22:07/jmh
Silica	9.3	mg/L		0.2		5	E200.7	08/02/10 16:26/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1320	umhos/cm		5.0		1	A2510 B	07/28/10 15:28/jmh
Oxidation-Reduction Potential	180	mV				1	A2580 B	08/03/10 16:00/jmh
pH	7.84	s.u.		0.01		1	A4500-H B	08/02/10 13:46/tb
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.10		1	Calculation	08/30/10 10:46/ADM
Solids, Total Dissolved TDS @ 180 C	950	mg/L	D	10		1	A2540 C	07/29/10 14:10/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	08/02/10 16:26/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	08/04/10 03:37/eli-c
Barium	ND	mg/L		0.1		5	E200.7	08/02/10 16:26/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	08/02/10 16:26/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/04/10 03:37/eli-c
Chromium	ND	mg/L		0.05		5	E200.7	08/02/10 16:26/eli-c
Copper	ND	mg/L		0.01		5	E200.7	08/02/10 16:26/eli-c
Iron	ND	mg/L		0.03		5	E200.7	08/02/10 16:26/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/04/10 03:37/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	08/04/10 03:37/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/04/10 03:37/eli-c
Molybdenum	ND	mg/L		0.1		5	E200.7	08/02/10 16:26/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	08/02/10 16:26/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/04/10 16:35/eli-ca
Silver	ND	mg/L		0.005		1	E200.8	08/04/10 03:37/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/06/10 09:19/eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0007	mg/L		0.0003		1	E200.8	08/04/10 03:37/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	08/04/10 03:37/eli-c
Zinc	0.01	mg/L		0.01		5	E200.7	08/02/10 16:26/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	08/11/10 01:13/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/04/10 14:48/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/04/10 17:03/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	6.7	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha MDC	6.1	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta	17.1	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta precision (±)	2.7	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta MDC	4.0	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Lead 210	0.4	pCi/L	U			1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 MDC	2.3	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Polonium 210	0.076	pCi/L	U			1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 MDC	0.61	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 precision (±)	0.30	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Radium 226	1.8	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Thorium 230	0.04	pCi/L	U			1	E907.0	08/12/10 08:54/eli-c
Thorium 230 MDC	0.09	pCi/L				1	E907.0	08/12/10 08:54/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	08/12/10 08:54/eli-c
Gross Gamma	500	pCi/L				1	E901.1	08/04/10 07:00/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	08/04/10 07:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-1	pCi/L	U			1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 MDC	4.2	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Polonium 210	-0.10	pCi/L	U			1	E912.0	08/10/10 12:20/eli-ca
Polonium 210 precision (±)	0.34	pCi/L				1	E912.0	08/10/10 12:20/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.95	pCi/L				1	E912.0	08/10/10 12:20/eli-ca
Radium 226	-0.1	pCi/L	U			1	E903.0	08/10/10 14:32/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Thorium 230	0.2	pCi/L	U			1	E907.0	08/06/10 08:44/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	08/06/10 08:44/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	247	pCi/L		100		1	D5072-92	07/29/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	08/06/10 20:39/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	08/06/10 20:39/eli-c
Barium	ND	mg/L		0.1		2	E200.7	08/05/10 11:18/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	08/06/10 20:39/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/05/10 11:18/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	08/05/10 11:18/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	08/06/10 20:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/06/10 20:39/eli-c
Iron	0.25	mg/L		0.03		2	E200.7	08/05/10 11:18/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/06/10 20:39/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	08/05/10 11:18/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	07/30/10 15:42/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	08/05/10 11:18/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	08/06/10 20:39/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	08/06/10 20:39/eli-c
Silver	ND	mg/L		0.005		2	E200.7	08/05/10 11:18/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	08/06/10 20:39/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	08/06/10 20:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	08/06/10 20:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/06/10 20:39/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.76	%				1	A1030 E	08/30/10 00:00/lkl
Anions	14.7	meq/L				1	A1030 E	08/30/10 00:00/lkl
Cations	15.2	meq/L				1	A1030 E	08/30/10 00:00/lkl
Solids, Total Dissolved Calculated	977	mg/L				1	A1030 E	08/30/10 00:00/lkl
TDS Balance (0.80 - 1.20)	0.970					1	A1030 E	08/30/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	200	mg/L		5		1	A2320 B	08/05/10 12:01/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/05/10 12:01/mb
Bicarbonate as HCO3	244	mg/L		5		1	A2320 B	08/05/10 12:01/mb
Calcium	163	mg/L	D	1		5	E200.7	08/02/10 16:30/eli-c
Chloride	9	mg/L		1		1	E300.0	07/29/10 00:11/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/29/10 00:11/jmh
Magnesium	47.4	mg/L		0.5		5	E200.7	08/02/10 16:30/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/04/10 14:13/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/29/10 00:11/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/29/10 00:11/jmh
Potassium	11.5	mg/L		0.5		5	E200.7	08/02/10 16:30/eli-c
Sodium	132	mg/L	D	1		5	E200.7	08/02/10 16:30/eli-c
Sulfate	658	mg/L	D	20		20	E300.0	07/28/10 23:18/jmh
Silica	8.5	mg/L		0.2		5	E200.7	08/02/10 16:30/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1540	umhos/cm		5.0		1	A2510 B	07/28/10 15:29/jmh
Oxidation-Reduction Potential	220	mV				1	A2580 B	08/03/10 16:00/jmh
pH	7.51	s.u.		0.01		1	A4500-H B	08/02/10 13:52/tb
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.10		1	Calculation	08/30/10 10:46/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	07/29/10 14:11/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	08/02/10 16:30/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	08/06/10 09:24/eli-b
Barium	ND	mg/L		0.1		5	E200.7	08/02/10 16:30/eli-c
Boron	ND	mg/L		0.1		5	E200.7	08/02/10 16:30/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	08/06/10 13:12/eli-b
Chromium	ND	mg/L		0.05		5	E200.7	08/02/10 16:30/eli-c
Copper	ND	mg/L		0.01		5	E200.7	08/02/10 16:30/eli-c
Iron	ND	mg/L		0.03		5	E200.7	08/02/10 16:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/06/10 09:24/eli-b
Manganese	0.56	mg/L		0.01		5	E200.7	08/02/10 16:30/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/06/10 09:24/eli-b
Molybdenum	ND	mg/L		0.1		5	E200.7	08/02/10 16:30/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	08/02/10 16:30/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/04/10 16:42/eli-ca
Silver	ND	mg/L		0.005		2	E200.7	08/06/10 13:12/eli-b
Thorium 232	ND	mg/L		0.005		1	E200.8	08/06/10 09:24/eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0069	mg/L		0.0003		1	E200.8	08/06/10 09:24/eli-b
Vanadium	ND	mg/L		0.1		2	E200.7	08/06/10 13:12/eli-b
Zinc	0.02	mg/L		0.01		5	E200.7	08/02/10 16:30/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	08/11/10 01:17/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/04/10 14:55/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/04/10 17:03/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	31.6	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha precision (±)	6.2	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha MDC	7.3	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta	27.2	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta MDC	5.2	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 MDC	2.3	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Polonium 210	0.062	pCi/L	U			1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 MDC	0.62	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Radium 226	2.6	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Thorium 230	0.04	pCi/L	U			1	E907.0	08/12/10 13:14/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	08/12/10 13:14/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	08/12/10 13:14/eli-c
Gross Gamma	980	pCi/L				1	E901.1	08/04/10 07:00/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	08/04/10 07:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-2	pCi/L	U			1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 MDC	4.2	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Polonium 210	0.0	pCi/L	U			1	E912.0	08/10/10 12:20/eli-ca
Polonium 210 precision (±)	0.20	pCi/L				1	E912.0	08/10/10 12:20/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.48	pCi/L				1	E912.0	08/10/10 12:20/eli-ca
Radium 226	-0.1	pCi/L	U			1	E903.0	08/10/10 14:32/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Thorium 230	-0.2	pCi/L	U			1	E907.0	08/06/10 08:44/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E907.0	08/06/10 08:44/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	373	pCi/L		100		1	D5072-92	07/29/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	08/06/10 20:45/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	08/06/10 20:45/eli-c
Barium	ND	mg/L		0.1		2	E200.7	08/05/10 11:22/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	08/05/10 11:22/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/05/10 11:22/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	08/05/10 11:22/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	08/05/10 11:22/eli-c
Copper	ND	mg/L		0.01		2	E200.7	08/05/10 11:22/eli-c
Iron	ND	mg/L		0.03		2	E200.7	08/05/10 11:22/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/06/10 20:45/eli-c
Manganese	0.56	mg/L		0.01		2	E200.7	08/05/10 11:22/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	07/30/10 15:46/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	08/05/10 11:22/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	08/05/10 11:22/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	08/06/10 20:45/eli-c
Silver	ND	mg/L		0.005		2	E200.7	08/05/10 11:22/eli-c
Strontium	2.3	mg/L		0.1		2	E200.7	08/05/10 11:22/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	08/06/10 20:45/eli-c
Uranium	0.0080	mg/L		0.0003		1	E200.8	08/06/10 20:45/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/06/10 20:45/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.400	%				1	A1030 E	08/30/10 00:00/lkl
Anions	18.0	meq/L				1	A1030 E	08/30/10 00:00/lkl
Cations	18.1	meq/L				1	A1030 E	08/30/10 00:00/lkl
Solids, Total Dissolved Calculated	1160	mg/L				1	A1030 E	08/30/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	08/30/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-003
Client Sample ID: DB-09-21-02-Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	198	mg/L		5		1	A2320 B	08/05/10 12:04/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/05/10 12:04/mb
Bicarbonate as HCO3	241	mg/L		5		1	A2320 B	08/05/10 12:04/mb
Calcium	167	mg/L	D	1		5	E200.7	08/02/10 16:34/eli-c
Chloride	9	mg/L		1		1	E300.0	07/29/10 00:46/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	07/29/10 00:46/jmh
Magnesium	47.4	mg/L		0.5		5	E200.7	08/02/10 16:34/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/04/10 14:14/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/29/10 00:46/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	07/29/10 00:46/jmh
Potassium	11.6	mg/L		0.5		5	E200.7	08/02/10 16:34/eli-c
Sodium	135	mg/L	D	1		5	E200.7	08/02/10 16:34/eli-c
Sulfate	659	mg/L	D	20		20	E300.0	07/29/10 00:29/jmh
Silica	8.5	mg/L		0.2		5	E200.7	08/02/10 16:34/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1530	umhos/cm		5.0		1	A2510 B	07/28/10 15:30/jmh
Oxidation-Reduction Potential	230	mV				1	A2580 B	08/03/10 16:00/jmh
pH	7.53	s.u.		0.01		1	A4500-H B	08/02/10 13:53/tb
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.10		1	Calculation	08/30/10 10:46/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	07/29/10 14:11/mb
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	08/02/10 16:34/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	08/06/10 09:28/eli-b
Barium	ND	mg/L		0.1		5	E200.7	08/02/10 16:34/eli-c
Boron	ND	mg/L		0.1		5	E200.7	08/02/10 16:34/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	08/06/10 13:24/eli-b
Chromium	ND	mg/L		0.05		5	E200.7	08/02/10 16:34/eli-c
Copper	ND	mg/L		0.01		5	E200.7	08/02/10 16:34/eli-c
Iron	ND	mg/L		0.03		5	E200.7	08/02/10 16:34/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/06/10 09:28/eli-b
Manganese	0.56	mg/L		0.01		5	E200.7	08/02/10 16:34/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/06/10 09:28/eli-b
Molybdenum	ND	mg/L		0.1		5	E200.7	08/02/10 16:34/eli-c
Nickel	ND	mg/L		0.05		5	E200.7	08/02/10 16:34/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/04/10 16:44/eli-ca
Silver	ND	mg/L		0.005		2	E200.7	08/06/10 13:24/eli-b
Thorium 232	ND	mg/L		0.005		1	E200.8	08/06/10 09:28/eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-003
Client Sample ID: DB-09-21-02-Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0070	mg/L		0.0003		1	E200.8	08/06/10 09:28/eli-b
Vanadium	ND	mg/L		0.1		2	E200.7	08/06/10 13:24/eli-b
Zinc	0.01	mg/L		0.01		5	E200.7	08/02/10 16:34/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	08/11/10 01:21/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/04/10 15:00/eli-ca
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/04/10 17:03/eli-ca
RADIONUCLIDES - DISSOLVED								
Gross Alpha	33.5	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha precision (±)	6.3	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Alpha MDC	7.3	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta	29.2	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Gross Beta MDC	5.2	pCi/L				1	E900.0	08/26/10 22:55/eli-ca
Lead 210	-1	pCi/L	U			1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 precision (±)	1.4	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Lead 210 MDC	2.3	pCi/L				1	E909.0M	08/13/10 09:09/eli-cs
Polonium 210	-0.040	pCi/L	U			1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 MDC	0.77	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Polonium 210 precision (±)	0.28	pCi/L				1	E912.0	08/10/10 09:40/eli-ca
Radium 226	2.6	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	08/09/10 13:47/eli-ca
Thorium 230	0.02	pCi/L	U			1	E907.0	08/12/10 13:14/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	08/12/10 13:14/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	08/12/10 13:14/eli-c
Gross Gamma	940	pCi/L				1	E901.1	08/04/10 07:00/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	08/04/10 07:00/eli-c
- See Case Narrative regarding Pb210 analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-3	pCi/L	U			1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 precision (±)	2.5	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Lead 210 MDC	4.2	pCi/L				1	E909.0M	08/11/10 15:18/eli-cs
Polonium 210	0.22	pCi/L	U			1	E912.0	08/10/10 12:20/eli-ca
Polonium 210 precision (±)	0.42	pCi/L				1	E912.0	08/10/10 12:20/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Report Date: 09/25/10
Collection Date: 07/27/10
Date Received: 07/27/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10070459-003
Client Sample ID: DB-09-21-02-Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.66	pCi/L				1	E912.0	08/10/10 12:20/eli-ca
Radium 226	-0.09	pCi/L	U			1	E903.0	08/10/10 14:32/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	08/10/10 14:32/eli-c
Thorium 230	-0.1	pCi/L	U			1	E907.0	08/06/10 08:44/eli-c
Thorium 230 precision (±)	0.09	pCi/L				1	E907.0	08/06/10 08:44/eli-c
- See Case Narrative regarding Pb210 analysis.								
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	388	pCi/L		100		1	D5072-92	07/29/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	08/06/10 21:19/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	08/06/10 21:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	08/05/10 11:26/eli-c
Beryllium	ND	mg/L		0.001		2	E200.7	08/05/10 11:26/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/05/10 11:26/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	08/05/10 11:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	08/05/10 11:26/eli-c
Copper	ND	mg/L		0.01		2	E200.7	08/05/10 11:26/eli-c
Iron	ND	mg/L		0.03		2	E200.7	08/05/10 11:26/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/06/10 21:19/eli-c
Manganese	0.56	mg/L		0.01		2	E200.7	08/05/10 11:26/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	07/30/10 15:48/eli-b
Molybdenum	ND	mg/L		0.1		2	E200.7	08/05/10 11:26/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	08/05/10 11:26/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	08/06/10 21:19/eli-c
Silver	ND	mg/L		0.005		2	E200.7	08/05/10 11:26/eli-c
Strontium	2.3	mg/L		0.1		2	E200.7	08/05/10 11:26/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	08/06/10 21:19/eli-c
Uranium	0.0081	mg/L		0.0003		1	E200.8	08/06/10 21:19/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/06/10 21:19/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.38	%				1	A1030 E	08/30/10 00:00/lkl
Anions	17.9	meq/L				1	A1030 E	08/30/10 00:00/lkl
Cations	18.4	meq/L				1	A1030 E	08/30/10 00:00/lkl
Solids, Total Dissolved Calculated	1170	mg/L				1	A1030 E	08/30/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	08/30/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Revised Date: 10/19/10
Client: Powertech USA Inc
Report Date: 09/25/10
Project: Dewey Groundwater Sampling
Collection Date: 07/27/10
Lab ID: R10070459-003
Date Received: 07/27/10
Client Sample ID: DB-09-21-02-Dup
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
DATA QUALITY								

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 100805A-ALK-SEL-W	
Sample ID: LCS1_100805A		Laboratory Control Sample				Run: PH_COND1-R_100805A			08/05/10 10:56	
Alkalinity, Total as CaCO3		948	mg/L	5.0	95	90	110			
Sample ID: MBLK1_100805A		Method Blank				Run: PH_COND1-R_100805A			08/05/10 10:58	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10070420-003AMS		Sample Matrix Spike				Run: PH_COND1-R_100805A			08/05/10 11:46	
Alkalinity, Total as CaCO3		272	mg/L	5.0	89	80	120			
Sample ID: R10070420-003AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_100805A			08/05/10 11:47	
Alkalinity, Total as CaCO3		286	mg/L	5.0	102	80	120	5	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Batch: 100728_1_COND-PROBE-W		
Sample ID: LCS1-1_100728		Laboratory Control Sample				Run: PH_COND2-R_100728A			07/28/10 15:20	
Conductivity @ 25 C		151	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_100728		Laboratory Control Sample				Run: PH_COND2-R_100728A			07/28/10 15:21	
Conductivity @ 25 C		5020	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_100728		Laboratory Control Sample				Run: PH_COND2-R_100728A			07/28/10 15:21	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100728		Method Blank				Run: PH_COND2-R_100728A			07/28/10 15:22	
Conductivity @ 25 C		ND	umhos/cm	5						
Sample ID: R10070321-001BDUP		Sample Duplicate				Run: PH_COND2-R_100728A			07/28/10 15:24	
Conductivity @ 25 C		501	umhos/cm	5.0				0.8	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 100729A-SLDS-TDS-W	
Sample ID: LCS1_100729A		Laboratory Control Sample				Run: BAL-4-R_100729A			07/29/10 14:01	
Solids, Total Dissolved TDS @ 180 C		210	mg/L	10	103	90	110			
Sample ID: MBLK1_100729A		Method Blank				Run: BAL-4-R_100729A			07/29/10 14:02	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	5						
Sample ID: R10070494-002AMS		Sample Matrix Spike				Run: BAL-4-R_100729A			07/29/10 14:15	
Solids, Total Dissolved TDS @ 180 C		1100	mg/L	10	103	90	110			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 100803-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_100803A			08/03/10 16:00	
Oxidation-Reduction Potential		490	mV		102	95	105			
Sample ID: R10070459-001F		Sample Duplicate				Run: PH_COND1-R_100803A			08/03/10 16:00	
Oxidation-Reduction Potential		180	mV					0.5	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 100802_1_PH-W	
Sample ID: LCS_pH-1_100802		Laboratory Control Sample				Run: PH_COND2-R_100802A			08/02/10 13:42	
pH		7.42	s.u.	0.010	100	98.55	101.45			
Sample ID: R10070459-001ADUP		Sample Duplicate				Run: PH_COND2-R_100802A			08/02/10 13:50	
pH		7.88	s.u.	0.010				0.5	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Client: Powertech USA Inc
Report Date: 09/25/10
Project: Dewey Groundwater Sampling
Work Order: R10070459

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-08-04_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100804A			08/04/10 10:46	
Nitrogen, Ammonia as N		ND	mg/L	0.01						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100804A			08/04/10 11:14	
Nitrogen, Ammonia as N		0.26	mg/L	0.10	102	90	110			
Sample ID: R10070459-001BMS		Sample Matrix Spike				Run: TECHAA2-R_100804A			08/04/10 13:52	
Nitrogen, Ammonia as N		0.34	mg/L	0.10	94	80	120			
Sample ID: R10070459-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100804A			08/04/10 13:53	
Nitrogen, Ammonia as N		0.37	mg/L	0.10	103	80	120	6.5	10	
Sample ID: R10070462-005CMS		Sample Matrix Spike				Run: TECHAA2-R_100804A			08/04/10 14:07	
Nitrogen, Ammonia as N		0.22	mg/L	0.10	89	80	120			
Sample ID: R10070462-005CMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100804A			08/04/10 14:08	
Nitrogen, Ammonia as N		0.23	mg/L	0.10	91	80	120	2.7	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R135591	
Sample ID: MB-100802A	15	Method Blank				Run: SUB-C135591			08/02/10 12:52	
Silicon		ND	mg/L	0.007						
Aluminum		ND	mg/L	0.01						
Barium		ND	mg/L	0.0005						
Boron		ND	mg/L	0.009						
Calcium		ND	mg/L	0.2						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.05						
Manganese		ND	mg/L	0.0004						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Zinc		ND	mg/L	0.001						
Sample ID: LFB-100802A	15	Laboratory Fortified Blank				Run: SUB-C135591			08/02/10 12:56	
Silicon		0.45	mg/L	0.10	96	85	115			
Aluminum		0.98	mg/L	0.10	98	85	115			
Barium		0.97	mg/L	0.10	97	85	115			
Boron		0.99	mg/L	0.10	99	85	115			
Calcium		48	mg/L	0.50	97	85	115			
Chromium		0.98	mg/L	0.050	98	85	115			
Copper		0.99	mg/L	0.010	99	85	115			
Iron		0.99	mg/L	0.030	99	85	115			
Magnesium		48	mg/L	0.50	96	85	115			
Manganese		0.98	mg/L	0.010	98	85	115			
Molybdenum		0.99	mg/L	0.10	99	85	115			
Nickel		0.99	mg/L	0.050	99	85	115			
Potassium		46	mg/L	0.50	93	85	115			
Sodium		49	mg/L	0.50	98	85	115			
Zinc		1.0	mg/L	0.010	101	85	115			
Sample ID: C10070457-001BMS2	15	Sample Matrix Spike				Run: SUB-C135591			08/02/10 13:57	
Aluminum		2.04	mg/L	0.10	100	70	130			
Barium		2.00	mg/L	0.10	97	70	130			
Boron		2.12	mg/L	0.10	98	70	130			
Chromium		1.99	mg/L	0.050	98	70	130			
Copper		2.01	mg/L	0.010	98	70	130			
Iron		2.01	mg/L	0.030	98	70	130			
Manganese		1.96	mg/L	0.010	96	70	130			
Molybdenum		1.99	mg/L	0.10	98	70	130			
Nickel		2.00	mg/L	0.050	98	70	130			
Silicon		5.53	mg/L	0.10		70	130			A
Zinc		2.06	mg/L	0.010	100	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R135591	
Sample ID: C10070457-001BMS2	15	Sample Matrix Spike				Run: SUB-C135591			08/02/10 13:57	
Calcium		109	mg/L	1.0	98	70	130			
Magnesium		99.8	mg/L	1.0	97	70	130			
Potassium		100	mg/L	1.0	95	70	130			
Sodium		224	mg/L	1.0	101	70	130			
Sample ID: C10070457-001BMSD2	15	Sample Matrix Spike Duplicate				Run: SUB-C135591			08/02/10 14:01	
Aluminum		2.04	mg/L	0.10	100	70	130	0	20	
Barium		2.02	mg/L	0.10	98	70	130	1	20	
Boron		2.13	mg/L	0.10	99	70	130	0.6	20	
Chromium		2.00	mg/L	0.050	98	70	130	0.4	20	
Copper		2.01	mg/L	0.010	98	70	130	0.1	20	
Iron		2.02	mg/L	0.030	99	70	130	0.6	20	
Manganese		1.99	mg/L	0.010	97	70	130	1.4	20	
Molybdenum		1.99	mg/L	0.10	98	70	130	0	20	
Nickel		1.97	mg/L	0.050	97	70	130	1.1	20	
Silicon		5.54	mg/L	0.10		70	130	0.3	20	A
Zinc		2.07	mg/L	0.010	100	70	130	0.4	20	
Calcium		110	mg/L	1.0	99	70	130	0.6	20	
Magnesium		103	mg/L	1.0	100	70	130	2.8	20	
Potassium		99.6	mg/L	1.0	94	70	130	0.9	20	
Sodium		226	mg/L	1.0	103	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Client: Powertech USA Inc
Report Date: 09/25/10
Project: Dewey Groundwater Sampling
Work Order: R10070459

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R135754
Sample ID: MB-100804A	12	Method Blank				Run: SUB-C135754				08/04/10 12:48
Barium		ND	mg/L	0.0005						
Beryllium		ND	mg/L	0.0002						
Boron		ND	mg/L	0.009						
Cadmium		ND	mg/L	0.001						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		0.002	mg/L	0.002						
Manganese		ND	mg/L	0.0004						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Silver		ND	mg/L	0.001						
Strontium		ND	mg/L	0.0002						
Sample ID: LFB-100804A	12	Laboratory Fortified Blank				Run: SUB-C135754				08/04/10 12:52
Barium		0.97	mg/L	0.10	97	85	115			
Beryllium		1.00	mg/L	0.010	100	85	115			
Boron		0.99	mg/L	0.10	99	85	115			
Cadmium		1.0	mg/L	0.010	101	85	115			
Chromium		0.97	mg/L	0.050	97	85	115			
Copper		0.98	mg/L	0.010	98	85	115			
Iron		1.00	mg/L	0.030	99	85	115			
Manganese		0.96	mg/L	0.010	96	85	115			
Molybdenum		0.99	mg/L	0.10	99	85	115			
Nickel		0.96	mg/L	0.050	96	85	115			
Silver		0.97	mg/L	0.010	97	85	115			
Strontium		0.98	mg/L	0.10	98	85	115			
Sample ID: C10070817-001BMS2	12	Sample Matrix Spike				Run: SUB-C135754				08/04/10 13:44
Barium		2.07	mg/L	0.10	97	70	130			
Beryllium		1.99	mg/L	0.010	98	70	130			
Boron		2.05	mg/L	0.10	99	70	130			
Cadmium		2.06	mg/L	0.010	101	70	130			
Chromium		1.96	mg/L	0.050	96	70	130			
Copper		2.00	mg/L	0.010	98	70	130			
Iron		2.04	mg/L	0.030	97	70	130			
Manganese		2.01	mg/L	0.010	94	70	130			
Molybdenum		1.98	mg/L	0.10	97	70	130			
Nickel		1.92	mg/L	0.050	94	70	130			
Silver		1.95	mg/L	0.010	96	70	130			
Strontium		2.20	mg/L	0.10	98	70	130			
Sample ID: C10070817-001BMSD2	12	Sample Matrix Spike Duplicate				Run: SUB-C135754				08/04/10 13:49
Barium		2.06	mg/L	0.10	97	70	130	0.5	20	
Beryllium		2.00	mg/L	0.010	98	70	130	0.4	20	
Boron		2.05	mg/L	0.10	99	70	130	0	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R135754	
Sample ID: C10070817-001BMSD2	12	Sample Matrix Spike Duplicate				Run: SUB-C135754			08/04/10 13:49	
Cadmium		2.02	mg/L	0.010	99	70	130	1.7	20	
Chromium		1.97	mg/L	0.050	97	70	130	0.3	20	
Copper		1.98	mg/L	0.010	97	70	130	0.6	20	
Iron		2.05	mg/L	0.030	98	70	130	0.4	20	
Manganese		2.03	mg/L	0.010	95	70	130	0.7	20	
Molybdenum		1.99	mg/L	0.10	98	70	130	0.7	20	
Nickel		1.96	mg/L	0.050	96	70	130	2.5	20	
Silver		1.94	mg/L	0.010	95	70	130	0.3	20	
Strontium		2.20	mg/L	0.10	98	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_R135663
Sample ID: LRB	15	Method Blank				Run: SUB-C135663				08/03/10 12:33
Arsenic		9E-05	mg/L	6E-05						
Beryllium		ND	mg/L	3E-05						
Cadmium		ND	mg/L	1E-05						
Chromium		ND	mg/L	4E-05						
Copper		0.0001	mg/L	7E-05						
Lead		ND	mg/L	3E-05						
Manganese		ND	mg/L	5E-05						
Mercury		ND	mg/L	8E-05						
Nickel		ND	mg/L	0.0007						
Selenium		0.0007	mg/L	0.0002						
Silver		5E-05	mg/L	3E-05						
Strontium		ND	mg/L	3E-05						
Uranium		ND	mg/L	1E-05						
Vanadium		ND	mg/L	3E-05						
Zinc		0.0003	mg/L	0.0003						
Sample ID: LFB	15	Laboratory Fortified Blank				Run: SUB-C135663				08/03/10 12:39
Arsenic		0.0512	mg/L	0.0010	102	85	115			
Beryllium		0.0526	mg/L	0.0010	105	85	115			
Cadmium		0.0521	mg/L	0.0010	104	85	115			
Chromium		0.0514	mg/L	0.0010	103	85	115			
Copper		0.0516	mg/L	0.0010	103	85	115			
Lead		0.0506	mg/L	0.0010	101	85	115			
Manganese		0.0516	mg/L	0.0010	103	85	115			
Mercury		0.00510	mg/L	0.0010	102	85	115			
Nickel		0.0518	mg/L	0.0010	104	85	115			
Selenium		0.0512	mg/L	0.0010	101	85	115			
Silver		0.0205	mg/L	0.0010	102	85	115			
Strontium		0.0504	mg/L	0.0010	101	85	115			
Uranium		0.0522	mg/L	0.00030	104	85	115			
Vanadium		0.0513	mg/L	0.0010	103	85	115			
Zinc		0.0542	mg/L	0.0010	108	85	115			
Sample ID: R10070459-001C	15	Post Digestion Spike				Run: SUB-C135663				08/04/10 04:11
Arsenic		0.0530	mg/L	0.0010	104	70	130			
Beryllium		0.0491	mg/L	0.010	98	70	130			
Cadmium		0.0494	mg/L	0.010	99	70	130			
Chromium		0.0491	mg/L	0.0010	98	70	130			
Copper		0.0477	mg/L	0.010	94	70	130			
Lead		0.0507	mg/L	0.050	101	70	130			
Manganese		0.101	mg/L	0.010	105	70	130			
Mercury		0.00511	mg/L	0.0010	102	70	130			
Nickel		0.0472	mg/L	0.0010	92	70	130			
Selenium		0.0507	mg/L	0.0010	101	70	130			
Silver		0.0157	mg/L	0.010	78	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R135663	
Sample ID: R10070459-001C	15	Post Digestion Spike				Run: SUB-C135663			08/04/10 04:11	
Strontium		2.76	mg/L	0.10		70	130			A
Uranium		0.0547	mg/L	0.00030	108	70	130			
Vanadium		0.0510	mg/L	0.0010	102	70	130			
Zinc		0.0517	mg/L	0.010	97	70	130			
Sample ID: R10070459-001C	15	Post Digestion Spike Duplicate				Run: SUB-C135663			08/04/10 04:18	
Arsenic		0.0525	mg/L	0.0010	103	70	130	0.9	20	
Beryllium		0.0495	mg/L	0.010	99	70	130	0.8	20	
Cadmium		0.0488	mg/L	0.010	98	70	130	1.1	20	
Chromium		0.0491	mg/L	0.0010	98	70	130	0.1	20	
Copper		0.0476	mg/L	0.010	94	70	130	0.2	20	
Lead		0.0507	mg/L	0.050	101	70	130	0	20	
Manganese		0.101	mg/L	0.010	105	70	130	0.3	20	
Mercury		0.00520	mg/L	0.0010	104	70	130	1.7	20	
Nickel		0.0471	mg/L	0.0010	92	70	130	0.1	20	
Selenium		0.0506	mg/L	0.0010	101	70	130	0.2	20	
Silver		0.0172	mg/L	0.010	86	70	130	9.4	20	
Strontium		2.74	mg/L	0.10		70	130	0.5	20	A
Uranium		0.0548	mg/L	0.00030	108	70	130	0.1	20	
Vanadium		0.0512	mg/L	0.0010	102	70	130	0.4	20	
Zinc		0.0518	mg/L	0.010	97	70	130	0.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Client: Powertech USA Inc
Report Date: 09/25/10
Project: Dewey Groundwater Sampling
Work Order: R10070459

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_R135811
Sample ID: LRB	7	Method Blank				Run: SUB-C135811				08/06/10 12:51
Antimony		ND	mg/L	7E-05						
Arsenic		ND	mg/L	6E-05						
Lead		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0003						
Sample ID: LFB	7	Laboratory Fortified Blank				Run: SUB-C135811				08/06/10 12:58
Antimony		0.0505	mg/L	0.0010	101	85	115			
Arsenic		0.0521	mg/L	0.0010	104	85	115			
Lead		0.0515	mg/L	0.0010	103	85	115			
Selenium		0.0516	mg/L	0.0010	103	85	115			
Thallium		0.0516	mg/L	0.0010	103	85	115			
Uranium		0.0500	mg/L	0.00030	100	85	115			
Zinc		0.0545	mg/L	0.0010	109	85	115			
Sample ID: C10071092-012AMS4	7	Post Digestion Spike				Run: SUB-C135811				08/06/10 15:01
Antimony		0.0558	mg/L	0.050	112	70	130			
Arsenic		0.0638	mg/L	0.0010	106	70	130			
Lead		0.0514	mg/L	0.050	103	70	130			
Selenium		0.0560	mg/L	0.0010	106	70	130			
Thallium		0.0516	mg/L	0.10	103	70	130			
Uranium		0.0661	mg/L	0.00030	103	70	130			
Zinc		0.0538	mg/L	0.010	102	70	130			
Sample ID: C10071092-012AMS4	7	Post Digestion Spike				Run: SUB-C135811				08/06/10 19:17
Antimony		0.0554	mg/L	0.050	111	70	130			
Arsenic		0.0616	mg/L	0.0010	103	70	130			
Lead		0.0503	mg/L	0.050	101	70	130			
Selenium		0.0527	mg/L	0.0010	100	70	130			
Thallium		0.0503	mg/L	0.0010	101	70	130			
Uranium		0.0646	mg/L	0.00030	100	70	130			
Zinc		0.0523	mg/L	0.010	99	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_B_R151901	
Sample ID: LRB		Method Blank				Run: SUB-C135846			08/05/10 11:30	
Thorium		0.001	mg/L	1E-05						
Sample ID: LFB		Laboratory Fortified Blank				Run: SUB-C135846			08/05/10 11:35	
Thorium		0.0470	mg/L	0.0010	92	85	115			
Sample ID: B10062814-002CMS		Sample Matrix Spike				Run: SUB-C135846			08/06/10 08:46	
Thorium		0.0482	mg/L	0.0050	95	70	130			
Sample ID: B10062814-002CMSD		Sample Matrix Spike Duplicate				Run: SUB-C135846			08/06/10 08:51	
Thorium		0.0502	mg/L	0.0050	98	70	130	4	20	
Method: E200.8									Batch: C_26896	
Sample ID: MB-26896		Method Blank				Run: SUB-C135977			08/11/10 01:00	
Uranium		0.0003	mg/L	6E-05						
Sample ID: LCS2-26896		Laboratory Control Sample				Run: SUB-C135977			08/11/10 01:05	
Uranium		0.0647	mg/L	0.00030	129	85	115			S
- Response is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.										
Sample ID: R10070459-003I		Sample Matrix Spike				Run: SUB-C135977			08/11/10 01:25	
Uranium		0.0549	mg/L	0.00030	110	70	130			
Sample ID: R10070459-003I		Sample Matrix Spike Duplicate				Run: SUB-C135977			08/11/10 01:29	
Uranium		0.0552	mg/L	0.00030	110	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B151585	
Sample ID: QCS		Initial Calibration Verification Standard							07/30/10 11:33	
Mercury		0.0020	mg/L	0.0010	100	90	110			
Method: E245.1									Batch: B_48008	
Sample ID: MB-48008		Method Blank				Run: SUB-B151585			07/30/10 15:38	
Mercury		ND	mg/L	1E-05						
Sample ID: LCS-48008		Laboratory Control Sample				Run: SUB-B151585			07/30/10 15:40	
Mercury		0.0022	mg/L	0.0010	108	85	115			
Sample ID: B10072906-001JMS		Sample Matrix Spike				Run: SUB-B151585			07/30/10 15:43	
Mercury		0.0020	mg/L	0.0010	102	70	130			
Sample ID: B10072906-001JMSD		Sample Matrix Spike Duplicate				Run: SUB-B151585			07/30/10 15:45	
Mercury		0.0021	mg/L	0.0010	105	70	130	2.9	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: DIONEX_100728A	
Sample ID: CCV072810-22	5	Continuing Calibration Verification Standard							07/28/10 18:18	
Chloride		73.6	mg/L	1.00	98	90	110			
Fluoride		7.15	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N		7.00	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N		7.17	mg/L	0.10	95	90	110			
Sulfate		70.8	mg/L	1.0	94	90	110			
Sample ID: CCV072810-34	5	Continuing Calibration Verification Standard							07/28/10 22:25	
Chloride		74.5	mg/L	1.00	99	90	110			
Fluoride		7.22	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N		7.14	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N		7.27	mg/L	0.10	97	90	110			
Sulfate		71.4	mg/L	1.0	95	90	110			
Method: E300.0										Batch: R47210
Sample ID: LFB072810-10	5	Laboratory Fortified Blank				Run: DIONEX_100728A			07/28/10 14:10	
Chloride		37.0	mg/L	1.00	92	90	110			
Fluoride		3.82	mg/L	0.10	95	90	110			
Nitrogen, Nitrate as N		3.74	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N		3.76	mg/L	0.10	94	90	110			
Sulfate		36.6	mg/L	1.0	91	90	110			
Sample ID: R10070459-002AMS	5	Sample Matrix Spike				Run: DIONEX_100728A			07/28/10 23:36	
Chloride		803	mg/L	20	96	90	110			
Fluoride		81.0	mg/L	2.0	97	90	110			
Nitrogen, Nitrate as N		78.9	mg/L	2.0	99	90	110			
Nitrogen, Nitrite as N		80.5	mg/L	2.0	101	90	110			
Sulfate		1420	mg/L	20	96	90	110			
Sample ID: R10070459-002AMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_100728A			07/28/10 23:53	
Chloride		806	mg/L	20	96	90	110	0.3	10	
Fluoride		81.4	mg/L	2.0	97	90	110	0.4	10	
Nitrogen, Nitrate as N		78.9	mg/L	2.0	99	90	110	0.1	10	
Nitrogen, Nitrite as N		79.2	mg/L	2.0	99	90	110	1.6	10	
Sulfate		1430	mg/L	20	97	90	110	0.7	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0941	
Sample ID: MB-GrAB-0941	6	Method Blank				Run: SUB-C135796			08/05/10 23:18	
Gross Alpha		-1	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.9	pCi/L							
Gross Beta		-2	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-0941		Laboratory Control Sample				Run: SUB-C135796			08/05/10 23:18	
Gross Alpha		100	pCi/L		102	70	130			
Sample ID: Cs137-GrAB-0941		Laboratory Control Sample				Run: SUB-C135796			08/05/10 23:18	
Gross Beta		78	pCi/L		89	70	130			
Sample ID: C10070657-001DMS		Sample Matrix Spike				Run: SUB-C135796			08/05/10 23:18	
Gross Alpha		124	pCi/L		118	70	130			
Sample ID: C10070657-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C135796			08/05/10 23:18	
Gross Alpha		115	pCi/L		108	70	130	7.8	18.8	
Sample ID: C10070657-001DMS		Sample Matrix Spike				Run: SUB-C135796			08/05/10 23:18	
Gross Beta		80.3	pCi/L		87	70	130			
Sample ID: C10070657-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C135796			08/05/10 23:18	
Gross Beta		86.4	pCi/L		94	70	130	7.3	16.3	
Sample ID: C10070781-002ADUP	6	Sample Duplicate				Run: SUB-C135796			08/06/10 11:25	
Gross Alpha		0.688	pCi/L					3800	598.8	UR
Gross Alpha precision (±)		2.18	pCi/L							
Gross Alpha MDC		3.61	pCi/L							
Gross Beta		6.31	pCi/L					33	86.9	
Gross Beta precision (±)		2.12	pCi/L							
Gross Beta MDC		3.37	pCi/L							

- For Gross Alpha the Sample and the Duplicate are both below the MDC; the RPD is acceptable.

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R135892
Sample ID: LCS-R135892	3	Laboratory Control Sample				Run: SUB-C135892				08/04/10 07:00
Americium 241		700	pCi/L	20	87	70	130			
Cesium 137		960	pCi/L	20	95	70	130			
Potassium 40		6300	pCi/L	20	94	70	130			
Sample ID: MB-R135892	4	Method Blank				Run: SUB-C135892				08/04/10 07:00
Bismuth 214		ND	pCi/L							U
Lead 214		ND	pCi/L							U
Potassium 40		ND	pCi/L							U
Gross Gamma		ND	pCi/L							U
Sample ID: R10070459-001H	4	Sample Duplicate				Run: SUB-C135892				08/04/10 07:00
Thorium 234		550	pCi/L	20				10	30	
Thorium 234 precision (±)		140	pCi/L							
Gross Gamma		550	pCi/L					10	30	
Gross Gamma precision (±)		140	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4699	
Sample ID: C10070928-001GMS		Sample Matrix Spike				Run: SUB-C135886			08/09/10 10:42	
Radium 226		16.5	pCi/L		105	70	130			
Sample ID: C10070928-001GMSD		Sample Matrix Spike Duplicate				Run: SUB-C135886			08/09/10 10:42	
Radium 226		14.5	pCi/L		93	70	130	12	24.1	
Sample ID: MB-RA226-4699	3	Method Blank				Run: SUB-C135886			08/09/10 13:47	
Radium 226		-0.1	pCi/L							U
Radium 226 precision (±)		0.07	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4699		Laboratory Control Sample				Run: SUB-C135886			08/09/10 13:47	
Radium 226		8.3	pCi/L		107	70	130			
Method: E903.0									Batch: C_R135959	
Sample ID: C10070368-004AMS		Sample Matrix Spike				Run: SUB-C135959			08/10/10 12:50	
Radium 226		0.00023	uCi/kg		91	70	130			
Sample ID: C10070368-004AMSD		Sample Matrix Spike Duplicate				Run: SUB-C135959			08/10/10 12:50	
Radium 226		0.00024	uCi/kg		95	70	130	3.2	23.6	
Sample ID: LCS-26896		Laboratory Control Sample				Run: SUB-C135959			08/10/10 14:32	
Radium 226		14	pCi/L		97	70	130			
Sample ID: MB-26896	3	Method Blank				Run: SUB-C135959			08/10/10 14:32	
Radium 226		-0.2	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0										Batch: C_26896
Sample ID: R10070459-003I		Sample Matrix Spike				Run: SUB-C135891				08/06/10 08:44
Thorium 230		10	pCi/L		97	70	130			
Sample ID: R10070459-003I		Sample Matrix Spike Duplicate				Run: SUB-C135891				08/06/10 08:44
Thorium 230		14	pCi/L		120	70	130	32	53.8	
Sample ID: LCS-26896		Laboratory Control Sample				Run: SUB-C135891				08/06/10 08:45
Thorium 230		4.3	pCi/L		88	70	130			
Sample ID: MB-26896	3	Method Blank				Run: SUB-C135891				08/06/10 08:44
Thorium 230		-0.2	pCi/L							U
Thorium 230 MDC		0.3	pCi/L							
Thorium 230 precision (±)		0.1	pCi/L							
Method: E907.0										Batch: C_RA-TH-ISO-1222
Sample ID: LCS-RA-TH-ISO-1222		Laboratory Control Sample				Run: SUB-C136138				08/12/10 08:54
Thorium 230		5.2	pCi/L		93	70	130			
Sample ID: C10071017-011DMS		Sample Matrix Spike				Run: SUB-C136138				08/12/10 08:54
Thorium 230		16	pCi/L		97	70	130			
Sample ID: C10071017-011DMSD		Sample Matrix Spike Duplicate				Run: SUB-C136138				08/12/10 08:54
Thorium 230		18	pCi/L		110	70	130	13	40.5	
Sample ID: MB-RA-TH-ISO-1222	3	Method Blank				Run: SUB-C136138				08/12/10 13:14
Thorium 230		0.1	pCi/L							U
Thorium 230 MDC		0.1	pCi/L							
Thorium 230 precision (±)		0.09	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: C_PB-210-0748	
Sample ID: MB-26896	3	Method Blank				Run: SUB-C136055			08/11/10 15:18	
Lead 210		-10	pCi/L							U
Lead 210 precision (±)		10	pCi/L							
Lead 210 MDC		20	pCi/L							
Sample ID: TAP WATER-MS		Sample Matrix Spike				Run: SUB-C136055			08/11/10 15:18	
Lead 210		590	pCi/L		109	70	130			
Sample ID: TAP WATER-MSD		Sample Matrix Spike Duplicate				Run: SUB-C136055			08/11/10 15:18	
Lead 210		590	pCi/L		109	70	130	0.1	15.3	
Sample ID: LCS-26896		Laboratory Control Sample				Run: SUB-C136055			08/11/10 15:18	
Lead 210		460	pCi/L		90	70	130			
Sample ID: LCS-PB-210-0748		Laboratory Control Sample				Run: SUB-C136055			08/11/10 15:18	
Lead 210		100	pCi/L		102	70	130			
Method: E909.0M									Batch: C_PB-210-0749	
Sample ID: MB-PB-210-0749	3	Method Blank				Run: SUB-C136095			08/13/10 09:09	
Lead 210		ND	pCi/L							U
Lead 210 precision (±)		1	pCi/L							
Lead 210 MDC		2	pCi/L							
Sample ID: C10071017-012DMS		Sample Matrix Spike				Run: SUB-C136095			08/13/10 09:09	
Lead 210		120	pCi/L		111	70	130			
Sample ID: C10071017-012DMSD		Sample Matrix Spike Duplicate				Run: SUB-C136095			08/13/10 09:09	
Lead 210		130	pCi/L		121	70	130	8.9	16.1	
Sample ID: LCS-PB-210-0749		Laboratory Control Sample				Run: SUB-C136095			08/13/10 09:09	
Lead 210		56	pCi/L		101	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Revised Date: 10/19/10
Report Date: 09/25/10
Work Order: R10070459

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_PO210-0308
Sample ID: R10070459-002K		Sample Matrix Spike				Run: SUB-C135910				08/10/10 09:40
Polonium 210		35	pCi/L		106	70	130			
Sample ID: R10070459-002K		Sample Matrix Spike Duplicate				Run: SUB-C135910				08/10/10 09:40
Polonium 210		32	pCi/L		99	70	130	7.3	58.7	
Sample ID: MB-PO210-0308	3	Method Blank				Run: SUB-C135910				08/10/10 09:40
Polonium 210		0.7	pCi/L							
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.6	pCi/L							
Sample ID: LCS-PO210-0308		Laboratory Control Sample				Run: SUB-C135910				08/10/10 09:40
Polonium 210		18	pCi/L		109	70	130			
Method: E912.0										Batch: C_R135911
Sample ID: R10070459-003I		Sample Matrix Spike				Run: SUB-C135911				08/10/10 12:20
Polonium 210		47	pCi/L		120	70	130			
Sample ID: R10070459-003I		Sample Matrix Spike Duplicate				Run: SUB-C135911				08/10/10 12:20
Polonium 210		34	pCi/L		88	70	130	31	56.8	
Sample ID: LCS-26896		Laboratory Control Sample				Run: SUB-C135911				08/10/10 12:20
Polonium 210		74	pCi/L		96	70	130			
Sample ID: MB-26896	3	Method Blank				Run: SUB-C135911				08/10/10 12:20
Polonium 210		-0.05	pCi/L							U
Polonium 210 precision (±)		0.9	pCi/L							
Polonium 210 MDC		2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page _____ of _____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Env.	Project Name, PWS, Permit, Etc.: Powertech - Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Powertech, Scott Env.	Contact Name: Allen Scott Phone/Fax: 673-4859	Email:	Sampler: (Please Print) Allen Scott
Invoice Address: Powertech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW
☐ POTW/WWTP
☐ State: _____
☐ Other: _____
☐ EDD/EDT (Electronic Data) Format: _____
☐ LEVEL IV
☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED: As per Quote

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX
1	DB-09-21-01	7-27-10		Water
2	DB-09-21-02	"		"
3	DB-09-21-02 Dup.	"		"
4				
5				
6				
7				
8				
9				
10				

LABORATORY USE ONLY

Shipped by:
Cooler ID(s):
Receipt Temp 7.2 °C
On Ice: Y N
Custody Seal
On Bottle Y N
On Cooler Y N
Intact Y N
Signature Match Y N

R1007045 9-001
002
003

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	7-27-10 4:27pm				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Fairland	Date/Time: 7-27-10 1627	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

October 15, 2010

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10080398

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. received the following 2 samples for Powertech USA Inc on 8/24/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10080398-001	DB-09-21-01	08/23/10 0:00	08/24/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10080398-002	DB-09-21-02	08/23/10 0:00	08/24/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.10.15 11:29:29 -06:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10080398

Report Date: 10/15/10

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002.
Comments imported for SUBBED Workorder: C10081031
RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved on all samples due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10081031

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-001
Client Sample ID: DB-09-21-01

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	168	mg/L		5		1	A2320 B	08/25/10 09:20/jmh
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/25/10 09:20/jmh
Bicarbonate as HCO3	205	mg/L		5		1	A2320 B	08/25/10 09:20/jmh
Calcium	97	mg/L	D	1		5	E200.7	09/01/10 20:46/eli-c
Chloride	8	mg/L	B	1		1	E300.0	08/25/10 13:15/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	08/25/10 13:15/jmh
Magnesium	35.4	mg/L		0.5		5	E200.7	09/01/10 20:46/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	08/31/10 16:21/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/25/10 13:15/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/25/10 13:15/jmh
Potassium	11.7	mg/L		0.5		5	E200.7	09/01/10 20:46/eli-c
Sodium	169	mg/L	D	1		5	E200.7	09/01/10 20:46/eli-c
Sulfate	575	mg/L	D	20		20	E300.0	08/25/10 12:58/jmh
Silica	8.5	mg/L		0.2		1	E200.8	09/01/10 10:12/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1330	umhos/cm		5.0		1	A2510 B	09/02/10 09:26/tb
Oxidation-Reduction Potential	270	mV				1	A2580 B	08/30/10 16:30/jmh
pH	7.88	s.u.		0.01		1	A4500-H B	08/30/10 09:05/tb
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.10		1	Calculation	10/04/10 10:46/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	D	10		1	A2540 C	08/30/10 14:08/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	09/01/10 20:46/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	09/01/10 10:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8	09/01/10 10:12/eli-c
Boron	ND	mg/L		0.1		1	E200.8	09/01/10 10:12/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/01/10 10:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	09/01/10 10:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/01/10 10:12/eli-c
Iron	ND	mg/L		0.03		1	E200.8	09/01/10 10:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/01/10 10:12/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	09/01/10 10:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/01/10 10:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	09/01/10 10:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	09/01/10 10:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/31/10 12:22/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/01/10 10:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/01/10 10:12/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-001
Client Sample ID: DB-09-21-01

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/01/10 10:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/01/10 10:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	09/01/10 10:12/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/10/10 03:00/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/10 10:56/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/31/10 15:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	8.9	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Alpha precision (±)	3.4	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Alpha MDC	4.7	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta	15.5	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta precision (±)	2.9	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta MDC	4.4	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Lead 210	0.01	pCi/L	U			1	E909.0M	09/19/10 10:49/eli-cs
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	09/19/10 10:49/eli-cs
Lead 210 MDC	1.7	pCi/L				1	E909.0M	09/19/10 10:49/eli-cs
Polonium 210	0.088	pCi/L	U			1	E912.0	09/07/10 09:24/eli-ca
Polonium 210 MDC	0.56	pCi/L				1	E912.0	09/07/10 09:24/eli-ca
Polonium 210 precision (±)	0.29	pCi/L				1	E912.0	09/07/10 09:24/eli-ca
Radium 226	1.8	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Radium 226 MDC	0.09	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Thorium 230	0.09	pCi/L	U			1	E907.0	09/17/10 17:09/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	09/17/10 17:09/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/17/10 17:09/eli-c
Gross Gamma	710	pCi/L				1	E901.1	09/02/10 09:00/eli-c
Gross Gamma precision (±)	190	pCi/L				1	E901.1	09/02/10 09:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.08	pCi/L	U			1	E909.0M	09/30/10 05:46/eli-cs
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	09/30/10 05:46/eli-cs
Lead 210 MDC	1.3	pCi/L				1	E909.0M	09/30/10 05:46/eli-cs
Polonium 210	0.069	pCi/L	U			1	E912.0	09/15/10 11:06/eli-ca
Polonium 210 precision (±)	0.27	pCi/L				1	E912.0	09/15/10 11:06/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-001
Client Sample ID: DB-09-21-01

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.55	pCi/L				1	E912.0	09/15/10 11:06/eli-ca
Radium 226	-0.2	pCi/L	U			1	E903.0	09/15/10 17:33/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	09/15/10 17:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	09/15/10 17:33/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	09/13/10 13:26/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	09/13/10 13:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/13/10 13:26/eli-c
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	238	pCi/L		100		1	D5072-92	08/25/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	08/31/10 23:52/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	08/31/10 23:52/eli-c
Barium	ND	mg/L		0.1		1	E200.8	08/31/10 23:52/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	08/31/10 23:52/eli-c
Boron	ND	mg/L		0.1		1	E200.8	08/31/10 23:52/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/31/10 23:52/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	08/31/10 23:52/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/31/10 23:52/eli-c
Iron	0.28	mg/L		0.03		1	E200.8	08/31/10 23:52/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/31/10 23:52/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	08/31/10 23:52/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/26/10 15:58/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	08/31/10 23:52/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	08/31/10 23:52/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	08/31/10 23:52/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/31/10 23:52/eli-c
Strontium	2.7	mg/L		0.1		1	E200.8	08/31/10 23:52/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	08/31/10 23:52/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	08/31/10 23:52/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/31/10 23:52/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.500	%				1	A1030 E	10/14/10 00:00/lkl
Anions	15.6	meq/L				1	A1030 E	10/14/10 00:00/lkl
Cations	15.4	meq/L				1	A1030 E	10/14/10 00:00/lkl
Solids, Total Dissolved Calculated	1020	mg/L				1	A1030 E	10/14/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	10/14/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-002
Client Sample ID: DB-09-21-02

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	194	mg/L		5		1	A2320 B	08/25/10 09:29/jmh
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/25/10 09:29/jmh
Bicarbonate as HCO3	236	mg/L		5		1	A2320 B	08/25/10 09:29/jmh
Calcium	170	mg/L	D	1		5	E200.7	09/01/10 20:42/eli-c
Chloride	10	mg/L	B	1		1	E300.0	08/25/10 13:51/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/25/10 13:51/jmh
Magnesium	48.7	mg/L		0.5		5	E200.7	09/01/10 20:42/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	08/31/10 16:23/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	08/25/10 13:51/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	08/25/10 13:51/jmh
Potassium	12.2	mg/L		0.5		5	E200.7	09/01/10 20:42/eli-c
Sodium	133	mg/L	D	1		5	E200.7	09/07/10 12:28/eli-c
Sulfate	708	mg/L	D	20		20	E300.0	08/25/10 13:33/jmh
Silica	7.9	mg/L		0.2		1	E200.8	09/01/10 10:19/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1540	umhos/cm		5.0		1	A2510 B	09/02/10 09:29/tb
Oxidation-Reduction Potential	280	mV				1	A2580 B	08/30/10 16:30/jmh
pH	7.53	s.u.		0.01		1	A4500-H B	08/30/10 09:19/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	10/04/10 10:46/ADM
Solids, Total Dissolved TDS @ 180 C	1300	mg/L	D	10		1	A2540 C	08/30/10 14:09/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		5	E200.7	09/01/10 20:42/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	09/01/10 10:19/eli-c
Barium	ND	mg/L		0.1		1	E200.8	09/01/10 10:19/eli-c
Boron	ND	mg/L		0.1		1	E200.8	09/01/10 10:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/01/10 10:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	09/01/10 10:19/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/01/10 10:19/eli-c
Iron	ND	mg/L		0.03		1	E200.8	09/01/10 10:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/01/10 10:19/eli-c
Manganese	0.57	mg/L		0.01		1	E200.8	09/01/10 10:19/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/01/10 10:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	09/01/10 10:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	09/01/10 10:19/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	08/31/10 12:24/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/01/10 10:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	09/01/10 10:19/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-002
Client Sample ID: DB-09-21-02

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0087	mg/L		0.0003		1	E200.8	09/01/10 10:19/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/01/10 10:19/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	09/01/10 10:19/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	09/10/10 03:05/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/31/10 10:58/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/31/10 15:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	21.9	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Alpha precision (±)	4.9	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Alpha MDC	5.8	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta	25.2	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta precision (±)	4.3	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Gross Beta MDC	6.4	pCi/L				1	E900.0	09/10/10 03:35/eli-ca
Lead 210	-0.7	pCi/L	U			1	E909.0M	09/20/10 01:01/eli-cs
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	09/20/10 01:01/eli-cs
Lead 210 MDC	1.7	pCi/L				1	E909.0M	09/20/10 01:01/eli-cs
Polonium 210	-0.040	pCi/L	U			1	E912.0	09/07/10 09:24/eli-ca
Polonium 210 MDC	0.77	pCi/L				1	E912.0	09/07/10 09:24/eli-ca
Polonium 210 precision (±)	0.28	pCi/L				1	E912.0	09/07/10 09:24/eli-ca
Radium 226	2.7	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Radium 226 MDC	0.09	pCi/L				1	E903.0	09/07/10 23:20/eli-c
Thorium 230	-0.02	pCi/L	U			1	E907.0	09/17/10 17:09/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	09/17/10 17:09/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/17/10 17:09/eli-c
Gross Gamma	610	pCi/L				1	E901.1	09/02/10 09:00/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	09/02/10 09:00/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.02	pCi/L	U			1	E909.0M	09/30/10 12:21/eli-cs
Lead 210 precision (±)	0.8	pCi/L				1	E909.0M	09/30/10 12:21/eli-cs
Lead 210 MDC	1.3	pCi/L				1	E909.0M	09/30/10 12:21/eli-cs
Polonium 210	0.068	pCi/L	U			1	E912.0	09/15/10 11:06/eli-ca
Polonium 210 precision (±)	0.27	pCi/L				1	E912.0	09/15/10 11:06/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10080398-002
Client Sample ID: DB-09-21-02

Report Date: 10/15/10
Collection Date: 08/23/10
Date Received: 08/24/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.54	pCi/L				1	E912.0	09/15/10 11:06/eli-ca
Radium 226	-0.1	pCi/L	U			1	E903.0	09/15/10 17:33/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	09/15/10 17:33/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	09/15/10 17:33/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	09/13/10 13:26/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	09/13/10 13:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	09/13/10 13:26/eli-c
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	342	pCi/L		100		1	D5072-92	08/25/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	09/01/10 13:31/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	09/01/10 13:31/eli-c
Barium	ND	mg/L		0.1		1	E200.8	09/01/10 13:31/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	09/01/10 13:31/eli-c
Boron	ND	mg/L		0.1		1	E200.8	09/01/10 13:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/01/10 13:31/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	09/01/10 13:31/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/01/10 13:31/eli-c
Iron	ND	mg/L		0.03		1	E200.8	09/01/10 13:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	09/01/10 13:31/eli-c
Manganese	0.58	mg/L		0.01		1	E200.8	09/01/10 13:31/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	08/26/10 16:00/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	09/01/10 13:31/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	09/01/10 13:31/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	09/01/10 13:31/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/01/10 13:31/eli-c
Strontium	2.3	mg/L		0.1		1	E200.8	09/01/10 13:31/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	09/01/10 13:31/eli-c
Uranium	0.0083	mg/L		0.0003		1	E200.8	09/01/10 13:31/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	09/01/10 13:31/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.750	%				1	A1030 E	10/14/10 00:00/lkl
Anions	18.9	meq/L				1	A1030 E	10/14/10 00:00/lkl
Cations	18.6	meq/L				1	A1030 E	10/14/10 00:00/lkl
Solids, Total Dissolved Calculated	1220	mg/L				1	A1030 E	10/14/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.09					1	A1030 E	10/14/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 100825A-ALK-SEL-W	
Sample ID: LCS1_100825A		Laboratory Control Sample				Run: PH_COND1-R_100825A			08/25/10 08:24	
Alkalinity, Total as CaCO3		952	mg/L	5.0	95	90	110			
Sample ID: MBLK1_100825A		Method Blank				Run: PH_COND1-R_100825A			08/25/10 08:27	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10080344-001AMS		Sample Matrix Spike				Run: PH_COND1-R_100825A			08/25/10 08:48	
Alkalinity, Total as CaCO3		152	mg/L	5.0	85	80	120			
Sample ID: R10080344-001AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_100825A			08/25/10 08:55	
Alkalinity, Total as CaCO3		150	mg/L	5.0	83	80	120	1.3	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 100902_1_COND-PROBE-W	
Sample ID: LCS1-1_100902		Laboratory Control Sample				Run: PH_COND2-R_100902A			09/02/10 08:50	
Conductivity @ 25 C		150	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_100902		Laboratory Control Sample				Run: PH_COND2-R_100902A			09/02/10 08:52	
Conductivity @ 25 C		4980	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_100902		Laboratory Control Sample				Run: PH_COND2-R_100902A			09/02/10 08:54	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_100902		Method Blank				Run: PH_COND2-R_100902A			09/02/10 08:55	
Conductivity @ 25 C		ND	umhos/cm	5						
Sample ID: R10080390-001BDUP		Sample Duplicate				Run: PH_COND2-R_100902A			09/02/10 09:23	
Conductivity @ 25 C		265	umhos/cm	5.0				0.4	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 100830A-SLDS-TDS-W	
Sample ID: LCS1_100830A		Laboratory Control Sample				Run: BAL-4-R_100830C			08/30/10 14:07	
Solids, Total Dissolved TDS @ 180 C		240	mg/L	10	108	90	110			
Sample ID: MBLK1_100830A		Method Blank				Run: BAL-4-R_100830C			08/30/10 14:08	
Solids, Total Dissolved TDS @ 180 C		20	mg/L	5						
Sample ID: R10080398-001ADUP		Sample Duplicate				Run: BAL-4-R_100830C			08/30/10 14:08	
Solids, Total Dissolved TDS @ 180 C		1100	mg/L	10				0.9	5	
Sample ID: R10080480-003AMS		Sample Matrix Spike				Run: BAL-4-R_100830C			08/30/10 14:21	
Solids, Total Dissolved TDS @ 180 C		980	mg/L	10	110	90	110			

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 100830-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_100830A			08/30/10 16:30	
Oxidation-Reduction Potential		490	mV		103	95	105			
Sample ID: R10080398-001F		Sample Duplicate				Run: PH_COND1-R_100830A			08/30/10 16:30	
Oxidation-Reduction Potential		280	mV					5.4	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B										Batch: C_27278
Sample ID: LRB-27278		Method Blank				Run: SUB-C136665				08/31/10 10:51
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LFB-27278		Laboratory Fortified Blank				Run: SUB-C136665				08/31/10 10:54
Selenium-IV		0.054	mg/L	0.0010	108	90	110			
Sample ID: R10080398-002E		Sample Matrix Spike				Run: SUB-C136665				08/31/10 11:00
Selenium-IV		0.046	mg/L	0.0010	92	85	115			
Sample ID: R10080398-002E		Sample Matrix Spike Duplicate				Run: SUB-C136665				08/31/10 11:03
Selenium-IV		0.045	mg/L	0.0010	90	85	115	1.6	10	
Method: A3114 B										Batch: C_27278
Sample ID: LRB-27278		Method Blank				Run: SUB-C136682				08/31/10 12:06
Selenium		ND	mg/L	0.0003						
Sample ID: LFB-27278		Laboratory Fortified Blank				Run: SUB-C136682				08/31/10 12:09
Selenium		0.047	mg/L	0.0010	94	90	110			
Sample ID: R10080398-002E		Sample Matrix Spike				Run: SUB-C136682				08/31/10 12:26
Selenium		0.046	mg/L	0.0010	92	85	115			
Sample ID: R10080398-002E		Sample Matrix Spike Duplicate				Run: SUB-C136682				08/31/10 12:28
Selenium		0.047	mg/L	0.0010	94	85	115	2.4	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 100830_1_PH-W	
Sample ID: LCS_pH-1_100830		Laboratory Control Sample				Run: PH_COND2-R_100830A			08/30/10 08:51	
pH		7.42	s.u.	0.010	100	98.55	101.45			
Sample ID: R10080398-001ADUP		Sample Duplicate				Run: PH_COND2-R_100830A			08/30/10 09:14	
pH		7.85	s.u.	0.010				0.4	1.25	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-08-31_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100831A			08/31/10 14:34	
Nitrogen, Ammonia as N		ND	mg/L	0.01						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100831A			08/31/10 15:04	
Nitrogen, Ammonia as N		0.26	mg/L	0.10	104	90	110			
Sample ID: R10080344-003CMS		Sample Matrix Spike				Run: TECHAA2-R_100831A			08/31/10 16:13	
Nitrogen, Ammonia as N		0.24	mg/L	0.10	98	80	120			
Sample ID: R10080344-003CMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100831A			08/31/10 16:14	
Nitrogen, Ammonia as N		0.25	mg/L	0.10	102	80	120	3.6	10	
Sample ID: R10080459-003BMS		Sample Matrix Spike				Run: TECHAA2-R_100831A			08/31/10 16:30	
Nitrogen, Ammonia as N		0.20	mg/L	0.10	78	80	120			S
Sample ID: R10080459-003BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100831A			08/31/10 16:31	
Nitrogen, Ammonia as N		0.22	mg/L	0.10	88	80	120	11	10	R

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R136764
Sample ID: MB-100901A	5	Method Blank				Run: SUB-C136764				09/01/10 13:09
Aluminum		ND	mg/L	0.01						
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-100901A	5	Laboratory Fortified Blank				Run: SUB-C136764				09/01/10 13:13
Aluminum		1.0	mg/L	0.10	99	85	115			
Calcium		51	mg/L	0.50	99	85	115			
Magnesium		52	mg/L	0.50	101	85	115			
Potassium		46	mg/L	0.50	91	85	115			
Sodium		49	mg/L	0.50	95	85	115			
Sample ID: C10081054-001BMS2	5	Sample Matrix Spike				Run: SUB-C136764				09/01/10 19:21
Aluminum		1.99	mg/L	0.10	98	70	130			
Calcium		139	mg/L	1.0	96	70	130			
Magnesium		114	mg/L	1.0	97	70	130			
Potassium		99.4	mg/L	1.0	94	70	130			
Sodium		889	mg/L	1.0		70	130			A
Sample ID: C10081054-001BMSD2	5	Sample Matrix Spike Duplicate				Run: SUB-C136764				09/01/10 19:25
Aluminum		2.03	mg/L	0.10	100	70	130	2.1	20	
Calcium		141	mg/L	1.0	98	70	130	1.5	20	
Magnesium		116	mg/L	1.0	98	70	130	1.1	20	
Potassium		101	mg/L	1.0	95	70	130	1.9	20	
Sodium		885	mg/L	1.0		70	130	0.5	20	A
Method: E200.7										Batch: C_R136930
Sample ID: MB-100907A		Method Blank				Run: SUB-C136930				09/07/10 11:10
Sodium		ND	mg/L	0.3						
Sample ID: LFB-100907A		Laboratory Fortified Blank				Run: SUB-C136930				09/07/10 11:14
Sodium		50	mg/L	0.50	100	85	115			
Sample ID: C10080752-007CMS2		Sample Matrix Spike				Run: SUB-C136930				09/07/10 12:14
Sodium		141	mg/L	1.0	101	70	130			
Sample ID: C10080752-007CMSD2		Sample Matrix Spike Duplicate				Run: SUB-C136930				09/07/10 12:19
Sodium		142	mg/L	1.0	101	70	130	0.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_27256
Sample ID: MB-27256	19	Method Blank				Run: SUB-C136716				08/31/10 22:43
Antimony		ND	mg/L	0.0003						
Arsenic		0.0009	mg/L	5E-05						
Barium		ND	mg/L	0.0002						
Beryllium		ND	mg/L	3E-05						
Boron		0.009	mg/L	0.003						
Cadmium		ND	mg/L	4E-05						
Chromium		0.0007	mg/L	3E-05						
Copper		0.0001	mg/L	5E-05						
Iron		0.005	mg/L	0.001						
Lead		9E-05	mg/L	5E-05						
Manganese		0.0003	mg/L	2E-05						
Molybdenum		ND	mg/L	0.00010						
Nickel		ND	mg/L	4E-05						
Selenium		ND	mg/L	3E-05						
Silver		ND	mg/L	4E-05						
Strontium		0.0002	mg/L	6E-05						
Thallium		ND	mg/L	0.0001						
Uranium		ND	mg/L	4E-05						
Zinc		0.01	mg/L	0.001						
Sample ID: LCS3-27256	19	Laboratory Control Sample				Run: SUB-C136716				08/31/10 22:50
Antimony		0.588	mg/L	0.050	118	85	115			S
Arsenic		0.512	mg/L	0.0010	102	85	115			
Barium		0.533	mg/L	0.10	107	85	115			
Beryllium		0.228	mg/L	0.010	91	85	115			
Boron		0.494	mg/L	0.10	97	85	115			
Cadmium		0.266	mg/L	0.010	106	85	115			
Chromium		0.526	mg/L	0.050	105	85	115			
Copper		0.529	mg/L	0.010	106	85	115			
Iron		2.47	mg/L	0.030	98	85	115			
Lead		0.526	mg/L	0.050	105	85	115			
Manganese		2.47	mg/L	0.010	99	85	115			
Molybdenum		0.552	mg/L	0.10	110	85	115			
Nickel		0.511	mg/L	0.050	102	85	115			
Selenium		0.533	mg/L	0.0010	107	85	115			
Silver		0.0513	mg/L	0.010	103	85	115			
Strontium		0.488	mg/L	0.10	98	85	115			
Thallium		0.515	mg/L	0.10	103	85	115			
Uranium		0.525	mg/L	0.00030	105	85	115			
Zinc		0.514	mg/L	0.010	100	85	115			
- Response for Antimony is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.										
Sample ID: R10080398-001D	19	Sample Matrix Spike				Run: SUB-C136716				08/31/10 23:59
Antimony		0.597	mg/L	0.050	119	70	130			
Arsenic		0.501	mg/L	0.0010	100	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_27256	
Sample ID: R10080398-001D	19	Sample Matrix Spike				Run: SUB-C136716			08/31/10 23:59	
Barium		0.552	mg/L	0.10	108	70	130			
Beryllium		0.201	mg/L	0.010	80	70	130			
Boron		0.521	mg/L	0.10	91	70	130			
Cadmium		0.254	mg/L	0.010	102	70	130			
Chromium		0.517	mg/L	0.050	103	70	130			
Copper		0.503	mg/L	0.010	101	70	130			
Iron		2.76	mg/L	0.030	99	70	130			
Lead		0.536	mg/L	0.050	107	70	130			
Manganese		2.52	mg/L	0.010	99	70	130			
Molybdenum		0.582	mg/L	0.10	116	70	130			
Nickel		0.490	mg/L	0.050	98	70	130			
Selenium		0.497	mg/L	0.0010	99	70	130			
Silver		0.0496	mg/L	0.010	99	70	130			
Strontium		3.26	mg/L	0.10		70	130			A
Thallium		0.524	mg/L	0.10	105	70	130			
Uranium		0.551	mg/L	0.00030	110	70	130			
Zinc		0.460	mg/L	0.010	91	70	130			
Sample ID: R10080398-001D	19	Sample Matrix Spike Duplicate				Run: SUB-C136716			09/01/10 00:05	
Antimony		0.590	mg/L	0.050	118	70	130	1.2	20	
Arsenic		0.506	mg/L	0.0010	101	70	130	1.1	20	
Barium		0.547	mg/L	0.10	107	70	130	0.8	20	
Beryllium		0.202	mg/L	0.010	81	70	130	0.9	20	
Boron		0.529	mg/L	0.10	93	70	130	1.6	20	
Cadmium		0.252	mg/L	0.010	101	70	130	0.7	20	
Chromium		0.537	mg/L	0.050	107	70	130	3.9	20	
Copper		0.512	mg/L	0.010	102	70	130	1.9	20	
Iron		2.77	mg/L	0.030	100	70	130	0.2	20	
Lead		0.541	mg/L	0.050	108	70	130	0.9	20	
Manganese		2.55	mg/L	0.010	100	70	130	1.2	20	
Molybdenum		0.580	mg/L	0.10	116	70	130	0.2	20	
Nickel		0.499	mg/L	0.050	100	70	130	1.7	20	
Selenium		0.500	mg/L	0.0010	100	70	130	0.5	20	
Silver		0.0486	mg/L	0.010	97	70	130	2.1	20	
Strontium		3.23	mg/L	0.10		70	130	1	20	A
Thallium		0.534	mg/L	0.10	107	70	130	2	20	
Uranium		0.573	mg/L	0.00030	115	70	130	3.9	20	
Zinc		0.467	mg/L	0.010	93	70	130	1.6	20	
Method: E200.8									Batch: C_R136716A	
Sample ID: R10080398-002D	23	Post Digestion Spike				Run: SUB-C136716			09/01/10 13:38	
Antimony		0.0562	mg/L	0.050	112	70	130			
Arsenic		0.0540	mg/L	0.0010	105	70	130			
Barium		0.0618	mg/L	0.0010	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R136716A	
Sample ID: R10080398-002D	23	Post Digestion Spike				Run: SUB-C136716			09/01/10 13:38	
Beryllium		0.0433	mg/L	0.010	87	70	130			
Boron		0.112	mg/L	0.10	94	70	130			
Cadmium		0.0500	mg/L	0.010	100	70	130			
Chromium		0.0522	mg/L	0.050	104	70	130			
Copper		0.0502	mg/L	0.010	100	70	130			
Iron		1.31	mg/L	0.030	103	70	130			
Lead		0.0523	mg/L	0.050	104	70	130			
Manganese		0.638	mg/L	0.010		70	130			A
Mercury		0.00519	mg/L	0.0010	102	70	130			
Molybdenum		0.0468	mg/L	0.0010	93	70	130			
Nickel		0.0497	mg/L	0.0010	99	70	130			
Selenium		0.0529	mg/L	0.0010	105	70	130			
Silicon		4.38	mg/L	0.10		70	130			A
Silver		0.0158	mg/L	0.010	79	70	130			
Strontium		2.35	mg/L	0.10		70	130			A
Thallium		0.0527	mg/L	0.0010	105	70	130			
Thorium 232		0.0535	mg/L	0.0010	107	70	130			
Uranium		0.0616	mg/L	0.00030	107	70	130			
Vanadium		0.0525	mg/L	0.0010	104	70	130			
Zinc		0.0493	mg/L	0.010	99	70	130			
Sample ID: R10080398-002D	23	Post Digestion Spike Duplicate				Run: SUB-C136716			09/01/10 13:45	
Antimony		0.0560	mg/L	0.050	112	70	130	0.4	20	
Arsenic		0.0544	mg/L	0.0010	106	70	130	0.7	20	
Barium		0.0618	mg/L	0.0010	104	70	130	0.1	20	
Beryllium		0.0434	mg/L	0.010	87	70	130	0.3	20	
Boron		0.115	mg/L	0.10	99	70	130	2.3	20	
Cadmium		0.0500	mg/L	0.010	100	70	130	0.1	20	
Chromium		0.0521	mg/L	0.050	104	70	130	0.1	20	
Copper		0.0505	mg/L	0.010	100	70	130	0.5	20	
Iron		1.34	mg/L	0.030	105	70	130	2.3	20	
Lead		0.0526	mg/L	0.050	105	70	130	0.5	20	
Manganese		0.650	mg/L	0.010		70	130	1.8	20	A
Mercury		0.00527	mg/L	0.0010	103	70	130	1.5	20	
Molybdenum		0.0497	mg/L	0.0010	99	70	130	6	20	
Nickel		0.0499	mg/L	0.0010	100	70	130	0.4	20	
Selenium		0.0535	mg/L	0.0010	106	70	130	1	20	
Silicon		4.44	mg/L	0.10		70	130	1.3	20	A
Silver		0.0183	mg/L	0.010	91	70	130	14	20	
Strontium		2.38	mg/L	0.10		70	130	1.3	20	A
Thallium		0.0529	mg/L	0.0010	106	70	130	0.3	20	
Thorium 232		0.0540	mg/L	0.0010	108	70	130	0.9	20	
Uranium		0.0622	mg/L	0.00030	108	70	130	1	20	
Vanadium		0.0531	mg/L	0.0010	105	70	130	1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_R136716A
Sample ID: R10080398-002D	23	Post Digestion Spike Duplicate				Run: SUB-C136716				09/01/10 13:45
Zinc		0.0498	mg/L	0.010	100	70	130	1	20	
Sample ID: LRB	23	Method Blank				Run: SUB-C136716				08/31/10 12:50
Silicon		ND	mg/L	0.0005						
Antimony		0.0007	mg/L	0.0002						
Arsenic		ND	mg/L	4E-05						
Barium		ND	mg/L	3E-05						
Beryllium		ND	mg/L	3E-05						
Boron		0.0004	mg/L							
Cadmium		ND	mg/L	7E-05						
Chromium		ND	mg/L	5E-05						
Copper		0.0002	mg/L	6E-05						
Iron		ND	mg/L	0.0001						
Lead		ND	mg/L	2E-05						
Manganese		ND	mg/L	2E-05						
Mercury		6E-05	mg/L	2E-05						
Molybdenum		0.0004	mg/L	8E-05						
Nickel		0.0002	mg/L	5E-05						
Selenium		ND	mg/L	5E-05						
Silver		ND	mg/L	8E-05						
Strontium		ND	mg/L	6E-05						
Thallium		ND	mg/L	2E-05						
Thorium 232		6E-05	mg/L	3E-05						
Uranium		ND	mg/L	8E-06						
Vanadium		ND	mg/L	1E-05						
Zinc		0.003	mg/L	0.0001						
Sample ID: LFB	23	Laboratory Fortified Blank				Run: SUB-C136716				08/31/10 12:57
Silicon		0.595	mg/L	0.0050	114	85	115			
Antimony		0.0498	mg/L	0.0010	98	85	115			
Arsenic		0.0520	mg/L	0.0010	104	85	115			
Barium		0.0518	mg/L	0.0010	104	85	115			
Beryllium		0.0515	mg/L	0.0010	103	85	115			
Boron		0.0500	mg/L	0.0010	99	85	115			
Cadmium		0.0525	mg/L	0.0010	105	85	115			
Chromium		0.0518	mg/L	0.0010	104	85	115			
Copper		0.0527	mg/L	0.0010	105	85	115			
Iron		1.28	mg/L	0.012	102	85	115			
Lead		0.0520	mg/L	0.0010	104	85	115			
Manganese		0.0508	mg/L	0.0010	102	85	115			
Mercury		0.00522	mg/L	0.0010	103	85	115			
Molybdenum		0.0510	mg/L	0.0010	101	85	115			
Nickel		0.0521	mg/L	0.0010	104	85	115			
Selenium		0.0526	mg/L	0.0010	105	85	115			
Silver		0.0203	mg/L	0.0010	102	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R136716A	
Sample ID: LFB	23	Laboratory Fortified Blank				Run: SUB-C136716			08/31/10 12:57	
Strontium		0.0513	mg/L	0.0010	103	85	115			
Thallium		0.0515	mg/L	0.0010	103	85	115			
Thorium 232		0.0519	mg/L	0.0010	104	85	115			
Uranium		0.0519	mg/L	0.00030	104	85	115			
Vanadium		0.0519	mg/L	0.0010	104	85	115			
Zinc		0.0549	mg/L	0.0010	103	85	115			
Method: E200.8									Batch: C_27340	
Sample ID: MB-27340		Method Blank				Run: SUB-C137102			09/10/10 02:44	
Uranium		0.0001	mg/L	6E-05						
Sample ID: LCS2-27340		Laboratory Control Sample				Run: SUB-C137102			09/10/10 02:49	
Uranium		0.0994	mg/L	0.00030	99	85	115			
Sample ID: R10080398-002I		Post Digestion Spike				Run: SUB-C137102			09/10/10 03:10	
Uranium		0.0520	mg/L	0.00030	104	70	130			
Sample ID: R10080398-002I		Post Digestion Spike Duplicate				Run: SUB-C137102			09/10/10 03:36	
Uranium		0.0508	mg/L	0.00030	101	70	130	2.4	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0								Analytical Run: DIONEX_100825A		
Sample ID: CCV082510-11	5	Continuing Calibration Verification Standard							08/25/10 11:47	
Chloride		77.3	mg/L	1.00	103	90	110			
Fluoride		7.70	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N		7.67	mg/L	0.10	102	90	110			
Nitrogen, Nitrite as N		7.70	mg/L	0.10	103	90	110			
Sulfate		75.9	mg/L	1.0	101	90	110			
Method: E300.0									Batch: R47669	
Sample ID: LFB082510-10	5	Laboratory Fortified Blank				Run: DIONEX_100825A			08/25/10 11:29	
Chloride		41.1	mg/L	1.00	96	90	110			
Fluoride		3.92	mg/L	0.10	98	90	110			
Nitrogen, Nitrate as N		4.22	mg/L	0.10	105	90	110			
Nitrogen, Nitrite as N		4.21	mg/L	0.10	98	90	110			
Sulfate		40.8	mg/L	1.0	102	90	110			
Sample ID: R10080390-001BMS	5	Sample Matrix Spike				Run: DIONEX_100825A			08/25/10 12:22	
Chloride		43.8	mg/L	1.00	98	90	110			
Fluoride		4.38	mg/L	0.10	96	90	110			
Nitrogen, Nitrate as N		4.61	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N		4.25	mg/L	0.10	106	90	110			
Sulfate		47.8	mg/L	1.0	97	90	110			
Sample ID: R10080390-001BMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_100825A			08/25/10 12:40	
Chloride		43.8	mg/L	1.00	98	90	110	0	10	
Fluoride		4.40	mg/L	0.10	97	90	110	0.4	10	
Nitrogen, Nitrate as N		4.61	mg/L	0.10	100	90	110	0.1	10	
Nitrogen, Nitrite as N		4.23	mg/L	0.10	106	90	110	0.4	10	
Sulfate		47.7	mg/L	1.0	96	90	110	0.2	10	

Qualifiers:
RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0957	
Sample ID: MB-GrAB-0957	6	Method Blank				Run: SUB-C137155			09/09/10 03:26	
Gross Alpha		-0.5	pCi/L							U
Gross Alpha precision (±)		0.6	pCi/L							
Gross Alpha MDC		0.7	pCi/L							
Gross Beta		-0.8	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-0957		Laboratory Control Sample				Run: SUB-C137155			09/09/10 03:26	
Gross Alpha		100	pCi/L		101	70	130			
Sample ID: Cs137-GrAB-0957		Laboratory Control Sample				Run: SUB-C137155			09/09/10 03:26	
Gross Beta		89	pCi/L		101	70	130			
Sample ID: C10080978-001DMS		Sample Matrix Spike				Run: SUB-C137155			09/09/10 03:26	
Gross Alpha		120	pCi/L		114	70	130			
Sample ID: C10080978-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C137155			09/09/10 03:26	
Gross Alpha		120	pCi/L		115	70	130	1.2	18.7	
Sample ID: C10080978-001DMS		Sample Matrix Spike				Run: SUB-C137155			09/09/10 03:26	
Gross Beta		96	pCi/L		94	70	130			
Sample ID: C10080978-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C137155			09/09/10 03:26	
Gross Beta		100	pCi/L		100	70	130	6.3	15.7	
Sample ID: R10080398-001H	6	Sample Duplicate				Run: SUB-C137155			09/10/10 03:35	
Gross Alpha		8.1	pCi/L					8.5	90.1	
Gross Alpha precision (±)		3.4	pCi/L							
Gross Alpha MDC		4.7	pCi/L							
Gross Beta		14	pCi/L					10	49.2	
Gross Beta precision (±)		2.9	pCi/L							
Gross Beta MDC		4.4	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R137019
Sample ID: LCS-R137019	3	Laboratory Control Sample				Run: SUB-C137019				09/02/10 09:00
Americium 241		1100	pCi/L	20	137	70	130			S
Cesium 137		930	pCi/L	20	92	70	130			
Potassium 40		5800	pCi/L	20	87	70	130			
Sample ID: MB-R137019	2	Method Blank				Run: SUB-C137019				09/02/10 09:00
Potassium 40		ND	pCi/L							U
Gross Gamma		ND	pCi/L							U
Sample ID: R10080398-001H	4	Sample Duplicate				Run: SUB-C137019				09/02/10 09:00
Thorium 234		590	pCi/L	20				18	30	
Thorium 234 precision (±)		160	pCi/L							
Gross Gamma		590	pCi/L					18	30	
Gross Gamma precision (±)		160	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: C_RA226-4759
Sample ID: C10080902-001CMS		Sample Matrix Spike				Run: SUB-C136932				09/07/10 21:44
Radium 226		15	pCi/L		96	70	130			
Sample ID: C10080902-001CMSD		Sample Matrix Spike Duplicate				Run: SUB-C136932				09/07/10 21:44
Radium 226		14	pCi/L		88	70	130	8.9	22.3	
Sample ID: MB-RA226-4759	3	Method Blank				Run: SUB-C136932				09/07/10 23:20
Radium 226		0.09	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.1	pCi/L							
Sample ID: LCS-RA226-4759		Laboratory Control Sample				Run: SUB-C136932				09/07/10 23:20
Radium 226		7.2	pCi/L		89	70	130			
Method: E903.0										Batch: C_27340
Sample ID: R10080398-001I		Sample Matrix Spike				Run: SUB-C137305				09/15/10 17:33
Radium 226		38	pCi/L		115	70	130			
Sample ID: R10080398-001I		Sample Matrix Spike Duplicate				Run: SUB-C137305				09/15/10 17:33
Radium 226		35	pCi/L		105	70	130	7.4	22.8	
Sample ID: LCS-27340		Laboratory Control Sample				Run: SUB-C137305				09/15/10 21:17
Radium 226		17	pCi/L		112	70	130			
Sample ID: MB-27340	3	Method Blank				Run: SUB-C137305				09/15/10 21:17
Radium 226		-0.2	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0										Batch: C_27340
Sample ID: R10080398-002I		Sample Matrix Spike				Run: SUB-C137369				09/13/10 13:26
Thorium 230		5.5	pCi/L		95	70	130			
Sample ID: R10080398-002I		Sample Matrix Spike Duplicate				Run: SUB-C137369				09/13/10 13:26
Thorium 230		6.7	pCi/L		115	70	130	19	56.5	
Sample ID: LCS-27340		Laboratory Control Sample				Run: SUB-C137369				09/13/10 13:26
Thorium 230		5.4	pCi/L		105	70	130			
Sample ID: MB-27340	3	Method Blank				Run: SUB-C137369				09/13/10 13:26
Thorium 230		0.02	pCi/L							U
Thorium 230 MDC		0.2	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Method: E907.0										Batch: C_RA-TH-ISO-1246
Sample ID: LCS-RA-TH-ISO-1246		Laboratory Control Sample				Run: SUB-C137446				09/17/10 17:09
Thorium 230		4.3	pCi/L		83	70	130			
Sample ID: R10080398-002H		Sample Matrix Spike				Run: SUB-C137446				09/17/10 17:09
Thorium 230		12	pCi/L		93	70	130			
Sample ID: R10080398-002H		Sample Matrix Spike Duplicate				Run: SUB-C137446				09/17/10 17:09
Thorium 230		10	pCi/L		80	70	130	15	40.5	
Sample ID: MB-RA-TH-ISO-1246	3	Method Blank				Run: SUB-C137446				09/20/10 09:06
Thorium 230		0.02	pCi/L							U
Thorium 230 MDC		0.1	pCi/L							
Thorium 230 precision (±)		0.07	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M										Batch: T_PB-210-0009
Sample ID: LCS-PB-210-0009		Laboratory Control Sample				Run: SUB-T36920				09/19/10 14:02
Lead 210		59	pCi/L		90	70	130			
Sample ID: TAP WATERMS		Sample Matrix Spike				Run: SUB-T36920				09/19/10 06:26
Lead 210		120	pCi/L		113	70	130			
Sample ID: TAP WATERMSD		Sample Matrix Spike Duplicate				Run: SUB-T36920				09/19/10 08:38
Lead 210		130	pCi/L		118	70	130	0	15.8	
Method: E909.0M										Batch: T_PB-210-0015
Sample ID: MB-12297	3	Method Blank				Run: SUB-T37064				09/29/10 23:12
Lead 210			pCi/L							U
Lead 210 precision (±)		4	pCi/L							
Lead 210 MDC		6	pCi/L							
Sample ID: R10080398-001I		Sample Matrix Spike				Run: SUB-T37064				09/30/10 07:58
Lead 210		440	pCi/L		81	70	130			
Sample ID: R10080398-001I		Sample Matrix Spike Duplicate				Run: SUB-T37064				09/30/10 10:09
Lead 210		490	pCi/L		89	70	130	9.1	15.6	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 10/15/10
Work Order: R10080398

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_PO210-0312
Sample ID: C10080917-004EMS		Sample Matrix Spike				Run: SUB-C137063				09/07/10 09:24
Polonium 210		34	pCi/L		106	70	130			
Sample ID: C10080917-004EMSD		Sample Matrix Spike Duplicate				Run: SUB-C137063				09/07/10 09:24
Polonium 210		34	pCi/L		103	70	130	2	58.8	
Sample ID: LCS-PO210-0312		Laboratory Control Sample				Run: SUB-C137063				09/07/10 09:24
Polonium 210		16	pCi/L		99	70	130			
Sample ID: MB-PO210-0312	3	Method Blank				Run: SUB-C137063				09/07/10 09:24
Polonium 210		0.08	pCi/L							U
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.3	pCi/L							
Method: E912.0										Batch: C_27340
Sample ID: C10080917-001FMS		Sample Matrix Spike				Run: SUB-C137367				09/15/10 11:06
Polonium 210		25	pCi/L		125	70	130			
Sample ID: C10080917-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C137367				09/15/10 11:06
Polonium 210		25	pCi/L		121	70	130	3.3	53.6	
Sample ID: LCS-27340		Laboratory Control Sample				Run: SUB-C137367				09/15/10 11:06
Polonium 210		100	pCi/L		131	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Sample ID: MB-27340	3	Method Blank				Run: SUB-C137367				09/15/10 11:06
Polonium 210		-0.2	pCi/L							U
Polonium 210 precision (±)		1	pCi/L							
Polonium 210 MDC		3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Env.	Project Name, PWS, Permit, Etc.: Dewey Burdock PowerTech	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: PowerTech / Scott Env.	Contact Name: Allen Scott Phone/Fax: 673-4859	Email:	Sampler: (Please Print) Allen Scott
Invoice Address: PowerTech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW
☐ POTW/WWTP
☐ State: _____
☐ Other: _____
☐ EDD/EDT (Electronic Data) Format: _____
☐ LEVEL IV
☐ NELAC

ANALYSIS REQUESTED: As per Quote

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX
1	PB-09-21-01	8-23-20		Water
2	PB-09-21-02	8-23-20		"
3				
4				
5				
6				
7				
8				
9				
10				

LABORATORY USE ONLY

Shipped by:
Cooler ID(s):
Receipt Temp 1.4 °C
On Ice: Y N
Custody Seal
On Bottle Y N
On Cooler Y N
Intact Y N
Signature Match Y N
L10080398-001
002

Custody Record MUST be Signed

Relinquished by (print): Allen Scott	Date/Time: 7:12 Am 8-24-20	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____	Lab Disposal:		Received by Laboratory: Steve Froiland / Date/Time: 8-24-20 8:00 / Signature:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

December 20, 2010

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10090519

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. Rapid City SD received the following 2 samples for Powertech USA Inc on 9/29/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10090519-001	DB-09-21-01	09/28/10 0:00	09/29/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10090519-002	DB-09-21-02	09/28/10 0:00	09/29/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2010.12.20 14:31:17 -07:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10090519

Report Date: 12/20/10

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002.
Comments imported for SUBBED Workorder: C10100037
GROSS GAMMA ANALYSIS
The gamma spectrometry software has identified Thorium 234 as a potential component of this sample. The value generated by the software has been reported here. However, the Thorium 234 gamma ray peaks reside in the middle of excessive background contributions from Compton scatter, x-rays from thorium, and interfering gamma ray peaks from other naturally occurring radionuclides present in the metal can and sample. This means that the value for Thorium 234 likely has a positive bias. The only method to determine the actual concentration of Th-234 would be by radiochemical separation of thorium and gamma spectrometric analysis on the isolate thorium fraction.
End of comments imported for SUBBED Workorder: C10100037

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-001
Client Sample ID: DB-09-21-01

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	10/08/10 10:07/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/08/10 10:07/hv
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	10/08/10 10:07/hv
Calcium	95.3	mg/L		0.5		2	E200.7	10/15/10 11:41/eli-c
Chloride	8	mg/L	B	1		1	E300.0	10/01/10 04:55/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	10/01/10 04:55/jmh
Magnesium	34.8	mg/L		0.5		2	E200.7	10/15/10 11:41/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	09/30/10 15:20/jmh
Nitrogen, Nitrate as N	ND	mg/L	D	2		20	E300.0	09/29/10 21:49/jmh
Nitrogen, Nitrite as N	ND	mg/L	D	2		20	E300.0	09/29/10 21:49/jmh
Potassium	11.6	mg/L		0.5		2	E200.7	10/15/10 11:41/eli-c
Sodium	169	mg/L	D	0.6		2	E200.7	10/15/10 11:41/eli-c
Sulfate	545	mg/L	D	20		20	E300.0	09/29/10 21:49/jmh
Silica	9.3	mg/L		0.2		2	E200.7	10/15/10 11:41/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1390	umhos/cm		5.0		1	A2510 B	10/05/10 15:49/tb
Oxidation-Reduction Potential	260	mV				1	A2580 B	10/05/10 16:45/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	10/05/10 08:54/tb
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.10		1	Calculation	11/09/10 16:57/ADM
Solids, Total Dissolved TDS @ 180 C	990	mg/L	D	10		1	A2540 C	09/29/10 16:55/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/12/10 14:57/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/12/10 14:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/12/10 14:57/eli-c
Boron	ND	mg/L		0.1		1	E200.8	10/12/10 14:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/12/10 14:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/12/10 14:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/12/10 14:57/eli-c
Iron	ND	mg/L		0.03		1	E200.8	10/12/10 14:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/12/10 14:57/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	10/12/10 14:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/12/10 14:57/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/12/10 14:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/12/10 14:57/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/09/10 15:42/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/12/10 14:57/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/12/10 14:57/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-001
Client Sample ID: DB-09-21-01

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/12/10 14:57/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/12/10 14:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/12/10 14:57/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/14/10 00:42/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/09/10 12:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/09/10 16:30/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	-3	pCi/L	U			1	E900.0	10/28/10 02:53/eli-ca
Gross Alpha precision (±)	3.2	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Alpha MDC	5.6	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta	8.6	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta MDC	4.4	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Lead 210	1.8	pCi/L	U			1	E909.0M	10/30/10 21:10/eli-cs
Lead 210 precision (±)	1.2	pCi/L				1	E909.0M	10/30/10 21:10/eli-cs
Lead 210 MDC	2.0	pCi/L				1	E909.0M	10/30/10 21:10/eli-cs
Polonium 210	-0.024	pCi/L	U			1	E912.0	10/18/10 08:37/eli-ca
Polonium 210 MDC	0.53	pCi/L				1	E912.0	10/18/10 08:37/eli-ca
Polonium 210 precision (±)	0.20	pCi/L				1	E912.0	10/18/10 08:37/eli-ca
Radium 226	1.8	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Radium 226 MDC	0.2	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Thorium 230	0.04	pCi/L	U			1	E907.0	10/19/10 13:09/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	10/19/10 13:09/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	10/19/10 13:09/eli-c
Gross Gamma	390	pCi/L				1	E901.1	10/04/10 09:40/eli-c
Gross Gamma precision (±)	140	pCi/L				1	E901.1	10/04/10 09:40/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.07	pCi/L	U			1	E909.0M	11/14/10 11:18/eli-cs
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	11/14/10 11:18/eli-cs
Lead 210 MDC	1.5	pCi/L				1	E909.0M	11/14/10 11:18/eli-cs
Polonium 210	-0.0041	pCi/L	U			1	E912.0	10/20/10 08:49/eli-ca
Polonium 210 precision (±)	0.075	pCi/L				1	E912.0	10/20/10 08:49/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-001
Client Sample ID: DB-09-21-01

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.19	pCi/L				1	E912.0	10/20/10 08:49/eli-ca
Radium 226	-0.06	pCi/L	U			1	E903.0	10/25/10 13:50/eli-c
Radium 226 precision (±)	0.03	pCi/L				1	E903.0	10/25/10 13:50/eli-c
Radium 226 MDC	0.07	pCi/L				1	E903.0	10/25/10 13:50/eli-c
Thorium 230	0.03	pCi/L	U			1	E907.0	10/20/10 15:27/eli-c
Thorium 230 MDC	0.09	pCi/L				1	E907.0	10/20/10 15:27/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	10/20/10 15:27/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	232	pCi/L		100		1	D5072-92	10/01/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/19/10 02:15/eli-c
Arsenic	0.002	mg/L	B	0.001		1	E200.8	10/19/10 02:15/eli-c
Barium	ND	mg/L		0.1		1	E200.7	10/13/10 22:41/eli-c
Beryllium	ND	mg/L		0.001		1	E200.7	10/13/10 22:41/eli-c
Boron	ND	mg/L		0.1		1	E200.7	10/13/10 22:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.7	10/13/10 22:41/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/13/10 22:41/eli-c
Copper	ND	mg/L		0.01		1	E200.7	10/13/10 22:41/eli-c
Iron	0.23	mg/L		0.03		1	E200.7	10/13/10 22:41/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/19/10 02:15/eli-c
Manganese	0.05	mg/L		0.01		1	E200.7	10/13/10 22:41/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/01/10 15:52/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.7	10/13/10 22:41/eli-c
Nickel	ND	mg/L		0.05		1	E200.7	10/13/10 22:41/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/19/10 02:15/eli-c
Silver	ND	mg/L		0.005		1	E200.7	10/13/10 22:41/eli-c
Strontium	2.7	mg/L		0.1		1	E200.7	10/13/10 22:41/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/19/10 02:15/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/19/10 02:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	10/13/10 22:41/eli-c
DATA QUALITY								
A/C Balance (± 5)	1.23	%				1	A1030 E	11/09/10 00:00/lkl
Anions	14.9	meq/L				1	A1030 E	11/09/10 00:00/lkl
Cations	15.3	meq/L				1	A1030 E	11/09/10 00:00/lkl
Solids, Total Dissolved Calculated	988	mg/L				1	A1030 E	11/09/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	11/09/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-002
Client Sample ID: DB-09-21-02

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	192	mg/L		5		1	A2320 B	10/08/10 10:11/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/08/10 10:11/hv
Bicarbonate as HCO3	234	mg/L		5		1	A2320 B	10/08/10 10:11/hv
Calcium	166	mg/L		0.5		2	E200.7	10/15/10 11:53/eli-c
Chloride	10	mg/L	B	1		1	E300.0	10/01/10 05:13/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/01/10 05:13/jmh
Magnesium	47.9	mg/L		0.5		2	E200.7	10/15/10 11:53/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	09/30/10 15:39/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/10 23:53/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	09/29/10 23:53/jmh
Potassium	11.6	mg/L		0.5		2	E200.7	10/15/10 11:53/eli-c
Sodium	132	mg/L	D	0.6		2	E200.7	10/15/10 11:53/eli-c
Sulfate	687	mg/L	D	20		20	E300.0	09/29/10 23:00/jmh
Silica	8.6	mg/L		0.2		2	E200.7	10/15/10 11:53/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1560	umhos/cm		5.0		1	A2510 B	10/05/10 15:51/tb
Oxidation-Reduction Potential	290	mV				1	A2580 B	10/05/10 16:45/jmh
pH	7.44	s.u.		0.01		1	A4500-H B	10/05/10 09:01/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	11/09/10 16:57/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	09/29/10 16:55/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	10/12/10 15:03/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/12/10 15:03/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/12/10 15:03/eli-c
Boron	ND	mg/L		0.1		1	E200.8	10/12/10 15:03/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/12/10 15:03/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/12/10 15:03/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/12/10 15:03/eli-c
Iron	ND	mg/L		0.03		1	E200.8	10/12/10 15:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/12/10 15:03/eli-c
Manganese	0.53	mg/L		0.01		1	E200.8	10/12/10 15:03/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/12/10 15:03/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/12/10 15:03/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/12/10 15:03/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	10/09/10 15:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/12/10 15:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/12/10 15:03/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
B - The analyte was detected in the method blank.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-002
Client Sample ID: DB-09-21-02

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0081	mg/L		0.0003		1	E200.8	10/12/10 15:03/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/12/10 15:03/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/12/10 15:03/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	10/14/10 00:46/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/09/10 12:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/09/10 16:30/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	20.5	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Alpha precision (±)	5.2	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Alpha MDC	6.9	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta	21.3	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta precision (±)	3.9	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Gross Beta MDC	5.9	pCi/L				1	E900.0	10/28/10 02:53/eli-ca
Lead 210	1.5	pCi/L	U			1	E909.0M	10/30/10 23:12/eli-cs
Lead 210 precision (±)	1.2	pCi/L				1	E909.0M	10/30/10 23:12/eli-cs
Lead 210 MDC	2.0	pCi/L				1	E909.0M	10/30/10 23:12/eli-cs
Polonium 210	-0.075	pCi/L	U			1	E912.0	10/28/10 09:35/eli-ca
Polonium 210 MDC	1.4	pCi/L				1	E912.0	10/28/10 09:35/eli-ca
Polonium 210 precision (±)	0.50	pCi/L				1	E912.0	10/28/10 09:35/eli-ca
Radium 226	2.0	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Radium 226 MDC	0.1	pCi/L				1	E903.0	10/13/10 14:58/eli-ca
Thorium 230	0.008	pCi/L	U			1	E907.0	10/19/10 13:09/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	10/19/10 13:09/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	10/19/10 13:09/eli-c
Gross Gamma	470	pCi/L				1	E901.1	10/04/10 09:40/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	10/04/10 09:40/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	-0.6	pCi/L	U			1	E909.0M	11/14/10 17:52/eli-cs
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	11/14/10 17:52/eli-cs
Lead 210 MDC	1.5	pCi/L				1	E909.0M	11/14/10 17:52/eli-cs
Polonium 210	-0.0047	pCi/L	U			1	E912.0	10/20/10 08:49/eli-ca
Polonium 210 precision (±)	0.086	pCi/L				1	E912.0	10/20/10 08:49/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10090519-002
Client Sample ID: DB-09-21-02

Report Date: 12/20/10
Collection Date: 09/28/10
Date Received: 09/29/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.22	pCi/L				1	E912.0	10/20/10 08:49/eli-ca
Radium 226	-0.02	pCi/L	U			1	E903.0	10/25/10 13:50/eli-c
Radium 226 precision (±)	0.03	pCi/L				1	E903.0	10/25/10 13:50/eli-c
Radium 226 MDC	0.05	pCi/L				1	E903.0	10/25/10 13:50/eli-c
Thorium 230	0.05	pCi/L	U			1	E907.0	10/20/10 15:27/eli-c
Thorium 230 MDC	0.08	pCi/L				1	E907.0	10/20/10 15:27/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E907.0	10/20/10 15:27/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	300	pCi/L		100		1	D5072-92	10/01/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	10/19/10 02:21/eli-c
Arsenic	0.002	mg/L	B	0.001		1	E200.8	10/19/10 02:21/eli-c
Barium	ND	mg/L		0.1		1	E200.7	10/13/10 22:45/eli-c
Beryllium	ND	mg/L		0.001		1	E200.7	10/13/10 22:45/eli-c
Boron	ND	mg/L		0.1		1	E200.7	10/13/10 22:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.7	10/13/10 22:45/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	10/13/10 22:45/eli-c
Copper	ND	mg/L		0.01		1	E200.7	10/13/10 22:45/eli-c
Iron	0.03	mg/L		0.03		1	E200.7	10/13/10 22:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/19/10 02:21/eli-c
Manganese	0.57	mg/L		0.01		1	E200.7	10/13/10 22:45/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/01/10 15:54/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.7	10/13/10 22:45/eli-c
Nickel	ND	mg/L		0.05		1	E200.7	10/13/10 22:45/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	10/19/10 02:21/eli-c
Silver	ND	mg/L		0.005		1	E200.7	10/13/10 22:45/eli-c
Strontium	2.3	mg/L		0.1		1	E200.7	10/13/10 22:45/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	10/19/10 02:21/eli-c
Uranium	0.0085	mg/L		0.0003		1	E200.8	10/19/10 02:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	10/13/10 22:45/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.400	%				1	A1030 E	11/09/10 00:00/lkl
Anions	18.4	meq/L				1	A1030 E	11/09/10 00:00/lkl
Cations	18.3	meq/L				1	A1030 E	11/09/10 00:00/lkl
Solids, Total Dissolved Calculated	1190	mg/L				1	A1030 E	11/09/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.00					1	A1030 E	11/09/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 101008A-ALK-SEL-W	
Sample ID: LCS1_101008A		Laboratory Control Sample				Run: PH_COND1-R_101008A			10/08/10 09:32	
Alkalinity, Total as CaCO3		964	mg/L	5.0	96	90	110			
Sample ID: MBLK1_101008A		Method Blank				Run: PH_COND1-R_101008A			10/08/10 09:39	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10090445-001AMS		Sample Matrix Spike				Run: PH_COND1-R_101008A			10/08/10 09:53	
Alkalinity, Total as CaCO3		288	mg/L	5.0	125	80	120			S
Sample ID: R10090445-001AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_101008A			10/08/10 10:00	
Alkalinity, Total as CaCO3		286	mg/L	5.0	123	80	120	0.7	10	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10
Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 101005_1_COND-PROBE-W	
Sample ID: LCS1-1_101005		Laboratory Control Sample				Run: PH_COND2-R_101005B			10/05/10 15:23	
Conductivity @ 25 C		153	umhos/cm	5.0	102	90	110			
Sample ID: LCS2-1_101005		Laboratory Control Sample				Run: PH_COND2-R_101005B			10/05/10 15:25	
Conductivity @ 25 C		4980	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_101005		Laboratory Control Sample				Run: PH_COND2-R_101005B			10/05/10 15:27	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_101005		Method Blank				Run: PH_COND2-R_101005B			10/05/10 15:29	
Conductivity @ 25 C		ND	umhos/cm	5						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 100929A-SLDS-TDS-W	
Sample ID: MBLK1_100929A		Method Blank				Run: BAL-4-R_100929B			09/29/10 16:55	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	5						
Sample ID: LCS1_100929A		Laboratory Control Sample				Run: BAL-4-R_100929B			09/29/10 16:55	
Solids, Total Dissolved TDS @ 180 C		210	mg/L	10	105	90	110			
Sample ID: R10090474-001BMS		Sample Matrix Spike				Run: BAL-4-R_100929B			09/29/10 16:55	
Solids, Total Dissolved TDS @ 180 C		1700	mg/L	10	105	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Report Date: 12/20/10
Project: Dewey Groundwater Sampling
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 101005-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_101005A			10/05/10 16:45	
Oxidation-Reduction Potential		480	mV		101	95	105			
Sample ID: R10090519-001F		Sample Duplicate				Run: PH_COND1-R_101005A			10/05/10 16:45	
Oxidation-Reduction Potential		280	mV					6.6	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									Batch: C_27769	
Sample ID: MB-27769		Method Blank				Run: SUB-C138337			10/09/10 12:30	
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LCS-27769		Laboratory Control Sample				Run: SUB-C138337			10/09/10 12:32	
Selenium-IV		0.049	mg/L	0.0010	99	90	110			
Sample ID: R10090519-001E		Sample Matrix Spike				Run: SUB-C138337			10/09/10 12:36	
Selenium-IV		0.049	mg/L	0.0010	99	85	115			
Sample ID: R10090519-001E		Sample Matrix Spike Duplicate				Run: SUB-C138337			10/09/10 12:39	
Selenium-IV		0.049	mg/L	0.0010	98	85	115	1.1	10	
Method: A3114 B									Batch: C_27769	
Sample ID: MB-27769		Method Blank				Run: SUB-C138338			10/09/10 15:22	
Selenium		ND	mg/L	0.0003						
Sample ID: LCS-27769		Laboratory Control Sample				Run: SUB-C138338			10/09/10 15:39	
Selenium		0.061	mg/L	0.0010	122	90	110			S
- Response is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.										
Sample ID: R10090519-001E		Sample Matrix Spike				Run: SUB-C138338			10/09/10 15:44	
Selenium		0.042	mg/L	0.0010	84	85	115			S
Sample ID: R10090519-001E		Sample Matrix Spike Duplicate				Run: SUB-C138338			10/09/10 15:46	
Selenium		0.040	mg/L	0.0010	80	85	115	5.6	15	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 101005_1_PH-W	
Sample ID: LCS_pH-1_101005		Laboratory Control Sample				Run: PH_COND2-R_101005A			10/05/10 08:48	
pH		7.41	s.u.	0.010	100	98.55	101.45			
Sample ID: R10090519-001ADUP		Sample Duplicate				Run: PH_COND2-R_101005A			10/05/10 08:57	
pH		7.77	s.u.	0.010				0.0	1.25	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-09-30_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_100930A			09/30/10 14:37	
Nitrogen, Ammonia as N		ND	mg/L	0.01						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_100930A			09/30/10 14:41	
Nitrogen, Ammonia as N		0.26	mg/L	0.10	103	90	110			
Sample ID: R10090519-002BMS		Sample Matrix Spike				Run: TECHAA2-R_100930A			09/30/10 15:40	
Nitrogen, Ammonia as N		0.23	mg/L	0.10	93	80	120			
Sample ID: R10090519-002BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_100930A			09/30/10 15:41	
Nitrogen, Ammonia as N		0.24	mg/L	0.10	95	80	120	2.6	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_27779
Sample ID: MB-27779	13	Method Blank				Run: SUB-C138497				10/13/10 21:44
Barium		ND	mg/L	0.002						
Beryllium		ND	mg/L	0.0001						
Boron		0.01	mg/L	0.008						
Cadmium		ND	mg/L	0.001						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.008						
Manganese		ND	mg/L	0.0008						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Silver		ND	mg/L	0.001						
Strontium		0.0006	mg/L	0.0002						
Zinc		ND	mg/L	0.008						
Sample ID: LCS3-27779	13	Laboratory Control Sample				Run: SUB-C138497				10/13/10 21:48
Barium		0.550	mg/L	0.10	110	85	115			
Beryllium		0.273	mg/L	0.010	109	85	115			
Boron		0.525	mg/L	0.10	103	85	115			
Cadmium		0.268	mg/L	0.010	107	85	115			
Chromium		0.540	mg/L	0.050	108	85	115			
Copper		0.540	mg/L	0.010	108	85	115			
Iron		2.81	mg/L	0.030	112	85	115			
Manganese		2.71	mg/L	0.010	108	85	115			
Molybdenum		0.540	mg/L	0.10	108	85	115			
Nickel		0.556	mg/L	0.050	111	85	115			
Silver		0.0511	mg/L	0.010	102	85	115			
Strontium		0.547	mg/L	0.10	109	85	115			
Zinc		0.544	mg/L	0.010	109	85	115			
Sample ID: R10090519-002D	13	Sample Matrix Spike				Run: SUB-C138497				10/13/10 22:49
Barium		0.546	mg/L	0.10	107	70	130			
Beryllium		0.265	mg/L	0.010	106	70	130			
Boron		0.606	mg/L	0.10	107	70	130			
Cadmium		0.262	mg/L	0.010	105	70	130			
Chromium		0.532	mg/L	0.050	106	70	130			
Copper		0.540	mg/L	0.010	108	70	130			
Iron		2.77	mg/L	0.030	110	70	130			
Manganese		3.23	mg/L	0.010	106	70	130			
Molybdenum		0.530	mg/L	0.10	106	70	130			
Nickel		0.540	mg/L	0.050	108	70	130			
Silver		0.0529	mg/L	0.010	106	70	130			
Strontium		2.90	mg/L	0.10		70	130			A
Zinc		0.534	mg/L	0.010	107	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10
Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_27779	
Sample ID: R10090519-002D	13	Sample Matrix Spike Duplicate				Run: SUB-C138497			10/13/10 22:53	
Barium		0.556	mg/L	0.10	109	70	130	1.8	20	
Beryllium		0.272	mg/L	0.010	109	70	130	2.4	20	
Boron		0.629	mg/L	0.10	112	70	130	3.7	20	
Cadmium		0.269	mg/L	0.010	108	70	130	2.7	20	
Chromium		0.543	mg/L	0.050	109	70	130	2.0	20	
Copper		0.549	mg/L	0.010	110	70	130	1.7	20	
Iron		2.84	mg/L	0.030	112	70	130	2.2	20	
Manganese		3.30	mg/L	0.010	109	70	130	2.1	20	
Molybdenum		0.547	mg/L	0.10	109	70	130	3.2	20	
Nickel		0.558	mg/L	0.050	112	70	130	3.3	20	
Silver		0.0528	mg/L	0.010	106	70	130	0.2	20	
Strontium		3.04	mg/L	0.10		70	130	4.6	20	A
Zinc		0.545	mg/L	0.010	109	70	130	2.0	20	
Method: E200.7									Batch: C_R138676	
Sample ID: MB-101015A	4	Method Blank				Run: SUB-C138676			10/15/10 10:48	
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-101015A	5	Laboratory Fortified Blank				Run: SUB-C138676			10/15/10 10:53	
Calcium		49	mg/L	0.50	97	85	115			
Magnesium		50	mg/L	0.50	100	85	115			
Potassium		46	mg/L	0.50	93	85	115			
Sodium		49	mg/L	0.50	99	85	115			
Silica		0.96	mg/L	0.21	96	85	115			
Sample ID: R10090519-001C	4	Sample Matrix Spike				Run: SUB-C138676			10/15/10 11:45	
Calcium		193	mg/L	1.0	96	70	130			
Magnesium		133	mg/L	1.0	97	70	130			
Potassium		102	mg/L	1.0	89	70	130			
Sodium		273	mg/L	1.0	102	70	130			
Sample ID: R10090519-001C	4	Sample Matrix Spike Duplicate				Run: SUB-C138676			10/15/10 11:49	
Calcium		194	mg/L	1.0	96	70	130	0.3	20	
Magnesium		133	mg/L	1.0	96	70	130	0.2	20	
Potassium		102	mg/L	1.0	89	70	130	0.2	20	
Sodium		268	mg/L	1.0	98	70	130	1.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10
Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R138415A	
Sample ID: C10091252-010BMS4	18	Post Digestion Spike				Run: SUB-C138415			10/12/10 14:08	
Aluminum		0.0597	mg/L	0.10	96	70	130			
Arsenic		0.0525	mg/L	0.0010	105	70	130			
Barium		0.0882	mg/L	0.10	102	70	130			
Boron		0.117	mg/L	0.10	95	70	130			
Cadmium		0.0502	mg/L	0.010	100	70	130			
Chromium		0.0508	mg/L	0.050	102	70	130			
Copper		0.0512	mg/L	0.010	102	70	130			
Iron		1.28	mg/L	0.030	99	70	130			
Lead		0.0516	mg/L	0.050	103	70	130			
Manganese		0.0748	mg/L	0.010	97	70	130			
Mercury		0.00498	mg/L	0.0010	100	70	130			
Molybdenum		0.0557	mg/L	0.10	103	70	130			
Nickel		0.0497	mg/L	0.050	99	70	130			
Silver		0.0182	mg/L	0.010	91	70	130			
Thorium 232		0.0500	mg/L	0.0010	100	70	130			
Uranium		0.0533	mg/L	0.00030	100	70	130			
Vanadium		0.0513	mg/L	0.10	103	70	130			
Zinc		0.0538	mg/L	0.010	104	70	130			
Sample ID: C10091252-010BMSD4	18	Post Digestion Spike Duplicate				Run: SUB-C138415			10/12/10 14:15	
Aluminum		0.0612	mg/L	0.0010	99	70	130	2.4	20	
Arsenic		0.0539	mg/L	0.0010	108	70	130	2.7	20	
Barium		0.0900	mg/L	0.0010	105	70	130	2.0	20	
Boron		0.120	mg/L	0.10	100	70	130	2.1	20	
Cadmium		0.0518	mg/L	0.010	104	70	130	3.2	20	
Chromium		0.0522	mg/L	0.050	104	70	130	2.8	20	
Copper		0.0521	mg/L	0.010	104	70	130	1.7	20	
Iron		1.32	mg/L	0.030	103	70	130	3.5	20	
Lead		0.0535	mg/L	0.050	107	70	130	3.7	20	
Manganese		0.0767	mg/L	0.010	101	70	130	2.5	20	
Mercury		0.00524	mg/L	0.0010	105	70	130	5.0	20	
Molybdenum		0.0588	mg/L	0.0010	109	70	130	5.4	20	
Nickel		0.0506	mg/L	0.0010	101	70	130	1.8	20	
Silver		0.0206	mg/L	0.010	103	70	130	12	20	
Thorium 232		0.0521	mg/L	0.0010	104	70	130	3.9	20	
Uranium		0.0554	mg/L	0.00030	104	70	130	3.9	20	
Vanadium		0.0524	mg/L	0.0010	105	70	130	2.1	20	
Zinc		0.0549	mg/L	0.010	106	70	130	1.9	20	
Sample ID: LRB	18	Method Blank				Run: SUB-C138415			10/11/10 16:22	
Aluminum		ND	mg/L	8E-05						
Arsenic		ND	mg/L	4E-05						
Barium		ND	mg/L	3E-05						
Boron		0.0002	mg/L							
Cadmium		ND	mg/L	7E-05						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10

Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R138415A	
Sample ID: LRB	18	Method Blank				Run: SUB-C138415			10/11/10 16:22	
Chromium		ND	mg/L	5E-05						
Copper		ND	mg/L	6E-05						
Iron		ND	mg/L	0.0001						
Lead		ND	mg/L	2E-05						
Manganese		ND	mg/L	2E-05						
Mercury		3E-05	mg/L	2E-05						
Molybdenum		0.0004	mg/L	8E-05						
Nickel		ND	mg/L	5E-05						
Silver		ND	mg/L	8E-05						
Thorium 232		ND	mg/L	3E-05						
Uranium		ND	mg/L	8E-06						
Vanadium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0001						
Sample ID: LFB	18	Laboratory Fortified Blank				Run: SUB-C138415			10/11/10 16:29	
Aluminum		0.0486	mg/L	0.0010	97	85	115			
Arsenic		0.0527	mg/L	0.0010	105	85	115			
Barium		0.0508	mg/L	0.0010	102	85	115			
Boron		0.0527	mg/L	0.0010	105	85	115			
Cadmium		0.0516	mg/L	0.0010	103	85	115			
Chromium		0.0526	mg/L	0.0010	105	85	115			
Copper		0.0532	mg/L	0.0010	106	85	115			
Iron		1.29	mg/L	0.012	103	85	115			
Lead		0.0513	mg/L	0.0010	103	85	115			
Manganese		0.0507	mg/L	0.0010	101	85	115			
Mercury		0.00522	mg/L	0.0010	104	85	115			
Molybdenum		0.0513	mg/L	0.0010	102	85	115			
Nickel		0.0532	mg/L	0.0010	106	85	115			
Silver		0.0199	mg/L	0.0010	99	85	115			
Thorium 232		0.0503	mg/L	0.0010	101	85	115			
Uranium		0.0498	mg/L	0.00030	100	85	115			
Vanadium		0.0526	mg/L	0.0010	105	85	115			
Zinc		0.0550	mg/L	0.0010	110	85	115			

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10

Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_27779
Sample ID: MB-27779	6	Method Blank				Run: SUB-C138669				10/19/10 01:00
Antimony		0.0002	mg/L	0.0002						
Arsenic		0.001	mg/L	0.0003						
Lead		ND	mg/L	5E-05						
Selenium		ND	mg/L	0.0007						
Thallium		ND	mg/L	5E-05						
Uranium		ND	mg/L	4E-05						
Sample ID: LCS3-27779	6	Laboratory Control Sample				Run: SUB-C138669				10/19/10 01:07
Antimony		0.601	mg/L	0.050	120	85	115			S
Arsenic		0.519	mg/L	0.0010	103	85	115			
Lead		0.549	mg/L	0.050	110	85	115			
Selenium		0.506	mg/L	0.0010	101	85	115			
Thallium		0.534	mg/L	0.10	107	85	115			
Uranium		0.574	mg/L	0.00030	115	85	115			
- Response is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.										
Sample ID: R10090519-002D	6	Sample Matrix Spike				Run: SUB-C138669				10/19/10 02:28
Antimony		0.599	mg/L	0.050	120	70	130			
Arsenic		0.525	mg/L	0.0010	105	70	130			
Lead		0.548	mg/L	0.050	110	70	130			
Selenium		0.500	mg/L	0.0010	100	70	130			
Thallium		0.532	mg/L	0.10	106	70	130			
Uranium		0.605	mg/L	0.00030	119	70	130			
Sample ID: R10090519-002D	6	Sample Matrix Spike Duplicate				Run: SUB-C138669				10/19/10 02:35
Antimony		0.608	mg/L	0.050	122	70	130	1.5	20	
Arsenic		0.529	mg/L	0.0010	105	70	130	0.8	20	
Lead		0.554	mg/L	0.050	111	70	130	1.1	20	
Selenium		0.507	mg/L	0.0010	101	70	130	1.5	20	
Thallium		0.539	mg/L	0.10	108	70	130	1.3	20	
Uranium		0.606	mg/L	0.00030	119	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10
Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B154899	
Sample ID: QCS		Initial Calibration Verification Standard							10/01/10 14:42	
Mercury		0.0020	mg/L	0.0010	100	90	110			
Method: E245.1									Batch: B_49478	
Sample ID: MB-49478		Method Blank				Run: SUB-B154899			10/01/10 15:33	
Mercury		3E-05	mg/L	1E-05						
Sample ID: LCS-49478		Laboratory Control Sample				Run: SUB-B154899			10/01/10 15:37	
Mercury		0.0020	mg/L	0.0010	97	85	115			
Sample ID: B10100063-001BMS		Sample Matrix Spike				Run: SUB-B154899			10/01/10 15:47	
Mercury		0.0010	mg/L	0.0010	49	70	130			S
Sample ID: B10100063-001BMSD		Sample Matrix Spike Duplicate				Run: SUB-B154899			10/01/10 15:48	
Mercury		0.0010	mg/L	0.0010	50	70	130	1.0	30	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10
Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: DIONEX_100929A	
Sample ID: CCV092910-15	3	Continuing Calibration Verification Standard							09/29/10 18:17	
Nitrogen, Nitrate as N		7.02	mg/L	0.10	94	90	110			
Nitrogen, Nitrite as N		7.11	mg/L	0.10	95	90	110			
Sulfate		72.1	mg/L	1.0	96	90	110			
Sample ID: CCV092910-34	3	Continuing Calibration Verification Standard							09/29/10 22:07	
Nitrogen, Nitrate as N		7.50	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N		7.61	mg/L	0.10	101	90	110			
Sulfate		77.1	mg/L	1.0	103	90	110			
Method: E300.0									Batch: R48299	
Sample ID: LFB092910-14	3	Laboratory Fortified Blank				Run: DIONEX_100929A			09/29/10 17:59	
Nitrogen, Nitrate as N		3.71	mg/L	0.10	93	90	110			
Nitrogen, Nitrite as N		3.78	mg/L	0.10	95	90	110			
Sulfate		37.3	mg/L	1.0	93	90	110			
Sample ID: R10090519-002AMS	3	Sample Matrix Spike				Run: DIONEX_100929A			09/29/10 23:17	
Nitrogen, Nitrate as N		80.6	mg/L	2.0	101	90	110			
Nitrogen, Nitrite as N		81.5	mg/L	2.0	102	90	110			
Sulfate		1530	mg/L	20	105	90	110			
Sample ID: R10090519-002AMSD	3	Sample Matrix Spike Duplicate				Run: DIONEX_100929A			09/29/10 23:35	
Nitrogen, Nitrate as N		80.6	mg/L	2.0	101	90	110	0.1	10	
Nitrogen, Nitrite as N		81.7	mg/L	2.0	102	90	110	0.1	10	
Sulfate		1530	mg/L	20	105	90	110	0.4	10	
Method: E300.0									Analytical Run: DIONEX_100930A	
Sample ID: CCV093010-28	2	Continuing Calibration Verification Standard							10/01/10 02:16	
Chloride		73.3	mg/L	1.00	98	90	110			
Fluoride		7.36	mg/L	0.10	98	90	110			
Method: E300.0									Batch: R48311	
Sample ID: LFB093010-14	2	Laboratory Fortified Blank				Run: DIONEX_100930A			09/30/10 22:27	
Chloride		37.9	mg/L	1.00	95	90	110			
Fluoride		4.02	mg/L	0.10	101	90	110			
Sample ID: R10090533-003AMS	2	Sample Matrix Spike				Run: DIONEX_100930A			10/01/10 03:09	
Chloride		41.5	mg/L	1.00	93	90	110			
Fluoride		4.28	mg/L	0.10	93	90	110			
Sample ID: R10090533-003AMSD	2	Sample Matrix Spike Duplicate				Run: DIONEX_100930A			10/01/10 03:27	
Chloride		41.4	mg/L	1.00	93	90	110	0.0	10	
Fluoride		4.27	mg/L	0.10	93	90	110	0.1	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-0985	
Sample ID: MB-GrAB-0985	6	Method Blank				Run: SUB-C139230			10/28/10 02:53	
Gross Alpha		-2	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.9	pCi/L							
Gross Beta		-2	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-0985		Laboratory Control Sample				Run: SUB-C139230			10/28/10 02:53	
Gross Alpha		100	pCi/L		103	70	130			
Sample ID: Cs137-GrAB-0985		Laboratory Control Sample				Run: SUB-C139230			10/28/10 02:53	
Gross Beta		92	pCi/L		106	70	130			
Sample ID: C10100071-002CDUP	6	Sample Duplicate				Run: SUB-C139230			10/28/10 02:53	
Gross Alpha		220	pCi/L					1.1	17.5	
Gross Alpha precision (±)		8.2	pCi/L							
Gross Alpha MDC		4.0	pCi/L							
Gross Beta		77	pCi/L					4.4	18.2	
Gross Beta precision (±)		3.2	pCi/L							
Gross Beta MDC		3.4	pCi/L							
Sample ID: C10100261-001DMS		Sample Matrix Spike				Run: SUB-C139230			10/28/10 20:13	
Gross Alpha		114	pCi/L		94	70	130			
Sample ID: C10100261-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C139230			10/28/10 20:14	
Gross Alpha		130	pCi/L		110	70	130	13	17.2	
Sample ID: C10100261-001DMS		Sample Matrix Spike				Run: SUB-C139230			10/28/10 20:14	
Gross Beta		104	pCi/L		103	70	130			
Sample ID: C10100261-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C139230			10/28/10 20:14	
Gross Beta		95.6	pCi/L		94	70	130	8.0	15.4	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R138187
Sample ID: LCS-R138187	3	Laboratory Control Sample				Run: SUB-C138187				10/04/10 09:40
Americium 241		710	pCi/L	20	87	70	130			
Cesium 137		930	pCi/L	20	93	70	130			
Potassium 40		6200	pCi/L	20	93	70	130			
Sample ID: MB-R138187	23	Method Blank				Run: SUB-C138187				10/04/10 09:40
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234 precision (±)		80	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		500	pCi/L							
Gross Gamma precision (±)		80	pCi/L							
- See Case Narrative regarding Gross Gamma analysis.										
Sample ID: R10090519-002H	22	Sample Duplicate				Run: SUB-C138187				10/04/10 09:40
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40		ND	pCi/L	20					30	
Radium 223 precision (±)		ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10

Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R138187
Sample ID: R10090519-002H	22	Sample Duplicate				Run: SUB-C138187				10/04/10 09:40
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234 precision (±)		130	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		440	pCi/L					7.6	30	
Gross Gamma precision (±)		130	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4869	
Sample ID: R10090519-001H		Sample Matrix Spike				Run: SUB-C138511			10/13/10 14:58	
Radium 226		15	pCi/L		102	70	130			
Sample ID: R10090519-001H		Sample Matrix Spike Duplicate				Run: SUB-C138511			10/13/10 14:58	
Radium 226		17	pCi/L		101	70	130	10	23.3	
Sample ID: MB-RA226-4869	3	Method Blank				Run: SUB-C138511			10/13/10 17:08	
Radium 226		-0.04	pCi/L							U
Radium 226 precision (±)		0.07	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4869		Laboratory Control Sample				Run: SUB-C138511			10/13/10 17:08	
Radium 226		8.2	pCi/L		104	70	130			
Method: E903.0									Batch: C_27802	
Sample ID: R10090519-001I		Sample Matrix Spike				Run: SUB-C139019			10/25/10 13:50	
Radium 226		78	pCi/L		102	70	130			
Sample ID: R10090519-001I		Sample Matrix Spike Duplicate				Run: SUB-C139019			10/25/10 13:50	
Radium 226		87	pCi/L		112	70	130	11	20.1	
Sample ID: LCS-27802		Laboratory Control Sample				Run: SUB-C139019			10/25/10 23:12	
Radium 226		13.7	pCi/Filter		92	70	130			
Sample ID: MB-27802	3	Method Blank				Run: SUB-C139019			10/25/10 23:12	
Radium 226		-0.1	pCi/Filter							U
Radium 226 precision (±)		0.1	pCi/Filter							
Radium 226 MDC		0.2	pCi/Filter							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									Batch: C_RA-TH-ISO-1268	
Sample ID: LCS-RA-TH-ISO-1268		Laboratory Control Sample				Run: SUB-C138766			10/19/10 13:09	
Thorium 230		5.0	pCi/L		91	70	130			
Sample ID: R10090519-002H		Sample Matrix Spike				Run: SUB-C138766			10/19/10 13:09	
Thorium 230		12	pCi/L		91	70	130			
Sample ID: R10090519-002H		Sample Matrix Spike Duplicate				Run: SUB-C138766			10/19/10 13:09	
Thorium 230		12	pCi/L		90	70	130	0.7	41	
Sample ID: MB-RA-TH-ISO-1268	3	Method Blank				Run: SUB-C138766			10/19/10 17:19	
Thorium 230		0.02	pCi/L							U
Thorium 230 MDC		0.2	pCi/L							
Thorium 230 precision (±)		0.08	pCi/L							
Method: E907.0									Batch: C_27802	
Sample ID: C10100194-003AMS		Sample Matrix Spike				Run: SUB-C138997			10/20/10 15:27	
Thorium 230		25.1	pCi/Filter		101	70	130			
Sample ID: C10100194-003AMSD		Sample Matrix Spike Duplicate				Run: SUB-C138997			10/20/10 15:27	
Thorium 230		23.8	pCi/Filter		95	70	130	5.3	34.6	
Sample ID: LCS-27802		Laboratory Control Sample				Run: SUB-C138997			10/20/10 15:27	
Thorium 230		4.85	pCi/Filter		103	70	130			
Sample ID: MB-27802	3	Method Blank				Run: SUB-C138997			10/20/10 15:27	
Thorium 230		-0.2	pCi/Filter							U
Thorium 230 MDC		0.09	pCi/Filter							
Thorium 230 precision (±)		0.06	pCi/Filter							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/20/10

Project: Dewey Groundwater Sampling **Work Order:** R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Batch: T_PB-210-0024	
Sample ID: MB-PB-210-0024	3	Method Blank				Run: SUB-T37512			10/29/10 12:34	
Lead 210			pCi/L							U
Lead 210 precision (±)		1	pCi/L							
Lead 210 MDC		2	pCi/L							
Sample ID: LCS-PB-210-0024		Laboratory Control Sample				Run: SUB-T37512			10/29/10 16:39	
Lead 210		48	pCi/L		88	70	130			
Sample ID: TAP WATERMS		Sample Matrix Spike				Run: SUB-T37512			10/29/10 20:43	
Lead 210		64	pCi/L		116	70	130			
Sample ID: TAP WATERMSD		Sample Matrix Spike Duplicate				Run: SUB-T37512			10/29/10 22:46	
Lead 210		64	pCi/L		116	70	130	0.0	15.7	
Method: E909.0M									Batch: T_12635	
Sample ID: MB-12635	3	Method Blank				Run: SUB-T37661			11/14/10 06:55	
Lead 210		-2	pCi/L							U
Lead 210 precision (±)		4	pCi/L							
Lead 210 MDC		6	pCi/L							
Sample ID: LCS-12635		Laboratory Control Sample				Run: SUB-T37661			11/14/10 09:06	
Lead 210		120	pCi/L		55	70	130			S
Sample ID: R10090519-001I		Sample Matrix Spike				Run: SUB-T37661			11/14/10 13:29	
Lead 210		380	pCi/L		86	70	130			
Sample ID: R10090519-001I		Sample Matrix Spike Duplicate				Run: SUB-T37661			11/14/10 15:40	
Lead 210		310	pCi/L		71	70	130	20	16.7	R

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/20/10
Work Order: R10090519

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_PO210-0321
Sample ID: C10100003-001GMS		Sample Matrix Spike				Run: SUB-C138717				10/18/10 08:37
Polonium 210		31	pCi/L		92	70	130			
Sample ID: C10100003-001GMSD		Sample Matrix Spike Duplicate				Run: SUB-C138717				10/18/10 08:37
Polonium 210		40	pCi/L		118	70	130	24	57	
Sample ID: LCS-PO210-0321		Laboratory Control Sample				Run: SUB-C138717				10/18/10 08:37
Polonium 210		17	pCi/L		101	70	130			
Sample ID: MB-PO210-0321	3	Method Blank				Run: SUB-C138717				10/18/10 08:37
Polonium 210		0.3	pCi/L							U
Polonium 210 MDC		0.5	pCi/L							
Polonium 210 precision (±)		0.3	pCi/L							
Method: E912.0										Batch: C_27802
Sample ID: R10090519-002I		Sample Matrix Spike				Run: SUB-C138957				10/20/10 08:49
Polonium 210		14	pCi/L		96	70	130			
Sample ID: R10090519-002I		Sample Matrix Spike Duplicate				Run: SUB-C138957				10/20/10 08:49
Polonium 210		17	pCi/L		116	70	130	19	57.6	
Sample ID: LCS-27802		Laboratory Control Sample				Run: SUB-C138957				10/20/10 08:49
Polonium 210		74	pCi/L		96	70	130			
Sample ID: MB-27802	3	Method Blank				Run: SUB-C138957				10/20/10 08:49
Polonium 210		ND	pCi/L							U
Polonium 210 precision (±)		0.8	pCi/L							
Polonium 210 MDC		2	pCi/L							
Method: E912.0										Batch: C_PO210-0324
Sample ID: C10100729-001FMS		Sample Matrix Spike				Run: SUB-C139322				10/28/10 09:35
Polonium 210		33	pCi/L		98	70	130			
Sample ID: C10100729-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C139322				10/28/10 09:35
Polonium 210		34	pCi/L		100	70	130	1.4	62.3	
Sample ID: MB-PO210-0324	3	Method Blank				Run: SUB-C139322				10/28/10 09:36
Polonium 210		0.05	pCi/L							U
Polonium 210 MDC		0.5	pCi/L							
Polonium 210 precision (±)		0.2	pCi/L							
Sample ID: LCS-PO210-0324		Laboratory Control Sample				Run: SUB-C139322				10/28/10 09:36
Polonium 210		18	pCi/L		113	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analysis Request

Page ____ of ____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Environmental	Project Name, PWS, Permit, Etc.: Powertech – Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Scott Env. / Powertech	Contact Name: Allen Scott Phone/Fax:	Email: Scotteng@gwtc.net	Sampler: (Please Print)
Invoice Address: Powertech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

As per Quote

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:

Cooler ID(s):

Receipt Temp 16.0 °C

On Ice: Y N

Custody Seal
On Bottle Y N
On Cooler Y N

Intact Y N

Signature Match Y N

LABORATORY USE ONLY: R1009051900 1A 00 2A

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX
1	OB-09-21-01	9-28-10		Water
2	OB-09-21-02	9-28-10		"
3				
4				
5				
6				
7				
8				
9				
10				

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	9-30-10 8:45 Am	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Fairlane	Date/Time: 9-29-10 8:45	Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

December 29, 2010

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10100355

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. Rapid City SD received the following 2 samples for Powertech USA Inc on 10/26/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10100355-001	DB-09-21-01	10/25/10 0:00	10/26/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10100355-002	DB-09-21-02	10/25/10 0:00	10/26/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda K. Larson

Branch Manager

Digitally signed by Linda Larson
Date: 2010.12.29 13:06:51 -07:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10100355

Report Date: 12/29/10

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002.
Comments imported for SUBBED Workorder: C10101128
GROSS GAMMA ANALYSIS
The gamma spectrometry software has identified Thorium 234 as a potential component of this sample. The value generated by the software has been reported here. However, the Thorium 234 gamma ray peaks reside in the middle of excessive background contributions from Compton scatter, x-rays from thorium, and interfering gamma ray peaks from other naturally occurring radionuclides present in the metal can and sample. This means that the value for Thorium 234 likely has a positive bias. The only method to determine the actual concentration of Th-234 would be by radiochemical separation of thorium and gamma spectrometric analysis on the isolate thorium fraction.

TH230 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.
End of comments imported for SUBBED Workorder: C10101128

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-001
Client Sample ID: DB-09-21-01

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	170	mg/L		5		1	A2320 B	11/02/10 08:47/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/02/10 08:47/hv
Bicarbonate as HCO3	207	mg/L		5		1	A2320 B	11/02/10 08:47/hv
Calcium	93.8	mg/L		0.5		2	E200.7	11/10/10 15:07/eli-c
Chloride	7	mg/L		1		1	E300.0	10/26/10 22:23/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	10/26/10 22:23/jmh
Magnesium	33.7	mg/L		0.5		2	E200.7	11/10/10 15:07/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	11/01/10 12:17/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/26/10 22:23/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/26/10 22:23/jmh
Potassium	11.3	mg/L		0.5		2	E200.7	11/10/10 15:07/eli-c
Sodium	162	mg/L	D	0.6		2	E200.7	11/10/10 15:07/eli-c
Sulfate	524	mg/L	D	20		20	E300.0	10/26/10 21:30/jmh
Silica	8.2	mg/L		0.2		1	E200.8	11/10/10 03:11/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1310	umhos/cm		5.0		1	A2510 B	10/27/10 17:05/hv
Oxidation-Reduction Potential	270	mV				1	A2580 B	11/01/10 17:00/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	10/29/10 11:09/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	12/07/10 10:07/ADM
Solids, Total Dissolved TDS @ 180 C	940	mg/L	D	10		1	A2540 C	10/27/10 16:14/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/01/10 19:04/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/01/10 19:04/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/01/10 19:04/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/10/10 03:11/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/01/10 19:04/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/01/10 19:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/01/10 19:04/eli-c
Iron	ND	mg/L		0.03		1	E200.8	11/10/10 03:11/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/01/10 19:04/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	11/01/10 19:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/01/10 19:04/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/01/10 19:04/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/01/10 19:04/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/15/10 14:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/01/10 19:04/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/10/10 03:11/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/01/10 19:04/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/01/10 19:04/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-001
Client Sample ID: DB-09-21-01

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Zinc	ND	mg/L		0.01		1	E200.8	11/01/10 19:04/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 18:18/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/15/10 13:43/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/16/10 10:52/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	-0.6	pCi/L	U			1	E900.0	12/27/10 23:05/eli-ca
Gross Alpha precision (±)	3.5	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Alpha MDC	6.0	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta	9.7	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta precision (±)	3.4	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta MDC	5.4	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Lead 210	-0.5	pCi/L	U			1	E909.0M	11/21/10 20:04/eli-cs
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	11/21/10 20:04/eli-cs
Lead 210 MDC	1.4	pCi/L				1	E909.0M	11/21/10 20:04/eli-cs
Polonium 210	-0.035	pCi/L	U			1	E912.0	11/11/10 08:53/eli-ca
Polonium 210 MDC	0.71	pCi/L				1	E912.0	11/11/10 08:53/eli-ca
Polonium 210 precision (±)	0.26	pCi/L				1	E912.0	11/11/10 08:53/eli-ca
Radium 226	2.4	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Thorium 230	0.02	pCi/L	U			1	E907.0	11/16/10 16:16/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	11/16/10 16:16/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	11/16/10 16:16/eli-c
Gross Gamma	670	pCi/L				1	E901.1	11/01/10 10:00/eli-c
Gross Gamma precision (±)	210	pCi/L				1	E901.1	11/01/10 10:00/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.7	pCi/L	U			1	E909.0M	12/16/10 23:03/eli-cs
Lead 210 precision (±)	1.9	pCi/L				1	E909.0M	12/16/10 23:03/eli-cs
Lead 210 MDC	3.2	pCi/L				1	E909.0M	12/16/10 23:03/eli-cs
Polonium 210	-0.013	pCi/L	U			1	E912.0	11/18/10 13:12/eli-ca
Polonium 210 precision (±)	0.24	pCi/L				1	E912.0	11/18/10 13:12/eli-ca
Polonium 210 MDC	0.62	pCi/L				1	E912.0	11/18/10 13:12/eli-ca
Radium 226	0.1	pCi/L	U			1	E903.0	11/23/10 01:20/eli-c
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	11/23/10 01:20/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-001
Client Sample ID: DB-09-21-01

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.1	pCi/L				1	E903.0	11/23/10 01:20/eli-c
Thorium 230	-0.3	pCi/L	U			1	E907.0	11/16/10 16:13/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	11/16/10 16:13/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	11/16/10 16:13/eli-c
- See Case Narrative regarding Th230 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	202	pCi/L		100		1	D5072-92	10/27/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/01/10 19:38/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/01/10 19:38/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/01/10 19:38/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/01/10 19:38/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/04/10 14:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/01/10 19:38/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/01/10 19:38/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/01/10 19:38/eli-c
Iron	0.21	mg/L		0.03		2	E200.7	11/04/10 14:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/01/10 19:38/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	11/01/10 19:38/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/28/10 17:04/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	11/01/10 19:38/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/01/10 19:38/eli-c
Selenium	0.001	mg/L		0.001		1	E200.8	11/01/10 19:38/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/01/10 19:38/eli-c
Strontium	2.8	mg/L		0.1		1	E200.8	11/01/10 19:38/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/01/10 19:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/01/10 19:38/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/01/10 19:38/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.850	%				1	A1030 E	12/07/10 00:00/jmh
Anions	14.5	meq/L				1	A1030 E	12/07/10 00:00/jmh
Cations	14.8	meq/L				1	A1030 E	12/07/10 00:00/jmh
Solids, Total Dissolved Calculated	940	mg/L				1	A1030 E	12/07/10 00:00/jmh
TDS Balance (0.80 - 1.20)	0.980					1	A1030 E	12/07/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-002
Client Sample ID: DB-09-21-02

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	192	mg/L		5		1	A2320 B	11/02/10 09:07/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/02/10 09:07/hv
Bicarbonate as HCO3	234	mg/L		5		1	A2320 B	11/02/10 09:07/hv
Calcium	167	mg/L		0.5		2	E200.7	11/10/10 15:56/eli-c
Chloride	9	mg/L		1		1	E300.0	10/26/10 22:58/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/26/10 22:58/jmh
Magnesium	47.7	mg/L		0.5		2	E200.7	11/10/10 15:56/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	11/01/10 11:37/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/26/10 22:58/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	10/26/10 22:58/jmh
Potassium	11.6	mg/L		0.5		2	E200.7	11/10/10 15:56/eli-c
Sodium	132	mg/L	D	0.6		2	E200.7	11/10/10 15:56/eli-c
Sulfate	648	mg/L	D	20		20	E300.0	10/26/10 22:41/jmh
Silica	7.9	mg/L		0.2		1	E200.8	11/10/10 03:17/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1510	umhos/cm		5.0		1	A2510 B	10/27/10 17:05/hv
Oxidation-Reduction Potential	320	mV				1	A2580 B	11/01/10 17:00/jmh
pH	7.59	s.u.		0.01		1	A4500-H B	10/29/10 11:18/tb
Sodium Adsorption Ratio (SAR)	2.3	unitless		0.10		1	Calculation	12/07/10 10:07/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	10/27/10 16:14/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/01/10 19:44/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/01/10 19:44/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/01/10 19:44/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/10/10 03:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/01/10 19:44/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/01/10 19:44/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/01/10 19:44/eli-c
Iron	ND	mg/L		0.03		1	E200.8	11/10/10 03:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/01/10 19:44/eli-c
Manganese	0.49	mg/L		0.01		1	E200.8	11/01/10 19:44/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/01/10 19:44/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/01/10 19:44/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/01/10 19:44/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/15/10 14:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/01/10 19:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/10/10 03:17/eli-c
Uranium	0.0086	mg/L		0.0003		1	E200.8	11/01/10 19:44/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/01/10 19:44/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-002
Client Sample ID: DB-09-21-02

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Zinc	ND	mg/L		0.01		1	E200.8	11/01/10 19:44/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 18:22/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/15/10 13:45/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/16/10 10:52/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	19.3	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Alpha precision (±)	5.5	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Alpha MDC	7.4	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta	25.8	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta precision (±)	4.6	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Gross Beta MDC	6.9	pCi/L				1	E900.0	12/27/10 23:05/eli-ca
Lead 210	0.1	pCi/L	U			1	E909.0M	11/21/10 22:15/eli-cs
Lead 210 precision (±)	0.9	pCi/L				1	E909.0M	11/21/10 22:15/eli-cs
Lead 210 MDC	1.4	pCi/L				1	E909.0M	11/21/10 22:15/eli-cs
Polonium 210	-0.012	pCi/L	U			1	E912.0	11/11/10 08:53/eli-ca
Polonium 210 MDC	0.54	pCi/L				1	E912.0	11/11/10 08:53/eli-ca
Polonium 210 precision (±)	0.21	pCi/L				1	E912.0	11/11/10 08:53/eli-ca
Radium 226	2.2	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	11/11/10 13:18/eli-c
Thorium 230	0.001	pCi/L	U			1	E907.0	11/16/10 16:16/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	11/16/10 16:16/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	11/16/10 16:16/eli-c
Gross Gamma	490	pCi/L				1	E901.1	11/01/10 10:00/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	11/01/10 10:00/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	1.5	pCi/L	U			1	E909.0M	12/17/10 05:36/eli-cs
Lead 210 precision (±)	1.9	pCi/L				1	E909.0M	12/17/10 05:36/eli-cs
Lead 210 MDC	3.1	pCi/L				1	E909.0M	12/17/10 05:36/eli-cs
Polonium 210	0.081	pCi/L	U			1	E912.0	11/18/10 13:12/eli-ca
Polonium 210 precision (±)	0.27	pCi/L				1	E912.0	11/18/10 13:12/eli-ca
Polonium 210 MDC	0.51	pCi/L				1	E912.0	11/18/10 13:12/eli-ca
Radium 226	0.2	pCi/L				1	E903.0	11/23/10 01:20/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	11/23/10 01:20/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10100355-002
Client Sample ID: DB-09-21-02

Report Date: 12/29/10
Collection Date: 10/25/10
Date Received: 10/26/10
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226 MDC	0.1	pCi/L				1	E903.0	11/23/10 01:20/eli-c
Thorium 230	-0.1	pCi/L	U			1	E907.0	11/16/10 16:13/eli-c
Thorium 230 MDC	0.3	pCi/L				1	E907.0	11/16/10 16:13/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	11/16/10 16:13/eli-c
- See Case Narrative regarding Th230 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	254	pCi/L		100		1	D5072-92	10/27/10 00:00/lkl
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/02/10 23:48/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	11/02/10 23:48/eli-c
Barium	ND	mg/L		0.1		1	E200.7	11/04/10 01:24/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/02/10 23:48/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/02/10 23:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/02/10 23:48/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	11/04/10 01:24/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/02/10 23:48/eli-c
Iron	0.06	mg/L		0.03		1	E200.8	11/02/10 23:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/02/10 23:48/eli-c
Manganese	0.56	mg/L		0.01		1	E200.7	11/04/10 01:24/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	10/28/10 17:06/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	11/02/10 23:48/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/02/10 23:48/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/02/10 23:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/02/10 23:48/eli-c
Strontium	2.0	mg/L		0.1		1	E200.8	11/02/10 23:48/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/02/10 23:48/eli-c
Uranium	0.0089	mg/L		0.0003		1	E200.8	11/06/10 00:22/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/02/10 23:48/eli-c
DATA QUALITY								
A/C Balance (± 5)	2.02	%				1	A1030 E	12/07/10 00:00/jmh
Anions	17.6	meq/L				1	A1030 E	12/07/10 00:00/jmh
Cations	18.3	meq/L				1	A1030 E	12/07/10 00:00/jmh
Solids, Total Dissolved Calculated	1190	mg/L				1	A1030 E	12/07/10 00:00/jmh
TDS Balance (0.80 - 1.20)	1.03					1	A1030 E	12/07/10 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 101102A-ALK-SEL-W	
Sample ID: LCS1_101102A		Laboratory Control Sample				Run: PH_COND1-R_101102A			11/02/10 08:28	
Alkalinity, Total as CaCO3		1020	mg/L	5.0	102	90	110			
Sample ID: MBLK1_101102A		Method Blank				Run: PH_COND1-R_101102A			11/02/10 08:42	
Alkalinity, Total as CaCO3		ND	mg/L	3						
Sample ID: R10100355-001AMS		Sample Matrix Spike				Run: PH_COND1-R_101102A			11/02/10 08:52	
Alkalinity, Total as CaCO3		294	mg/L	5.0	117	80	120			
Sample ID: R10100355-001AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_101102A			11/02/10 08:58	
Alkalinity, Total as CaCO3		296	mg/L	5.0	119	80	120	0.7	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 101027_1_COND-PROBE-W	
Sample ID: LCS1-1_101027		Laboratory Control Sample				Run: PH_COND2-R_101027A			10/27/10 16:18	
Conductivity @ 25 C		147	umhos/cm	5.0	98	90	110			
Sample ID: LCS2-1_101027		Laboratory Control Sample				Run: PH_COND2-R_101027A			10/27/10 16:33	
Conductivity @ 25 C		5010	umhos/cm	5.0	100	90	110			
Sample ID: LCS_COND-1_101027		Laboratory Control Sample				Run: PH_COND2-R_101027A			10/27/10 16:33	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_101027		Method Blank				Run: PH_COND2-R_101027A			10/27/10 16:25	
Conductivity @ 25 C		ND	umhos/cm	5						
Sample ID: R10100260-001BDUP		Sample Duplicate				Run: PH_COND2-R_101027A			10/27/10 16:36	
Conductivity @ 25 C		1480	umhos/cm	5.0				0.0	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 101027A-SLDS-TDS-W	
Sample ID: LCS1_101027A		Laboratory Control Sample				Run: BAL-4-R_101027A			10/27/10 16:11	
Solids, Total Dissolved TDS @ 180 C		220	mg/L	10	108	90	110			
Sample ID: MBLK1_101027A		Method Blank				Run: BAL-4-R_101027A			10/27/10 16:12	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	3						
Sample ID: R10100319-001ADUP		Sample Duplicate				Run: BAL-4-R_101027A			10/27/10 16:13	
Solids, Total Dissolved TDS @ 180 C		220	mg/L	10				0.0	5	
Sample ID: R10100382-002AMS		Sample Matrix Spike				Run: BAL-4-R_101027A			10/27/10 16:16	
Solids, Total Dissolved TDS @ 180 C		700	mg/L	10	107	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 101101-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_101101A			11/01/10 17:00	
Oxidation-Reduction Potential		480	mV		101	95	105			
Sample ID: R10100355-002F		Sample Duplicate				Run: PH_COND1-R_101101A			11/01/10 17:00	
Oxidation-Reduction Potential		320	mV					2.3	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									Batch: C_28215	
Sample ID: MB-28215		Method Blank				Run: SUB-C139889			11/15/10 13:39	
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LCS-28215		Laboratory Control Sample				Run: SUB-C139889			11/15/10 13:41	
Selenium-IV		0.051	mg/L	0.0010	102	90	110			
Sample ID: R10100355-002E		Sample Matrix Spike				Run: SUB-C139889			11/15/10 13:48	
Selenium-IV		0.057	mg/L	0.0010	115	85	115			
Sample ID: R10100355-002E		Sample Matrix Spike Duplicate				Run: SUB-C139889			11/15/10 13:50	
Selenium-IV		0.055	mg/L	0.0010	111	85	115	3.5	10	
Method: A3114 B									Batch: C_28215	
Sample ID: MB-28215		Method Blank				Run: SUB-C139895			11/15/10 14:33	
Selenium		ND	mg/L	0.0002						
Sample ID: LCS-28215		Laboratory Control Sample				Run: SUB-C139895			11/15/10 14:35	
Selenium		0.046	mg/L	0.0010	92	90	110			
Sample ID: R10100355-001E		Sample Matrix Spike				Run: SUB-C139895			11/15/10 14:42	
Selenium		0.056	mg/L	0.0010	112	85	115			
Sample ID: R10100355-001E		Sample Matrix Spike Duplicate				Run: SUB-C139895			11/15/10 14:44	
Selenium		0.055	mg/L	0.0010	110	85	115	2.1	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 101029_1_PH-W	
Sample ID: LCS_pH-1_101029		Laboratory Control Sample				Run: PH_COND2-R_101029A			10/29/10 10:42	
pH		7.43	s.u.	0.010	100	98.55	101.45			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-11-01_2_NH3_02	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_101101A			11/01/10 09:26	
Nitrogen, Ammonia as N		ND	mg/L	0.02						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_101101A			11/01/10 09:27	
Nitrogen, Ammonia as N		0.26	mg/L	0.10	105	90	110			
Sample ID: LFB-4		Laboratory Fortified Blank				Run: TECHAA2-R_101101A			11/01/10 09:28	
Nitrogen, Ammonia as N		0.25	mg/L	0.10	100	90	110			
Sample ID: LFB-5		Laboratory Fortified Blank				Run: TECHAA2-R_101101A			11/01/10 09:29	
Nitrogen, Ammonia as N		0.25	mg/L	0.10	101	90	110			
Sample ID: LFB-6		Laboratory Fortified Blank				Run: TECHAA2-R_101101A			11/01/10 09:30	
Nitrogen, Ammonia as N		0.25	mg/L	0.10	100	90	110			
Sample ID: R10100355-001BMS		Sample Matrix Spike				Run: TECHAA2-R_101101A			11/01/10 11:35	
Nitrogen, Ammonia as N		0.43	mg/L	0.10	107	80	120			
Sample ID: R10100355-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_101101A			11/01/10 11:36	
Nitrogen, Ammonia as N		0.42	mg/L	0.10	104	80	120	1.4	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: SUB-C139437	
Sample ID: CRI	3	CRDL Standard for ICP							11/03/10 11:56	
Barium		0.0035	mg/L	0.10	117	50	150			
Chromium		0.021	mg/L	0.050	105	50	150			
Manganese		0.0053	mg/L	0.010	106	50	150			
Sample ID: ICSA	3	Interference Check Sample A							11/03/10 12:00	
Barium		0.0018	mg/L	0.10		0	0			
Chromium		0.0029	mg/L	0.050		0	0			
Manganese		-0.0065	mg/L	0.010		0	0			
Sample ID: ICSAB	3	Interference Check Sample AB							11/03/10 12:04	
Barium		0.52	mg/L	0.10	103	80	120			
Chromium		0.50	mg/L	0.050	99	80	120			
Manganese		0.50	mg/L	0.010	99	80	120			
Method: E200.7									Batch: C_28033	
Sample ID: MB-28033	3	Method Blank				Run: SUB-C139437			11/04/10 00:20	
Barium		0.002	mg/L	0.002						
Chromium		ND	mg/L	0.002						
Manganese		ND	mg/L	0.0008						
Sample ID: LCS3-28033	3	Laboratory Control Sample				Run: SUB-C139437			11/04/10 00:24	
Barium		0.511	mg/L	0.10	102	85	115			
Chromium		0.524	mg/L	0.050	105	85	115			
Manganese		2.60	mg/L	0.010	104	85	115			
Sample ID: R10100355-002D	3	Sample Matrix Spike				Run: SUB-C139437			11/04/10 01:28	
Barium		0.536	mg/L	0.10	105	70	130			
Chromium		0.523	mg/L	0.050	105	70	130			
Manganese		3.20	mg/L	0.010	106	70	130			
Sample ID: R10100355-002D	3	Sample Matrix Spike Duplicate				Run: SUB-C139437			11/04/10 01:32	
Barium		0.524	mg/L	0.10	103	70	130	2.3	20	
Chromium		0.516	mg/L	0.050	103	70	130	1.3	20	
Manganese		3.17	mg/L	0.010	105	70	130	1.0	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: SUB-C139485	
Sample ID: CRI	2	CRDL Standard for ICP							11/04/10 11:33	
Boron		0.044	mg/L	0.10	146	50	150			
Iron		0.022	mg/L	0.030	107	50	150			
Sample ID: ICSA	2	Interference Check Sample A							11/04/10 11:37	
Boron		-0.35	mg/L	0.10		0	0			
Iron		190	mg/L	0.030	95	80	120			
Sample ID: ICSAB	2	Interference Check Sample AB							11/04/10 11:41	
Boron		-0.38	mg/L	0.10		0	0			
Iron		190	mg/L	0.030	94	80	120			
Method: E200.7									Batch: C_R139485	
Sample ID: QCS	2	Quality Control Sample				Run: SUB-C139485			11/04/10 11:13	
Boron		1.0	mg/L	0.10	102	95	105			
Iron		5.0	mg/L	0.030	100	95	105			
Sample ID: LFB-101104A	2	Laboratory Fortified Blank				Run: SUB-C139485			11/04/10 12:06	
Boron		0.91	mg/L	0.10	91	85	115			
Iron		0.92	mg/L	0.030	92	85	115			
Sample ID: MB-101104A	2	Method Blank				Run: SUB-C139485			11/04/10 12:16	
Boron		0.01	mg/L	0.009						
Iron		ND	mg/L	0.002						
Sample ID: C10100249-001BMS2	2	Sample Matrix Spike				Run: SUB-C139485			11/04/10 14:25	
Boron		12.8	mg/L	0.10	93	70	130			
Iron		181	mg/L	0.084		70	130			A
Sample ID: C10100249-001BMSD2	2	Sample Matrix Spike Duplicate				Run: SUB-C139485			11/04/10 14:29	
Boron		13.1	mg/L	0.10	97	70	130	2.8	20	
Iron		182	mg/L	0.084		70	130	0.7	20	A
Method: E200.7									Batch: C_28033	
Sample ID: R10100355-002D	3	Sample Matrix Spike				Run: SUB-C139552			11/06/10 10:11	
Barium		0.512	mg/L	0.10	100	70	130			
Chromium		0.519	mg/L	0.050	104	70	130			
Manganese		3.17	mg/L	0.010	104	70	130			
Sample ID: R10100355-002D	3	Sample Matrix Spike Duplicate				Run: SUB-C139552			11/06/10 10:15	
Barium		0.518	mg/L	0.10	102	70	130	1.2	20	
Chromium		0.500	mg/L	0.050	100	70	130	3.7	20	
Manganese		3.06	mg/L	0.010	100	70	130	3.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: SUB-C139733	
Sample ID: CRI	4	CRDL Standard for ICP							11/10/10 12:03	
Calcium		0.54	mg/L	0.50	109	50	150			
Magnesium		0.51	mg/L	0.50	102	50	150			
Potassium		0.54	mg/L	0.50	107	50	150			
Sodium		0.58	mg/L	0.50	116	50	150			
Sample ID: ICSA	4	Interference Check Sample A							11/10/10 12:07	
Calcium		520	mg/L	0.50	104	80	120			
Magnesium		540	mg/L	0.50	108	80	120			
Potassium		0.0040	mg/L	0.50		0	0			
Sodium		0.11	mg/L	0.50		0	0			
Sample ID: ICSAB	4	Interference Check Sample AB							11/10/10 12:25	
Calcium		500	mg/L	0.50	101	80	120			
Magnesium		540	mg/L	0.50	109	80	120			
Potassium		0.0024	mg/L	0.50		0	0			
Sodium		-0.016	mg/L	0.50		0	0			
Method: E200.7									Batch: C_R139733	
Sample ID: QCS	4	Quality Control Sample				Run: SUB-C139733			11/10/10 11:43	
Calcium		49	mg/L	0.50	98	95	105			
Magnesium		48	mg/L	0.50	96	95	105			
Potassium		50	mg/L	0.80	99	95	105			
Sodium		50	mg/L	0.50	100	95	105			
Sample ID: MB-101110A	4	Method Blank				Run: SUB-C139733			11/10/10 12:46	
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-101110A	4	Laboratory Fortified Blank				Run: SUB-C139733			11/10/10 12:50	
Calcium		48	mg/L	0.50	97	85	115			
Magnesium		48	mg/L	0.50	96	85	115			
Potassium		44	mg/L	0.50	87	85	115			
Sodium		49	mg/L	0.50	97	85	115			
Sample ID: C10110303-004BMS2	4	Sample Matrix Spike				Run: SUB-C139733			11/10/10 16:24	
Calcium		342	mg/L	1.1	93	70	130			
Magnesium		269	mg/L	1.0	94	70	130			
Potassium		235	mg/L	1.0	90	70	130			
Sodium		818	mg/L	1.4	103	70	130			
Sample ID: C10110303-004BMSD2	4	Sample Matrix Spike Duplicate				Run: SUB-C139733			11/10/10 16:29	
Calcium		345	mg/L	1.1	94	70	130	1.0	20	
Magnesium		276	mg/L	1.0	97	70	130	2.6	20	
Potassium		232	mg/L	1.0	89	70	130	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R139733
Sample ID: C10110303-004BMSD2	4	Sample Matrix Spike Duplicate				Run: SUB-C139733			11/10/10 16:29	
Sodium		815	mg/L	1.4	103	70	130	0.2	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: SUB-C139312	
Sample ID: ICV	20	Initial Calibration Verification Standard							11/01/10 12:48	
Aluminum		0.0505	mg/L	0.0010	101	90	110			
Antimony		0.0533	mg/L	0.0010	107	90	110			
Arsenic		0.0492	mg/L	0.0010	98	90	110			
Barium		0.0506	mg/L	0.0010	101	90	110			
Beryllium		0.0511	mg/L	0.0010	102	90	110			
Cadmium		0.0507	mg/L	0.0010	101	90	110			
Chromium		0.0512	mg/L	0.0010	102	90	110			
Copper		0.0511	mg/L	0.0010	102	90	110			
Lead		0.0504	mg/L	0.0010	101	90	110			
Manganese		0.0503	mg/L	0.0010	101	90	110			
Mercury		0.00519	mg/L	0.0010	104	90	110			
Molybdenum		0.0517	mg/L	0.0010	103	90	110			
Nickel		0.0512	mg/L	0.0010	102	90	110			
Selenium		0.249	mg/L	0.0010	100	90	110			
Silver		0.0497	mg/L	0.0010	99	90	110			
Strontium		0.0499	mg/L	0.0010	100	90	110			
Thallium		0.0508	mg/L	0.0010	102	90	110			
Uranium		0.0502	mg/L	0.00030	100	90	110			
Vanadium		0.0516	mg/L	0.0010	103	90	110			
Zinc		0.0510	mg/L	0.0010	102	90	110			
Sample ID: ICSA	20	Interference Check Sample A							11/01/10 12:55	
Aluminum		0.999	mg/L	0.0010	100	80	120			
Antimony		0.000164	mg/L	0.0010		0	0			
Arsenic		6.32E-05	mg/L	0.0010		0	0			
Barium		1.80E-06	mg/L	0.0010		0	0			
Beryllium		2.80E-06	mg/L	0.0010		0	0			
Cadmium		8.70E-06	mg/L	0.0010		0	0			
Chromium		-0.000128	mg/L	0.0010		0	0			
Copper		1.61E-05	mg/L	0.0010		0	0			
Lead		4.70E-06	mg/L	0.0010		0	0			
Manganese		2.39E-05	mg/L	0.0010		0	0			
Mercury		0.000127	mg/L	0.0010		0	0			
Molybdenum		0.0203	mg/L	0.0010	101	80	120			
Nickel		2.22E-05	mg/L	0.0010		0	0			
Selenium		0.000130	mg/L	0.0010		0	0			
Silver		6.93E-05	mg/L	0.0010		0	0			
Strontium		5.51E-05	mg/L	0.0010		0	0			
Thallium		1.41E-05	mg/L	0.0010		0	0			
Uranium		4.04E-05	mg/L	0.00030		0	0			
Vanadium		2.42E-05	mg/L	0.0010		0	0			
Zinc		5.10E-06	mg/L	0.0010		0	0			
Sample ID: ICSAB	20	Interference Check Sample AB							11/01/10 13:02	
Aluminum		0.991	mg/L	0.0010	99	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: SUB-C139312	
Sample ID: ICSAB	20	Interference Check Sample AB							11/01/10 13:02	
Antimony		1.97E-05	mg/L	0.0010		0	0			
Arsenic		0.00991	mg/L	0.0010	99	70	130			
Barium		1.66E-05	mg/L	0.0010		0	0			
Beryllium		2.00E-06	mg/L	0.0010		0	0			
Cadmium		0.0100	mg/L	0.0010	101	70	130			
Chromium		0.00994	mg/L	0.0010	99	70	130			
Copper		0.00998	mg/L	0.0010	100	70	130			
Lead		2.70E-06	mg/L	0.0010		0	0			
Manganese		0.00992	mg/L	0.0010	99	70	130			
Mercury		2.84E-05	mg/L	0.0010		0	0			
Molybdenum		0.0199	mg/L	0.0010	100	70	130			
Nickel		0.00990	mg/L	0.0010	99	70	130			
Selenium		0.000407	mg/L	0.0010		0	0			
Silver		0.0101	mg/L	0.0010	101	70	130			
Strontium		4.97E-05	mg/L	0.0010		0	0			
Thallium		1.20E-06	mg/L	0.0010		0	0			
Uranium		1.24E-05	mg/L	0.00030		0	0			
Vanadium		-0.000197	mg/L	0.0010		0	0			
Zinc		0.00988	mg/L	0.0010	99	70	130			
Method: E200.8									Batch: C_R139312	
Sample ID: LRB	20	Method Blank				Run: SUB-C139312			11/01/10 13:43	
Aluminum		0.002	mg/L	0.0001						
Antimony		ND	mg/L	7E-05						
Arsenic		ND	mg/L	6E-05						
Barium		9E-05	mg/L	3E-05						
Beryllium		ND	mg/L	3E-05						
Cadmium		2E-05	mg/L	1E-05						
Chromium		ND	mg/L	4E-05						
Copper		0.001	mg/L	7E-05						
Lead		3E-05	mg/L	3E-05						
Manganese		8E-05	mg/L	5E-05						
Mercury		ND	mg/L	8E-05						
Molybdenum		ND	mg/L	5E-05						
Nickel		0.001	mg/L	0.0007						
Selenium		0.0003	mg/L	0.0002						
Silver		ND	mg/L	3E-05						
Strontium		0.0001	mg/L	3E-05						
Thallium		ND	mg/L	1E-05						
Uranium		2E-05	mg/L	1E-05						
Vanadium		ND	mg/L	3E-05						
Zinc		0.008	mg/L	0.0003						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R139312	
Sample ID: LFB	20	Laboratory Fortified Blank				Run: SUB-C139312			11/01/10 13:49	
Aluminum		0.0525	mg/L	0.0010	101	85	115			
Antimony		0.0524	mg/L	0.0010	105	85	115			
Arsenic		0.0533	mg/L	0.0010	107	85	115			
Barium		0.0532	mg/L	0.0010	106	85	115			
Beryllium		0.0518	mg/L	0.0010	104	85	115			
Cadmium		0.0530	mg/L	0.0010	106	85	115			
Chromium		0.0520	mg/L	0.0010	104	85	115			
Copper		0.0539	mg/L	0.0010	105	85	115			
Lead		0.0530	mg/L	0.0010	106	85	115			
Manganese		0.0520	mg/L	0.0010	104	85	115			
Mercury		0.00527	mg/L	0.0010	105	85	115			
Molybdenum		0.0532	mg/L	0.0010	106	85	115			
Nickel		0.0539	mg/L	0.0010	105	85	115			
Selenium		0.0538	mg/L	0.0010	107	85	115			
Silver		0.0209	mg/L	0.0010	104	85	115			
Strontium		0.0537	mg/L	0.0010	107	85	115			
Thallium		0.0532	mg/L	0.0010	106	85	115			
Uranium		0.0525	mg/L	0.00030	105	85	115			
Vanadium		0.0520	mg/L	0.0010	104	85	115			
Zinc		0.0557	mg/L	0.0010	96	85	115			
Sample ID: C10101139-001CMS4	20	Post Digestion Spike				Run: SUB-C139312			11/01/10 19:58	
Aluminum		0.0439	mg/L	0.0010	86	70	130			
Antimony		0.0627	mg/L	0.050	115	70	130			
Arsenic		0.101	mg/L	0.0010	105	70	130			
Barium		0.105	mg/L	0.10	109	70	130			
Beryllium		0.0418	mg/L	0.010	84	70	130			
Cadmium		0.0468	mg/L	0.010	93	70	130			
Chromium		0.0439	mg/L	0.0010	80	70	130			
Copper		0.0686	mg/L	0.010	95	70	130			
Lead		0.0561	mg/L	0.050	111	70	130			
Manganese		0.0737	mg/L	0.010	80	70	130			
Mercury		0.00542	mg/L	0.0010	108	70	130			
Molybdenum		0.451	mg/L	0.10		70	130			A
Nickel		0.0810	mg/L	0.050	98	70	130			
Selenium		0.177	mg/L	0.0010	97	70	130			
Silver		0.0154	mg/L	0.010	77	70	130			
Strontium		2.44	mg/L	0.10		70	130			A
Thallium		0.0553	mg/L	0.0010	109	70	130			
Uranium		1.03	mg/L	0.00030		70	130			A
Vanadium		0.813	mg/L	0.10		70	130			A
Zinc		0.0563	mg/L	0.010	88	70	130			
Sample ID: C10101139-001CMSD4	20	Post Digestion Spike Duplicate				Run: SUB-C139312			11/01/10 20:05	
Aluminum		0.0454	mg/L	0.0010	89	70	130	3.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R139312	
Sample ID: C10101139-001CMSD4	20	Post Digestion Spike Duplicate				Run: SUB-C139312			11/01/10 20:05	
Antimony		0.0622	mg/L	0.050	114	70	130	0.9	20	
Arsenic		0.0996	mg/L	0.0010	102	70	130	1.6	20	
Barium		0.106	mg/L	0.10	110	70	130	0.5	20	
Beryllium		0.0431	mg/L	0.010	86	70	130	2.9	20	
Cadmium		0.0472	mg/L	0.010	93	70	130	0.9	20	
Chromium		0.0448	mg/L	0.0010	82	70	130	2.1	20	
Copper		0.0679	mg/L	0.010	94	70	130	1.0	20	
Lead		0.0560	mg/L	0.050	111	70	130	0.3	20	
Manganese		0.0757	mg/L	0.010	84	70	130	2.7	20	
Mercury		0.00554	mg/L	0.0010	111	70	130	2.1	20	
Molybdenum		0.452	mg/L	0.10		70	130	0.3	20	A
Nickel		0.0799	mg/L	0.050	96	70	130	1.3	20	
Selenium		0.173	mg/L	0.0010	89	70	130	2.2	20	
Silver		0.0151	mg/L	0.010	76	70	130	1.4	20	
Strontium		2.44	mg/L	0.10		70	130	0.1	20	A
Thallium		0.0559	mg/L	0.0010	110	70	130	1.0	20	
Uranium		1.02	mg/L	0.00030		70	130	1.2	20	A
Vanadium		0.839	mg/L	0.10		70	130	3.1	20	A
Zinc		0.0559	mg/L	0.010	88	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_28033
Sample ID: MB-28033	15	Method Blank				Run: SUB-C139366				11/02/10 21:10
Antimony		ND	mg/L	0.0003						
Arsenic		0.0008	mg/L	5E-05						
Beryllium		ND	mg/L	3E-05						
Boron		0.009	mg/L	0.003						
Cadmium		ND	mg/L	4E-05						
Copper		0.001	mg/L	5E-05						
Iron		0.002	mg/L	0.001						
Lead		9E-05	mg/L	5E-05						
Molybdenum		0.0005	mg/L	0.00010						
Nickel		0.0001	mg/L	4E-05						
Selenium		0.0003	mg/L	3E-05						
Silver		0.0001	mg/L	4E-05						
Strontium		ND	mg/L	6E-05						
Thallium		0.001	mg/L	0.0001						
Zinc		0.002	mg/L	0.001						
Sample ID: LCS3-28033	15	Laboratory Control Sample				Run: SUB-C139366				11/02/10 21:17
Antimony		0.616	mg/L	0.050	123	85	115			S
Arsenic		0.513	mg/L	0.0010	102	85	115			
Beryllium		0.240	mg/L	0.010	96	85	115			
Boron		0.440	mg/L	0.10	86	85	115			
Cadmium		0.275	mg/L	0.010	110	85	115			
Copper		0.471	mg/L	0.010	94	85	115			
Iron		2.14	mg/L	0.030	86	85	115			
Lead		0.517	mg/L	0.050	103	85	115			
Molybdenum		0.462	mg/L	0.10	92	85	115			
Nickel		0.474	mg/L	0.050	95	85	115			
Selenium		0.562	mg/L	0.0010	112	85	115			
Silver		0.0492	mg/L	0.010	98	85	115			
Strontium		0.447	mg/L	0.10	89	85	115			
Thallium		0.501	mg/L	0.10	100	85	115			
Zinc		0.515	mg/L	0.010	103	85	115			
Sample ID: R10100355-002D	15	Sample Matrix Spike				Run: SUB-C139366				11/02/10 23:55
Antimony		0.615	mg/L	0.050	123	70	130			
Arsenic		0.506	mg/L	0.0010	101	70	130			
Beryllium		0.216	mg/L	0.010	87	70	130			
Boron		0.454	mg/L	0.10	78	70	130			
Cadmium		0.262	mg/L	0.010	105	70	130			
Copper		0.457	mg/L	0.010	91	70	130			
Iron		2.23	mg/L	0.030	87	70	130			
Lead		0.528	mg/L	0.050	106	70	130			
Molybdenum		0.481	mg/L	0.10	96	70	130			
Nickel		0.461	mg/L	0.050	92	70	130			
Selenium		0.534	mg/L	0.0010	107	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_28033	
Sample ID: R10100355-002D	15	Sample Matrix Spike				Run: SUB-C139366			11/02/10 23:55	
Silver		0.0471	mg/L	0.010	94	70	130			
Strontium		2.48	mg/L	0.10	105	70	130			
Thallium		0.505	mg/L	0.10	101	70	130			
Zinc		0.464	mg/L	0.010	92	70	130			
Sample ID: R10100355-002D	15	Sample Matrix Spike Duplicate				Run: SUB-C139366			11/03/10 00:02	
Antimony		0.537	mg/L	0.050	107	70	130	14	20	
Arsenic		0.507	mg/L	0.0010	101	70	130	0.2	20	
Beryllium		0.216	mg/L	0.010	86	70	130	0.1	20	
Boron		0.456	mg/L	0.10	79	70	130	0.6	20	
Cadmium		0.254	mg/L	0.010	101	70	130	3.1	20	
Copper		0.468	mg/L	0.010	93	70	130	2.4	20	
Iron		2.21	mg/L	0.030	86	70	130	0.8	20	
Lead		0.513	mg/L	0.050	103	70	130	2.8	20	
Molybdenum		0.418	mg/L	0.10	83	70	130	14	20	
Nickel		0.463	mg/L	0.050	92	70	130	0.4	20	
Selenium		0.532	mg/L	0.0010	106	70	130	0.5	20	
Silver		0.0464	mg/L	0.010	93	70	130	1.4	20	
Strontium		2.42	mg/L	0.10	94	70	130	2.2	20	
Thallium		0.493	mg/L	0.10	99	70	130	2.4	20	
Zinc		0.465	mg/L	0.010	93	70	130	0.1	20	
Method: E200.8									Analytical Run: SUB-C139573	
Sample ID: ICV		Initial Calibration Verification Standard							11/05/10 12:23	
Uranium		0.0498	mg/L	0.00030	100	90	110			
Sample ID: ICSA		Interference Check Sample A							11/05/10 12:30	
Uranium		3.56E-05	mg/L	0.00030		0	0			
Sample ID: ICSAB		Interference Check Sample AB							11/05/10 12:37	
Uranium		8.10E-06	mg/L	0.00030		0	0			
Method: E200.8									Batch: C_28033	
Sample ID: MB-28033		Method Blank				Run: SUB-C139573			11/05/10 23:14	
Uranium		ND	mg/L	4E-05						
Sample ID: LCS3-28033		Laboratory Control Sample				Run: SUB-C139573			11/05/10 23:21	
Uranium		0.566	mg/L	0.00030	113	85	115			
Sample ID: R10100355-002D		Sample Matrix Spike				Run: SUB-C139573			11/06/10 00:29	
Uranium		0.597	mg/L	0.00030	118	70	130			
Sample ID: R10100355-002D		Sample Matrix Spike Duplicate				Run: SUB-C139573			11/06/10 00:35	
Uranium		0.582	mg/L	0.00030	115	70	130	2.5	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R139687A	
Sample ID: C10110303-019BMS4	4	Post Digestion Spike				Run: SUB-C139687			11/10/10 02:22	
Boron		0.596	mg/L	0.10		70	130			A
Iron		1.40	mg/L	0.030	111	70	130			
Silicon		7.79	mg/L	0.10		70	130			A
Thorium 232		0.0542	mg/L	0.0010	108	70	130			
Sample ID: C10110303-019BMSD4	4	Post Digestion Spike Duplicate				Run: SUB-C139687			11/10/10 02:29	
Boron		0.598	mg/L	0.10		70	130	0.4	20	A
Iron		1.42	mg/L	0.030	113	70	130	1.5	20	
Silicon		7.84	mg/L	0.10		70	130	0.6	20	A
Thorium 232		0.0541	mg/L	0.0010	108	70	130	0.2	20	
Sample ID: LRB	4	Method Blank				Run: SUB-C139687			11/09/10 14:18	
Silicon		ND	mg/L	0.0005						
Boron		-0.001	mg/L							
Iron		ND	mg/L	0.0001						
Thorium 232		ND	mg/L	3E-05						
Sample ID: LFB	4	Laboratory Fortified Blank				Run: SUB-C139687			11/09/10 14:25	
Silicon		0.579	mg/L	0.0050	111	85	115			
Boron		0.0529	mg/L	0.0010	109	85	115			
Iron		1.34	mg/L	0.012	108	85	115			
Thorium 232		0.0521	mg/L	0.0010	104	85	115			
Method: E200.8									Analytical Run: SUB-C140426	
Sample ID: ICV		Initial Calibration Verification Standard							11/30/10 11:59	
Uranium		0.0514	mg/L	0.00030	103	90	110			
Method: E200.8									Batch: C_28164	
Sample ID: MB-28164		Method Blank				Run: SUB-C140426			11/30/10 17:49	
Uranium		ND	mg/L	6E-05						
Sample ID: LCS2-28164		Laboratory Control Sample				Run: SUB-C140426			11/30/10 17:53	
Uranium		0.104	mg/L	0.00030	104	85	115			
Sample ID: R10100355-002I		Post Digestion Spike				Run: SUB-C140426			11/30/10 18:26	
Uranium		0.0137	mg/L	0.00030	104	70	130			
Sample ID: R10100355-002I		Post Digestion Spike Duplicate				Run: SUB-C140426			11/30/10 18:30	
Uranium		0.0133	mg/L	0.00030	101	70	130	3.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B156309	
Sample ID: QCS		Initial Calibration Verification Standard							10/28/10 16:00	
Mercury		0.0020	mg/L	0.00020	101	90	110			
Method: E245.1									Batch: B_50118	
Sample ID: MB-50118		Method Blank				Run: SUB-B156309			10/28/10 16:10	
Mercury		4E-05	mg/L	1E-05						
Sample ID: LCS-50118		Laboratory Control Sample				Run: SUB-B156309			10/28/10 16:11	
Mercury		0.0018	mg/L	0.00020	86	85	115			
Sample ID: B10102325-001BMS		Sample Matrix Spike				Run: SUB-B156309			10/28/10 16:56	
Mercury		0.0019	mg/L	0.00010	95	70	130			
Sample ID: B10102325-001BMSD		Sample Matrix Spike Duplicate				Run: SUB-B156309			10/28/10 16:58	
Mercury		0.0019	mg/L	0.00010	95	70	130	0.0	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0										Batch: R48774
Sample ID: LFB102610-14	5	Laboratory Fortified Blank				Run: DIONEX_101026A				10/26/10 21:12
Chloride		39.4	mg/L	1.00	99	90	110			
Fluoride		4.08	mg/L	0.10	102	90	110			
Nitrogen, Nitrate as N		3.98	mg/L	0.10	100	90	110			
Nitrogen, Nitrite as N		4.05	mg/L	0.10	101	90	110			
Sulfate		39.2	mg/L	1.0	98	90	110			
Sample ID: R10100355-001AMS	5	Sample Matrix Spike				Run: DIONEX_101026A				10/26/10 21:48
Chloride		802	mg/L	20	94	90	110			
Fluoride		82.3	mg/L	2.0	99	90	110			
Nitrogen, Nitrate as N		80.3	mg/L	2.0	100	90	110			
Nitrogen, Nitrite as N		81.8	mg/L	2.0	102	90	110			
Sulfate		1290	mg/L	20	96	90	110			
Sample ID: R10100355-001AMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_101026A				10/26/10 22:05
Chloride		794	mg/L	20	93	90	110	1.0	10	
Fluoride		81.5	mg/L	2.0	98	90	110	1.1	10	
Nitrogen, Nitrate as N		79.5	mg/L	2.0	99	90	110	0.9	10	
Nitrogen, Nitrite as N		80.8	mg/L	2.0	101	90	110	1.2	10	
Sulfate		1280	mg/L	20	95	90	110	0.6	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-1022	
Sample ID: MB-GrAB-1022	6	Method Blank				Run: SUB-C141279			12/27/10 23:05	
Gross Alpha		-2	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.9	pCi/L							
Gross Beta		-1	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-1022		Laboratory Control Sample				Run: SUB-C141279			12/27/10 23:05	
Gross Alpha		110	pCi/L		107	70	130			
Sample ID: Cs137-GrAB-1022		Laboratory Control Sample				Run: SUB-C141279			12/27/10 23:05	
Gross Beta		76	pCi/L		88	70	130			
Sample ID: C10120494-001FDUP	6	Sample Duplicate				Run: SUB-C141279			12/27/10 23:05	
Gross Alpha		-7.4	pCi/L					18	79	U
Gross Alpha precision (±)		2.3	pCi/L							
Gross Alpha MDC		3.0	pCi/L							
Gross Beta		2.0	pCi/L					130	266.4	
Gross Beta precision (±)		1.9	pCi/L							
Gross Beta MDC		1.9	pCi/L							
Sample ID: C10120742-001DMS		Sample Matrix Spike				Run: SUB-C141279			12/28/10 11:23	
Gross Alpha		230	pCi/L		134	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.										
Sample ID: C10120742-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C141279			12/28/10 11:23	
Gross Alpha		230	pCi/L		137	70	130	1.5	16.3	S
Sample ID: C10120742-001DMS		Sample Matrix Spike				Run: SUB-C141279			12/28/10 11:23	
Gross Beta		110	pCi/L		95	70	130			
Sample ID: C10120742-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C141279			12/28/10 11:23	
Gross Beta		120	pCi/L		103	70	130	6.1	14.9	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R139341
Sample ID: LCS-R139341	3	Laboratory Control Sample				Run: SUB-C139341				11/01/10 10:00
Americium 241		700	pCi/L	20	87	70	130			
Cesium 137		980	pCi/L	20	97	70	130			
Potassium 40		6600	pCi/L	20	98	70	130			
Sample ID: MB-R139341	23	Method Blank				Run: SUB-C139341				11/01/10 10:00
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		500	pCi/L							
Thorium 234 precision (±)		80	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		500	pCi/L							
Gross Gamma precision (±)		80	pCi/L							
- See Case Narrative regarding Gross Gamma analysis.										
Sample ID: R10100355-002H	23	Sample Duplicate				Run: SUB-C139341				11/01/10 10:00
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R139341	
Sample ID: R10100355-002H	23	Sample Duplicate				Run: SUB-C139341			11/01/10 10:00	
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		470	pCi/L	20				5.1	30	
Thorium 234 precision (±)		130	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		470	pCi/L					5.1	30	
Gross Gamma precision (±)		130	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-4959	
Sample ID: C10101041-008DMS		Sample Matrix Spike				Run: SUB-C139874			11/11/10 11:45	
Radium 226		18.6	pCi/L		115	70	130			
Sample ID: C10101041-008DMSD		Sample Matrix Spike Duplicate				Run: SUB-C139874			11/11/10 11:45	
Radium 226		20.1	pCi/L		125	70	130	7.7	24.6	
Sample ID: MB-RA226-4959	3	Method Blank				Run: SUB-C139874			11/11/10 13:18	
Radium 226		-0.1	pCi/L							U
Radium 226 precision (±)		0.09	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4959		Laboratory Control Sample				Run: SUB-C139874			11/11/10 13:18	
Radium 226		11	pCi/L		141	70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Method: E903.0									Batch: C_R140270	
Sample ID: R10100355-001I		Sample Matrix Spike				Run: SUB-C140270			11/23/10 01:20	
Radium 226		19	pCi/L		98	70	130			
Sample ID: R10100355-001I		Sample Matrix Spike Duplicate				Run: SUB-C140270			11/23/10 01:20	
Radium 226		22	pCi/L		113	70	130	14	21.9	
Sample ID: LCS-28164		Laboratory Control Sample				Run: SUB-C140270			11/23/10 01:21	
Radium 226		18	pCi/L		116	70	130			
Sample ID: MB-28164	3	Method Blank				Run: SUB-C140270			11/23/10 01:21	
Radium 226		0.4	pCi/L							
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10

Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0										Batch: C_28164
Sample ID: R10100355-002I		Sample Matrix Spike				Run: SUB-C140085				11/16/10 16:13
Thorium 230		13	pCi/L		105	70	130			
Sample ID: R10100355-002I		Sample Matrix Spike Duplicate				Run: SUB-C140085				11/16/10 16:13
Thorium 230		10	pCi/L		83	70	130	25	46.6	
Sample ID: LCS-28164		Laboratory Control Sample				Run: SUB-C140085				11/16/10 16:13
Thorium 230		5.6	pCi/L		116	70	130			
Sample ID: MB-28164	3	Method Blank				Run: SUB-C140085				11/16/10 16:13
Thorium 230		-0.10	pCi/L							U
Thorium 230 MDC		0.3	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Method: E907.0										Batch: C_RA-TH-ISO-1285
Sample ID: LCS-RA-TH-ISO-1285		Laboratory Control Sample				Run: SUB-C140086				11/16/10 16:16
Thorium 230		5.4	pCi/L		94	70	130			
Sample ID: R10100355-002H		Sample Matrix Spike				Run: SUB-C140086				11/16/10 16:16
Thorium 230		13	pCi/L		100	70	130			
Sample ID: R10100355-002H		Sample Matrix Spike Duplicate				Run: SUB-C140086				11/16/10 16:16
Thorium 230		13	pCi/L		100	70	130	0.0	40.8	
Sample ID: MB-RA-TH-ISO-1285	3	Method Blank				Run: SUB-C140086				11/17/10 15:57
Thorium 230		0.01	pCi/L							U
Thorium 230 MDC		0.1	pCi/L							
Thorium 230 precision (±)		0.05	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Report Date: 12/29/10
Work Order: R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0M									Analytical Run: SUB-T37761	
Sample ID: STD-PB-210-0038	3	Continuing Calibration Verification Standard							11/19/10 19:53	
Lead 210		32	pCi/L			70	130	0.0	30	
Lead 210 precision (±)		1.3	pCi/L			0	0			
Lead 210 MDC		1.4	pCi/L			0	0			
Method: E909.0M									Batch: T_PB-210-0038	
Sample ID: MB-PB-210-0038	3	Method Blank				Run: SUB-T37761			11/19/10 17:42	
Lead 210		-0.4	pCi/L							U
Lead 210 precision (±)		0.9	pCi/L							
Lead 210 MDC		1	pCi/L							
Sample ID: LCS-PB-210-0038		Laboratory Control Sample				Run: SUB-T37761			11/19/10 22:05	
Lead 210		53	pCi/L		97	70	130			
Sample ID: T10110006-001BMS		Sample Matrix Spike				Run: SUB-T37761			11/20/10 02:28	
Lead 210		100	pCi/L		93	70	130			
Sample ID: T10110006-001BMSD		Sample Matrix Spike Duplicate				Run: SUB-T37761			11/20/10 04:39	
Lead 210		95	pCi/L		88	70	130	6.3	15.9	
Method: E909.0M									Batch: T_PB-210-0055	
Sample ID: MB-12635	3	Method Blank				Run: SUB-T38122			12/16/10 16:28	
Lead 210		1	pCi/L							U
Lead 210 precision (±)		9	pCi/L							
Lead 210 MDC		10	pCi/L							
Sample ID: LCS-12635		Laboratory Control Sample				Run: SUB-T38122			12/16/10 20:51	
Lead 210		440	pCi/L		81	70	130			
Sample ID: R10100355-001I		Sample Matrix Spike				Run: SUB-T38122			12/17/10 01:14	
Lead 210		480	pCi/L		87	70	130			
Sample ID: R10100355-001I		Sample Matrix Spike Duplicate				Run: SUB-T38122			12/17/10 03:25	
Lead 210		460	pCi/L		85	70	130	2.7	16.2	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Client: Powertech USA Inc **Report Date:** 12/29/10
Project: Dewey Groundwater Sampling **Work Order:** R10100355

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0									Batch: C_PO210-0325	
Sample ID: C10100987-001CMS		Sample Matrix Spike				Run: SUB-C139964			11/11/10 08:53	
Polonium 210		34	pCi/L		105	70	130			
Sample ID: C10100987-001CMSD		Sample Matrix Spike Duplicate				Run: SUB-C139964			11/11/10 08:53	
Polonium 210		34	pCi/L		106	70	130	1.0	56.3	
Sample ID: MB-PO210-0325	3	Method Blank				Run: SUB-C139964			11/11/10 08:53	
Polonium 210		0.09	pCi/L							U
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.3	pCi/L							
Sample ID: LCS-PO210-0325		Laboratory Control Sample				Run: SUB-C139964			11/11/10 08:53	
Polonium 210		15	pCi/L		90	70	130			
Method: E912.0									Batch: C_PO210-0327	
Sample ID: C10110253-006DMS		Sample Matrix Spike				Run: SUB-C140163			11/18/10 13:12	
Polonium 210		31	pCi/L		96	70	130			
Sample ID: C10110253-006DMSD		Sample Matrix Spike Duplicate				Run: SUB-C140163			11/18/10 13:12	
Polonium 210		32	pCi/L		98	70	130	2.3	59	
Sample ID: LCS-PO210-0327		Laboratory Control Sample				Run: SUB-C140163			11/18/10 13:12	
Polonium 210		15	pCi/L		90	70	130			
Sample ID: MB-PO210-0327	3	Method Blank				Run: SUB-C140163			11/18/10 13:12	
Polonium 210		0.08	pCi/L							U
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Env.	Project Name, PWS, Permit, Etc. Powertech Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Scott Env. / Powertech	Contact Name: Allen Scott Phone/Fax: 673-4859	Email:	Sampler: (Please Print)
Invoice Address: Powertech, Inc. USA	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED: As per Quote

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

SEE ATTACHED

Standard Turnaround (TAT)

RUSH — Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:
Cooler ID(s):
Receipt Temp 3.8 °C
On Ice: (Y) N
Custody Seal On Bottle Y N
On Cooler Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX		
705	1 DB-09-21-01	10-25-10		Water		R10100355-001
706	2 DB-09-21-02	10-25-10		"		002
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	10-26-10 8:58	[signature]			
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: Steve Froiland	Date/Time: 10-26-10 8:58	Signature: [signature]

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 14, 2011

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10110179

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. Rapid City SD received the following 3 samples for Powertech USA Inc on 11/15/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10110179-001	DB-09-21-01	11/15/10 0:00	11/15/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10110179-002	DB-09-21-02	11/15/10 0:00	11/15/10	Aqueous	Same As Above
R10110179-003	DB-09-21-02 Dup	11/15/10 0:00	11/15/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2011.02.14 13:37:50 -07:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10110179

Revised Date: 02/14/11
Report Date: 01/05/11

CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002 and WY00937.
Comments imported for SUBBED Workorder: C10110686
GROSS GAMMA ANALYSIS
The gamma spectrometry software has identified Thorium 234 as a potential component of this sample. The value generated by the software has been reported here. However, the Thorium 234 gamma ray peaks reside in the middle of excessive background contributions from Compton scatter, x-rays from thorium, and interfering gamma ray peaks from other naturally occurring radionuclides present in the metal can and sample. This means that the value for Thorium 234 likely has a positive bias. The only method to determine the actual concentration of Th-234 would be by radiochemical separation of thorium and gamma spectrometric analysis on the isolate thorium fraction.
End of comments imported for SUBBED Workorder: C10110686
Comments imported for SUBBED Workorder: T10110102
Prep Comments for Sample R10110179-001I, Test PRP-3050-F-T: The prep hold time was exceeded by 29.5 days. The prep hold time was exceeded by 23.3 days.
Prep Comments for Sample R10110179-002I, Test PRP-3050-F-T: The prep hold time was exceeded by 29.5 days. The prep hold time was exceeded by 23.3 days.
Prep Comments for Sample R10110179-003I, Test PRP-3050-F-T: The prep hold time was exceeded by 29.5 days. The prep hold time was exceeded by 23.3 days.
End of comments imported for SUBBED Workorder: T10110102

Revised report issued for PB210 recheck on DB09-21-02 sample.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	11/19/10 16:20/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/19/10 16:20/hv
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	11/19/10 16:20/hv
Calcium	91.4	mg/L		0.5		2	E200.7	11/30/10 17:46/eli-c
Chloride	8	mg/L		1		1	E300.0	11/16/10 22:55/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	11/16/10 22:55/jmh
Magnesium	33.4	mg/L		0.5		2	E200.7	11/30/10 17:46/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	11/18/10 15:43/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/16/10 22:55/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/10 22:55/jmh
Potassium	11.8	mg/L		0.5		2	E200.7	11/30/10 17:46/eli-c
Sodium	157	mg/L	D	0.6		2	E200.7	11/30/10 17:46/eli-c
Sulfate	548	mg/L	D	10		10	E300.0	11/16/10 22:02/jmh
Silica	8.8	mg/L		0.2		1	E200.8	11/30/10 03:30/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1300	umhos/cm		5.0		1	A2510 B	11/22/10 14:56/tb
Oxidation-Reduction Potential	210	mV				1	A2580 B	11/22/10 18:00/jmh
pH	7.63	s.u.		0.01		1	A4500-H B	11/19/10 14:10/tb
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	12/21/10 17:26/ADM
Solids, Total Dissolved TDS @ 180 C	990	mg/L	D	10		1	A2540 C	11/22/10 11:21/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/30/10 03:30/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/30/10 03:30/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 03:30/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/30/10 03:30/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 03:30/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 03:30/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 03:30/eli-c
Iron	ND	mg/L		0.03		1	E200.8	11/30/10 03:30/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 03:30/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	11/30/10 03:30/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/30/10 03:30/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 03:30/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 03:30/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/22/10 13:10/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 03:30/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/30/10 03:30/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 03:30/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/30/10 03:30/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 03:30/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 17:24/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/22/10 11:41/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/22/10 13:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	0.7	pCi/L	U			1	E900.0	12/02/10 21:28/eli-ca
Gross Alpha precision (±)	3.6	pCi/L				1	E900.0	12/02/10 21:28/eli-ca
Gross Alpha MDC	6.0	pCi/L				1	E900.0	12/02/10 21:28/eli-ca
Gross Beta	10.7	pCi/L				1	E900.0	12/02/10 21:28/eli-ca
Gross Beta precision (±)	3.4	pCi/L				1	E900.0	12/02/10 21:28/eli-ca
Gross Beta MDC	5.3	pCi/L				1	E900.0	12/02/10 21:28/eli-ca
Lead 210	1	pCi/L	U			1	E909.0M	12/15/10 23:53/eli-cs
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	12/15/10 23:53/eli-cs
Lead 210 MDC	1.7	pCi/L				1	E909.0M	12/15/10 23:53/eli-cs
Polonium 210	-0.012	pCi/L	U			1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 MDC	0.52	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 precision (±)	0.20	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Radium 226	2.0	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 MDC	0.06	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Thorium 230	-0.03	pCi/L	U			1	E907.0	12/06/10 09:46/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Gross Gamma	650	pCi/L				1	E901.1	11/18/10 15:20/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	11/18/10 15:20/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	1.3	pCi/L	U			1	E909.0M	12/30/10 01:16/eli-cs
Lead 210 precision (±)	2.0	pCi/L				1	E909.0M	12/30/10 01:16/eli-cs
Lead 210 MDC	3.3	pCi/L				1	E909.0M	12/30/10 01:16/eli-cs
Polonium 210	0.078	pCi/L	U			1	E912.0	12/01/10 09:34/eli-ca
Polonium 210 precision (±)	0.31	pCi/L				1	E912.0	12/01/10 09:34/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.62	pCi/L				1	E912.0	12/01/10 09:34/eli-ca
Radium 226	0.2	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Thorium 230	-0.2	pCi/L	U			1	E907.0	12/02/10 16:26/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	12/02/10 16:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	12/02/10 16:26/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	532	pCi/L		100		1	D5072-92	11/18/10 15:53/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/30/10 14:43/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/30/10 14:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 14:43/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/30/10 14:43/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/30/10 14:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 14:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 14:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 14:43/eli-c
Iron	0.26	mg/L		0.03		1	E200.8	11/30/10 14:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 14:43/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	11/30/10 14:43/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	11/18/10 15:10/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 14:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 14:43/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/30/10 14:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 14:43/eli-c
Strontium	2.6	mg/L		0.1		1	E200.8	11/30/10 14:43/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/30/10 14:43/eli-c
Uranium	0.0003	mg/L		0.0003		1	E200.8	11/30/10 14:43/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 14:43/eli-c
DATA QUALITY								
A/C Balance (± 5)	-1.85	%				1	A1030 E	12/31/10 00:00/lkl
Anions	15.0	meq/L				1	A1030 E	12/31/10 00:00/lkl
Cations	14.4	meq/L				1	A1030 E	12/31/10 00:00/lkl
Solids, Total Dissolved Calculated	974	mg/L				1	A1030 E	12/31/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.02					1	A1030 E	12/31/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	194	mg/L		5		1	A2320 B	11/19/10 16:24/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/19/10 16:24/hv
Bicarbonate as HCO3	236	mg/L		5		1	A2320 B	11/19/10 16:24/hv
Calcium	163	mg/L		0.5		2	E200.7	11/30/10 17:50/eli-c
Chloride	10	mg/L		1		1	E300.0	11/16/10 23:30/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	11/16/10 23:30/jmh
Magnesium	45.2	mg/L		0.5		2	E200.7	11/30/10 17:50/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/18/10 15:47/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/16/10 23:30/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/16/10 23:30/jmh
Potassium	12.0	mg/L		0.5		2	E200.7	11/30/10 17:50/eli-c
Sodium	125	mg/L	D	0.6		2	E200.7	11/30/10 17:50/eli-c
Sulfate	689	mg/L	D	10		10	E300.0	11/16/10 23:12/jmh
Silica	8.3	mg/L		0.2		1	E200.8	11/30/10 03:37/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1470	umhos/cm		5.0		1	A2510 B	11/22/10 14:58/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	11/22/10 18:00/jmh
pH	7.35	s.u.		0.01		1	A4500-H B	11/19/10 14:14/tb
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	12/21/10 17:26/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	11/22/10 11:21/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/30/10 03:37/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/30/10 03:37/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 03:37/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/30/10 03:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 03:37/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 03:37/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 03:37/eli-c
Iron	ND	mg/L		0.03		1	E200.8	11/30/10 03:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 03:37/eli-c
Manganese	0.57	mg/L		0.01		1	E200.8	11/30/10 03:37/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/30/10 03:37/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 03:37/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 03:37/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/22/10 13:17/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 03:37/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/30/10 03:37/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0082	mg/L		0.0003		1	E200.8	11/30/10 03:37/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/30/10 03:37/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 03:37/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 17:28/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/22/10 11:48/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/22/10 13:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	24.5	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Alpha precision (±)	6.0	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Alpha MDC	7.7	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta	21.1	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta precision (±)	3.9	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta MDC	6.0	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Lead 210	-0.08	pCi/L	U			1	E909.0	02/10/11 14:52/eli-cs
Lead 210 precision (±)	0.8	pCi/L				1	E909.0	02/10/11 14:52/eli-cs
Lead 210 MDC	1.4	pCi/L				1	E909.0	02/10/11 14:52/eli-cs
Polonium 210	-0.011	pCi/L	U			1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 MDC	0.53	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 precision (±)	0.20	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Radium 226	2.4	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 MDC	0.06	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Thorium 230	0.03	pCi/L	U			1	E907.0	12/06/10 09:46/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Thorium 230 precision (±)	0.06	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Gross Gamma	490	pCi/L				1	E901.1	11/18/10 15:20/eli-c
Gross Gamma precision (±)	170	pCi/L				1	E901.1	11/18/10 15:20/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	2.5	pCi/L	U			1	E909.0M	12/30/10 07:50/eli-cs
Lead 210 precision (±)	2.0	pCi/L				1	E909.0M	12/30/10 07:50/eli-cs
Lead 210 MDC	3.3	pCi/L				1	E909.0M	12/30/10 07:50/eli-cs
Polonium 210	-0.032	pCi/L	U			1	E912.0	12/01/10 09:34/eli-ca
Polonium 210 precision (±)	0.25	pCi/L				1	E912.0	12/01/10 09:34/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.66	pCi/L				1	E912.0	12/01/10 09:34/eli-ca
Radium 226	0.1	pCi/L	U			1	E903.0	12/06/10 16:46/eli-c
Radium 226 precision (±)	0.08	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Thorium 230	-0.2	pCi/L	U			1	E907.0	12/02/10 16:26/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	12/02/10 16:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	12/02/10 16:26/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	683	pCi/L		100		1	D5072-92	11/18/10 15:53/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/30/10 14:50/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/30/10 14:50/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 14:50/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/30/10 14:50/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/30/10 14:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 14:50/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 14:50/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 14:50/eli-c
Iron	0.04	mg/L		0.03		1	E200.8	11/30/10 14:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 14:50/eli-c
Manganese	0.59	mg/L		0.01		1	E200.8	11/30/10 14:50/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	11/18/10 15:12/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 14:50/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 14:50/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/30/10 14:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 14:50/eli-c
Strontium	2.3	mg/L		0.1		1	E200.8	11/30/10 14:50/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/30/10 14:50/eli-c
Uranium	0.0098	mg/L		0.0003		1	E200.8	11/30/10 14:50/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 14:50/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.58	%				1	A1030 E	12/31/10 00:00/lkl
Anions	18.6	meq/L				1	A1030 E	12/31/10 00:00/lkl
Cations	17.6	meq/L				1	A1030 E	12/31/10 00:00/lkl
Solids, Total Dissolved Calculated	1180	mg/L				1	A1030 E	12/31/10 00:00/lkl
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	12/31/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-003
Client Sample ID: DB-09-21-02 Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	192	mg/L		5		1	A2320 B	11/19/10 16:29/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/19/10 16:29/hv
Bicarbonate as HCO3	234	mg/L		5		1	A2320 B	11/19/10 16:29/hv
Calcium	163	mg/L		0.5		2	E200.7	11/30/10 17:54/eli-c
Chloride	10	mg/L		1		1	E300.0	11/17/10 00:05/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	11/17/10 00:05/jmh
Magnesium	46.4	mg/L		0.5		2	E200.7	11/30/10 17:54/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/18/10 15:48/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/17/10 00:05/jmh
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	11/17/10 00:05/jmh
Potassium	12.0	mg/L		0.5		2	E200.7	11/30/10 17:54/eli-c
Sodium	123	mg/L	D	0.6		2	E200.7	11/30/10 17:54/eli-c
Sulfate	691	mg/L	D	10		10	E300.0	11/16/10 23:48/jmh
Silica	8.5	mg/L		0.2		1	E200.8	11/30/10 04:12/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1470	umhos/cm		5.0		1	A2510 B	11/22/10 15:00/tb
Oxidation-Reduction Potential	220	mV				1	A2580 B	11/22/10 18:00/jmh
pH	7.35	s.u.		0.01		1	A4500-H B	11/19/10 14:15/tb
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	12/21/10 17:26/ADM
Solids, Total Dissolved TDS @ 180 C	1100	mg/L	D	10		1	A2540 C	11/22/10 11:22/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		1	E200.8	11/30/10 04:12/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/30/10 04:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 04:12/eli-c
Boron	ND	mg/L		0.1		2	E200.7	11/30/10 17:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 04:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 04:12/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 04:12/eli-c
Iron	ND	mg/L		0.03		1	E200.8	11/30/10 04:12/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 04:12/eli-c
Manganese	0.58	mg/L		0.01		1	E200.8	11/30/10 04:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/30/10 04:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 04:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 04:12/eli-c
Selenium	ND	mg/L		0.001		1	A3114 B	11/22/10 13:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 04:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/30/10 04:12/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-003
Client Sample ID: DB-09-21-02 Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0083	mg/L		0.0003		1	E200.8	11/30/10 04:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/30/10 04:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 04:12/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	11/30/10 17:32/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/22/10 11:50/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/22/10 13:55/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	23.3	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Alpha precision (±)	5.9	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Alpha MDC	7.7	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta	26.0	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta precision (±)	4.0	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Gross Beta MDC	6.0	pCi/L				1	E900.0	12/20/10 22:38/eli-ca
Lead 210	0.5	pCi/L	U			1	E909.0M	12/16/10 04:16/eli-cs
Lead 210 precision (±)	1.0	pCi/L				1	E909.0M	12/16/10 04:16/eli-cs
Lead 210 MDC	1.7	pCi/L				1	E909.0M	12/16/10 04:16/eli-cs
Polonium 210	-0.024	pCi/L	U			1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 MDC	0.60	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Polonium 210 precision (±)	0.23	pCi/L				1	E912.0	11/29/10 09:17/eli-ca
Radium 226	2.3	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Radium 226 MDC	0.06	pCi/L				1	E903.0	11/29/10 17:41/eli-c
Thorium 230	0.004	pCi/L	U			1	E907.0	12/06/10 09:46/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0	12/06/10 09:46/eli-c
Gross Gamma	550	pCi/L				1	E901.1	11/18/10 15:20/eli-c
Gross Gamma precision (±)	160	pCi/L				1	E901.1	11/18/10 15:20/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	1.4	pCi/L	U			1	E909.0M	12/30/10 10:01/eli-cs
Lead 210 precision (±)	2.0	pCi/L				1	E909.0M	12/30/10 10:01/eli-cs
Lead 210 MDC	3.3	pCi/L				1	E909.0M	12/30/10 10:01/eli-cs
Polonium 210	0.070	pCi/L	U			1	E912.0	12/01/10 09:34/eli-ca
Polonium 210 precision (±)	0.34	pCi/L				1	E912.0	12/01/10 09:34/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Collection Date: 11/15/10
Date Received: 11/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10110179-003
Client Sample ID: DB-09-21-02 Dup

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.70	pCi/L				1	E912.0	12/01/10 09:34/eli-ca
Radium 226	0.1	pCi/L	U			1	E903.0	12/06/10 16:46/eli-c
Radium 226 precision (±)	0.09	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	12/06/10 16:46/eli-c
Thorium 230	-0.1	pCi/L	U			1	E907.0	12/02/10 16:26/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E907.0	12/02/10 16:26/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	12/02/10 16:26/eli-c
RADIONUCLIDES - TOTAL								
Radon 222	666	pCi/L		100		1	D5072-92	11/18/10 15:53/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	11/30/10 14:57/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	11/30/10 14:57/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/30/10 14:57/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	11/30/10 14:57/eli-c
Boron	ND	mg/L		0.1		1	E200.8	11/30/10 14:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/30/10 14:57/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/30/10 14:57/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/30/10 14:57/eli-c
Iron	0.09	mg/L		0.03		1	E200.8	11/30/10 14:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/30/10 14:57/eli-c
Manganese	0.57	mg/L		0.01		1	E200.8	11/30/10 14:57/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	11/18/10 15:13/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	11/30/10 14:57/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/30/10 14:57/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	11/30/10 14:57/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/30/10 14:57/eli-c
Strontium	2.2	mg/L		0.1		1	E200.8	11/30/10 14:57/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	11/30/10 14:57/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	11/30/10 14:57/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/30/10 14:57/eli-c
DATA QUALITY								
A/C Balance (± 5)	-2.35	%				1	A1030 E	12/31/10 00:00/lkl
Anions	18.5	meq/L				1	A1030 E	12/31/10 00:00/lkl
Cations	17.7	meq/L				1	A1030 E	12/31/10 00:00/lkl
Solids, Total Dissolved Calculated	1190	mg/L				1	A1030 E	12/31/10 00:00/lkl
TDS Balance (0.80 - 1.20)	0.950					1	A1030 E	12/31/10 00:00/lkl

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc

Report Date: 01/05/11

Project: Dewey Groundwater Sampling

Work Order: R10110179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 101119A-ALK-SEL-W	
Sample ID: LCS1_101119A		Laboratory Control Sample				Run: PH_COND1-R_101119A			11/19/10 15:29	
Alkalinity, Total as CaCO3		964	mg/L	5.0	96	90	110			
Sample ID: MBLK1_101119A		Method Blank				Run: PH_COND1-R_101119A			11/19/10 15:35	
Alkalinity, Total as CaCO3		ND	mg/L	7						
Sample ID: R10110177-002AMS		Sample Matrix Spike				Run: PH_COND1-R_101119A			11/19/10 15:47	
Alkalinity, Total as CaCO3		310	mg/L	5.0	98	80	120			
Sample ID: R10110177-002AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_101119A			11/19/10 15:53	
Alkalinity, Total as CaCO3		312	mg/L	5.0	99	80	120	0.6	10	
Sample ID: R10110212-004AMS		Sample Matrix Spike				Run: PH_COND1-R_101119A			11/19/10 17:01	
Alkalinity, Total as CaCO3		294	mg/L	5.0	96	80	120			
Sample ID: R10110212-004AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_101119A			11/19/10 17:04	
Alkalinity, Total as CaCO3		296	mg/L	5.0	98	80	120	0.7	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 101122_1_COND-PROBE-W	
Sample ID: LCS1-1_101122		Laboratory Control Sample				Run: PH_COND2-R_101122A			11/22/10 14:35	
Conductivity @ 25 C		152	umhos/cm	5.0	101	90	110			
Sample ID: LCS2-1_101122		Laboratory Control Sample				Run: PH_COND2-R_101122A			11/22/10 14:37	
Conductivity @ 25 C		4970	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_101122		Laboratory Control Sample				Run: PH_COND2-R_101122A			11/22/10 14:41	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_101122		Method Blank				Run: PH_COND2-R_101122A			11/22/10 14:43	
Conductivity @ 25 C		ND	umhos/cm	5						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 101122A-SLDS-TDS-W	
Sample ID: LCS1_101122A		Laboratory Control Sample				Run: BAL-4-R_101122A				11/22/10 11:15
Solids, Total Dissolved TDS @ 180 C		220	mg/L	10	103	90	110			
Sample ID: MBLK1_101122A		Method Blank				Run: BAL-4-R_101122A				11/22/10 11:16
Solids, Total Dissolved TDS @ 180 C		10	mg/L	3						
Sample ID: R10110212-001AMS		Sample Matrix Spike				Run: BAL-4-R_101122A				11/22/10 11:23
Solids, Total Dissolved TDS @ 180 C		1500	mg/L	10	102	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 101122-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_101122B			11/22/10 18:00	
Oxidation-Reduction Potential		480	mV		101	95	105			
Sample ID: R10110179-003F		Sample Duplicate				Run: PH_COND1-R_101122B			11/22/10 18:00	
Oxidation-Reduction Potential		220	mV					0.2	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									Batch: C_28290	
Sample ID: MB-28290		Method Blank				Run: SUB-C140166			11/22/10 11:34	
Selenium-IV		0.0005	mg/L	0.0003						
Sample ID: LCS-28290		Laboratory Control Sample				Run: SUB-C140166			11/22/10 11:39	
Selenium-IV		0.047	mg/L	0.0010	94	90	110			
Sample ID: R10110179-001E		Sample Matrix Spike				Run: SUB-C140166			11/22/10 11:44	
Selenium-IV		0.048	mg/L	0.0010	96	85	115			
Sample ID: R10110179-001E		Sample Matrix Spike Duplicate				Run: SUB-C140166			11/22/10 11:46	
Selenium-IV		0.047	mg/L	0.0010	93	85	115	3.2	10	
Method: A3114 B									Batch: C_28290	
Sample ID: MB-28290		Method Blank				Run: SUB-C140171			11/22/10 13:05	
Selenium		ND	mg/L	0.0002						
Sample ID: LCS-28290		Laboratory Control Sample				Run: SUB-C140171			11/22/10 13:08	
Selenium		0.046	mg/L	0.0010	92	90	110			
Sample ID: R10110179-001E		Sample Matrix Spike				Run: SUB-C140171			11/22/10 13:12	
Selenium		0.052	mg/L	0.0010	103	85	115			
Sample ID: R10110179-001E		Sample Matrix Spike Duplicate				Run: SUB-C140171			11/22/10 13:15	
Selenium		0.053	mg/L	0.0010	106	85	115	2.4	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 101119_2_PH-W	
Sample ID: LCS_pH-1_101119		Laboratory Control Sample				Run: PH_COND2-R_101119A			11/19/10 13:57	
pH		7.40	s.u.	0.010	100	98.55	101.45			
Sample ID: R10110179-001ADUP		Sample Duplicate				Run: PH_COND2-R_101119A			11/19/10 14:12	
pH		7.64	s.u.	0.010				0.1	1.25	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-11-18_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_101118A			11/18/10 13:36	
Nitrogen, Ammonia as N		ND	mg/L	0.02						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_101118A			11/18/10 13:37	
Nitrogen, Ammonia as N		0.23	mg/L	0.10	91	90	110			
Sample ID: R10110179-001BMS		Sample Matrix Spike				Run: TECHAA2-R_101118A			11/18/10 15:45	
Nitrogen, Ammonia as N		0.40	mg/L	0.10	110	80	120			
Sample ID: R10110179-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_101118A			11/18/10 15:46	
Nitrogen, Ammonia as N		0.40	mg/L	0.10	112	80	120	1.2	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92										Batch: C_R140114
Sample ID: R10110179-003G		Sample Duplicate				Run: SUB-C140114				11/18/10 15:53
Radon 222		610	pCi/L	100				8.7	30	
Sample ID: MB-R140114		Method Blank				Run: SUB-C140114				11/18/10 15:53
Radon 222		30	pCi/L							U
Sample ID: LCS-R140114		Laboratory Control Sample				Run: SUB-C140114				11/18/10 15:53
Radon 222		301	pCi/L	100	89	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R140421	
Sample ID: MB-101130A	5	Method Blank				Run: SUB-C140421			11/30/10 15:57	
Boron		ND	mg/L	0.009						
Calcium		ND	mg/L	0.2						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Sample ID: LFB-101130A	5	Laboratory Fortified Blank				Run: SUB-C140421			11/30/10 16:01	
Boron		0.96	mg/L	0.10	96	85	115			
Calcium		47	mg/L	0.50	94	85	115			
Magnesium		47	mg/L	0.50	94	85	115			
Potassium		43	mg/L	0.50	87	85	115			
Sodium		47	mg/L	0.50	94	85	115			
Sample ID: C10110416-001BMS2	5	Sample Matrix Spike				Run: SUB-C140421			11/30/10 16:57	
Boron		4.68	mg/L	0.10	99	70	130			
Calcium		130	mg/L	1.0	95	70	130			
Magnesium		95.7	mg/L	1.0	93	70	130			
Potassium		109	mg/L	1.0	82	70	130			
Sodium		647	mg/L	1.0		70	130			A
Sample ID: C10110416-001BMSD2	5	Sample Matrix Spike Duplicate				Run: SUB-C140421			11/30/10 17:02	
Boron		4.72	mg/L	0.10	101	70	130	0.8	20	
Calcium		131	mg/L	1.0	96	70	130	0.9	20	
Magnesium		97.0	mg/L	1.0	94	70	130	1.4	20	
Potassium		109	mg/L	1.0	83	70	130	0.6	20	
Sodium		656	mg/L	1.0		70	130	1.4	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R140353A	
Sample ID: C10110505-007BMS4	19	Post Digestion Spike				Run: SUB-C140353			11/30/10 03:10	
Aluminum		0.0715	mg/L	0.0010	96	70	130			
Arsenic		0.0546	mg/L	0.0010	108	70	130			
Barium		0.0625	mg/L	0.0010	103	70	130			
Boron		0.198	mg/L	0.10	78	70	130			
Cadmium		0.0495	mg/L	0.010	97	70	130			
Chromium		0.0519	mg/L	0.050	104	70	130			
Copper		0.0530	mg/L	0.010	99	70	130			
Iron		7.25	mg/L	0.030		70	130			A
Lead		0.0537	mg/L	0.050	107	70	130			
Manganese		4.99	mg/L	0.010		70	130			A
Mercury		0.00417	mg/L	0.0010	83	70	130			
Molybdenum		0.0597	mg/L	0.0010	102	70	130			
Nickel		0.0966	mg/L	0.050	99	70	130			
Silicon		5.68	mg/L	0.10		70	130			A
Silver		0.00186	mg/L	0.0010	9	70	130			S
Thorium 232		0.0561	mg/L	0.0010	111	70	130			
Uranium		0.0571	mg/L	0.00030	110	70	130			
Vanadium		0.0535	mg/L	0.0010	106	70	130			
Zinc		0.126	mg/L	0.010	94	70	130			
Sample ID: C10110505-007BMSD4	19	Post Digestion Spike Duplicate				Run: SUB-C140353			11/30/10 03:17	
Aluminum		0.0708	mg/L	0.0010	94	70	130	1.0	20	
Arsenic		0.0552	mg/L	0.0010	109	70	130	1.1	20	
Barium		0.0643	mg/L	0.0010	107	70	130	2.8	20	
Boron		0.189	mg/L	0.10	60	70	130	4.6	20	S
Cadmium		0.0496	mg/L	0.010	98	70	130	0.2	20	
Chromium		0.0526	mg/L	0.050	105	70	130	1.2	20	
Copper		0.0537	mg/L	0.010	100	70	130	1.2	20	
Iron		7.24	mg/L	0.030		70	130	0.0	20	A
Lead		0.0540	mg/L	0.050	108	70	130	0.6	20	
Manganese		5.00	mg/L	0.010		70	130	0.2	20	A
Mercury		0.00451	mg/L	0.0010	90	70	130	7.7	20	
Molybdenum		0.0610	mg/L	0.0010	104	70	130	2.1	20	
Nickel		0.0979	mg/L	0.050	101	70	130	1.3	20	
Silicon		5.69	mg/L	0.10		70	130	0.1	20	A
Silver		0.00410	mg/L	0.0010	20	70	130	75	20	SR
Thorium 232		0.0569	mg/L	0.0010	113	70	130	1.4	20	
Uranium		0.0574	mg/L	0.00030	111	70	130	0.6	20	
Vanadium		0.0539	mg/L	0.0010	107	70	130	0.9	20	
Zinc		0.123	mg/L	0.010	89	70	130	2.0	20	
Sample ID: LRB	19	Method Blank				Run: SUB-C140353			11/29/10 19:01	
Silicon		0.04	mg/L	0.0005						
Aluminum		0.004	mg/L	8E-05						
Arsenic		ND	mg/L	4E-05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R140353A	
Sample ID: LRB	19	Method Blank				Run: SUB-C140353			11/29/10 19:01	
Barium		ND	mg/L	3E-05						
Boron		0.003	mg/L							
Cadmium		ND	mg/L	7E-05						
Chromium		ND	mg/L	5E-05						
Copper		ND	mg/L	6E-05						
Iron		0.0002	mg/L	0.0001						
Lead		ND	mg/L	2E-05						
Manganese		ND	mg/L	2E-05						
Mercury		5E-05	mg/L	2E-05						
Molybdenum		ND	mg/L	8E-05						
Nickel		ND	mg/L	5E-05						
Silver		ND	mg/L	8E-05						
Thorium 232		6E-05	mg/L	3E-05						
Uranium		ND	mg/L	8E-06						
Vanadium		ND	mg/L	1E-05						
Zinc		0.005	mg/L	0.0001						
Sample ID: LFB	20	Laboratory Fortified Blank				Run: SUB-C140353			11/29/10 19:08	
Silicon		0.573	mg/L	0.0050	102	85	115			
Aluminum		0.0524	mg/L	0.0010	97	85	115			
Arsenic		0.0519	mg/L	0.0010	104	85	115			
Barium		0.0526	mg/L	0.0010	105	85	115			
Boron		0.0518	mg/L	0.0010	98	85	115			
Cadmium		0.0524	mg/L	0.0010	105	85	115			
Chromium		0.0517	mg/L	0.0010	103	85	115			
Copper		0.0523	mg/L	0.0010	105	85	115			
Iron		1.30	mg/L	0.012	104	85	115			
Lead		0.0526	mg/L	0.0010	105	85	115			
Manganese		0.0525	mg/L	0.0010	105	85	115			
Mercury		0.00525	mg/L	0.0010	104	85	115			
Molybdenum		0.0502	mg/L	0.0010	100	85	115			
Nickel		0.0508	mg/L	0.0010	102	85	115			
Silver		0.0206	mg/L	0.0010	103	85	115			
Thorium 232		0.0516	mg/L	0.0010	103	85	115			
Uranium		0.0520	mg/L	0.00030	104	85	115			
Vanadium		0.0510	mg/L	0.0010	102	85	115			
Zinc		0.0543	mg/L	0.0010	98	85	115			
Silica		1.23	mg/L	0.011	115	85	115			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_28308
Sample ID: MB-28308	19	Method Blank				Run: SUB-C140415				11/30/10 13:28
Antimony		0.0010	mg/L	0.0003						
Arsenic		0.0004	mg/L	5E-05						
Barium		ND	mg/L	0.0002						
Beryllium		ND	mg/L	3E-05						
Boron		ND	mg/L	0.003						
Cadmium		8E-05	mg/L	4E-05						
Chromium		0.0003	mg/L	3E-05						
Copper		0.002	mg/L	5E-05						
Iron		ND	mg/L	0.001						
Lead		8E-05	mg/L	5E-05						
Manganese		0.0002	mg/L	2E-05						
Molybdenum		0.0002	mg/L	0.00010						
Nickel		ND	mg/L	4E-05						
Selenium		0.0001	mg/L	3E-05						
Silver		0.0003	mg/L	4E-05						
Strontium		ND	mg/L	6E-05						
Thallium		0.0007	mg/L	0.0001						
Uranium		ND	mg/L	4E-05						
Zinc		0.001	mg/L	0.001						
Sample ID: LCS3-28308	19	Laboratory Control Sample				Run: SUB-C140415				11/30/10 13:35
Antimony		0.602	mg/L	0.050	120	85	115			S
Arsenic		0.497	mg/L	0.0010	99	85	115			
Barium		0.526	mg/L	0.10	105	85	115			
Beryllium		0.258	mg/L	0.010	103	85	115			
Boron		0.520	mg/L	0.10	104	85	115			
Cadmium		0.275	mg/L	0.010	110	85	115			
Chromium		0.483	mg/L	0.050	97	85	115			
Copper		0.497	mg/L	0.010	99	85	115			
Iron		2.51	mg/L	0.030	100	85	115			
Lead		0.518	mg/L	0.050	104	85	115			
Manganese		2.48	mg/L	0.010	99	85	115			
Molybdenum		0.545	mg/L	0.10	109	85	115			
Nickel		0.489	mg/L	0.050	98	85	115			
Selenium		0.530	mg/L	0.0010	106	85	115			
Silver		0.0536	mg/L	0.010	107	85	115			
Strontium		0.492	mg/L	0.10	98	85	115			
Thallium		0.504	mg/L	0.10	101	85	115			
Uranium		0.537	mg/L	0.00030	107	85	115			
Zinc		0.521	mg/L	0.010	104	85	115			
- Response is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.										
Sample ID: C10110772-010BMS3	19	Sample Matrix Spike				Run: SUB-C140415				11/30/10 14:23
Antimony		0.560	mg/L	0.050	112	70	130			
Arsenic		0.536	mg/L	0.0010	90	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_28308	
Sample ID: C10110772-010BMS3	19	Sample Matrix Spike				Run: SUB-C140415			11/30/10 14:23	
Barium		0.511	mg/L	0.10	98	70	130			
Beryllium		0.204	mg/L	0.010	82	70	130			
Boron		0.951	mg/L	0.10	81	70	130			
Cadmium		0.241	mg/L	0.010	95	70	130			
Chromium		0.446	mg/L	0.050	89	70	130			
Copper		0.437	mg/L	0.010	86	70	130			
Iron		2.32	mg/L	0.030	92	70	130			
Lead		0.484	mg/L	0.050	97	70	130			
Manganese		2.45	mg/L	0.010	89	70	130			
Molybdenum		3.39	mg/L	0.10		70	130			A
Nickel		0.431	mg/L	0.050	86	70	130			
Selenium		0.447	mg/L	0.0010	89	70	130			
Silver		0.0455	mg/L	0.010	90	70	130			
Strontium		2.21	mg/L	0.10	73	70	130			
Thallium		0.468	mg/L	0.10	93	70	130			
Uranium		2.56	mg/L	0.00030		70	130			A
Zinc		0.453	mg/L	0.010	88	70	130			
Sample ID: C10110772-010BMSD3	19	Sample Matrix Spike Duplicate				Run: SUB-C140415			11/30/10 14:30	
Antimony		0.596	mg/L	0.050	119	70	130	6.2	20	
Arsenic		0.544	mg/L	0.0010	92	70	130	1.5	20	
Barium		0.536	mg/L	0.10	103	70	130	4.8	20	
Beryllium		0.217	mg/L	0.010	87	70	130	5.8	20	
Boron		0.987	mg/L	0.10	88	70	130	3.7	20	
Cadmium		0.253	mg/L	0.010	100	70	130	4.9	20	
Chromium		0.450	mg/L	0.050	90	70	130	1.0	20	
Copper		0.439	mg/L	0.010	87	70	130	0.4	20	
Iron		2.46	mg/L	0.030	97	70	130	5.6	20	
Lead		0.508	mg/L	0.050	102	70	130	4.8	20	
Manganese		2.54	mg/L	0.010	93	70	130	3.4	20	
Molybdenum		3.47	mg/L	0.10		70	130	2.4	20	A
Nickel		0.432	mg/L	0.050	86	70	130	0.1	20	
Selenium		0.478	mg/L	0.0010	95	70	130	6.7	20	
Silver		0.0481	mg/L	0.010	95	70	130	5.7	20	
Strontium		2.26	mg/L	0.10	84	70	130	2.4	20	
Thallium		0.491	mg/L	0.10	98	70	130	4.8	20	
Uranium		2.67	mg/L	0.00030		70	130	4.0	20	A
Zinc		0.459	mg/L	0.010	89	70	130	1.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc **Report Date:** 01/05/11

Project: Dewey Groundwater Sampling **Work Order:** R10110179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: SUB-C140426	
Sample ID: ICV		Initial Calibration Verification Standard							11/30/10 11:59	
Uranium		0.0514	mg/L	0.00030	103	90	110			
Method: E200.8									Batch: C_28303	
Sample ID: MB-28303		Method Blank				Run: SUB-C140426			11/30/10 16:55	
Uranium		0.0002	mg/L	6E-05						
Sample ID: LCS2-28303		Laboratory Control Sample				Run: SUB-C140426			11/30/10 16:59	
Uranium		0.102	mg/L	0.00030	102	85	115			
Sample ID: R10110179-003I		Post Digestion Spike				Run: SUB-C140426			11/30/10 17:37	
Uranium		0.0130	mg/L	0.00030	102	70	130			
Sample ID: R10110179-003I		Post Digestion Spike Duplicate				Run: SUB-C140426			11/30/10 17:41	
Uranium		0.0132	mg/L	0.00030	103	70	130	1.4	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B157434	
Sample ID: QCS		Initial Calibration Verification Standard							11/18/10 14:41	
Mercury		0.0018	mg/L	0.0010	91	90	110			
Method: E245.1									Batch: B_50582	
Sample ID: MB-50582		Method Blank				Run: SUB-B157434			11/18/10 14:49	
Mercury		6E-05	mg/L	1E-05						
Sample ID: LCS-50582		Laboratory Control Sample				Run: SUB-B157434			11/18/10 14:52	
Mercury		0.0019	mg/L	0.0010	91	85	115			
Sample ID: R10110177-006D		Sample Matrix Spike				Run: SUB-B157434			11/18/10 15:18	
Mercury		0.0018	mg/L	0.0010	86	70	130			
Sample ID: R10110177-006D		Sample Matrix Spike Duplicate				Run: SUB-B157434			11/18/10 15:20	
Mercury		0.0018	mg/L	0.0010	86	70	130	0.0	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0										Batch: R49128
Sample ID: LFB111610-14	5	Laboratory Fortified Blank				Run: DIONEX_101116A			11/16/10 21:44	
Chloride		38.1	mg/L	1.00	95	90	110			
Fluoride		3.87	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N		3.93	mg/L	0.10	98	90	110			
Nitrogen, Nitrite as N		4.00	mg/L	0.10	100	90	110			
Sulfate		37.4	mg/L	1.0	93	90	110			
Sample ID: R10110179-001AMS	5	Sample Matrix Spike				Run: DIONEX_101116A			11/16/10 22:19	
Chloride		389	mg/L	10.0	88	90	110			S
Fluoride		39.0	mg/L	1.0	91	90	110			
Nitrogen, Nitrate as N		39.6	mg/L	1.0	99	90	110			
Nitrogen, Nitrite as N		40.2	mg/L	1.0	101	90	110			
Sulfate		909	mg/L	10	90	90	110			
Sample ID: R10110179-001AMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_101116A			11/16/10 22:37	
Chloride		390	mg/L	10.0	89	90	110	0.3	10	S
Fluoride		39.0	mg/L	1.0	91	90	110	0.1	10	
Nitrogen, Nitrate as N		39.5	mg/L	1.0	99	90	110	0.2	10	
Nitrogen, Nitrite as N		40.3	mg/L	1.0	101	90	110	0.0	10	
Sulfate		912	mg/L	10	91	90	110	0.4	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-1012	
Sample ID: MB-GrAB-1012	6	Method Blank				Run: SUB-C140538			12/02/10 21:27	
Gross Alpha		-2	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.9	pCi/L							
Gross Beta		-2	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-1012		Laboratory Control Sample				Run: SUB-C140538			12/02/10 21:27	
Gross Alpha		110	pCi/L		110	70	130			
Sample ID: Cs137-GrAB-1012		Laboratory Control Sample				Run: SUB-C140538			12/02/10 21:28	
Gross Beta		83	pCi/L		96	70	130			
Sample ID: R10110179-001H	6	Sample Duplicate				Run: SUB-C140538			12/02/10 21:28	
Gross Alpha		-5.3	pCi/L					260	189.6	UR
Gross Alpha precision (±)		3.2	pCi/L							
Gross Alpha MDC		6.0	pCi/L							
Gross Beta		4.1	pCi/L					89	92.1	U
Gross Beta precision (±)		3.3	pCi/L							
Gross Beta MDC		5.3	pCi/L							
- For Gross Alpha the Sample and the Duplicate are both below the MDC; the RPD is acceptable.										
Sample ID: C10110899-001FMS		Sample Matrix Spike				Run: SUB-C140538			12/03/10 09:38	
Gross Alpha		2930	pCi/L		344	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.										
Sample ID: C10110899-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C140538			12/03/10 09:38	
Gross Alpha		2840	pCi/L		259	70	130	3.2	11.9	S
Sample ID: C10110899-001FMS		Sample Matrix Spike				Run: SUB-C140538			12/03/10 09:38	
Gross Beta		530	pCi/L		143	70	130			S
- Sample response is much larger than spike amount, therefore small variances in the sample adversely affected the recovery. The LCS and the RPD of the MS/MSD pair meets acceptance criteria; this batch is approved.										
Sample ID: C10110899-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C140538			12/03/10 09:38	
Gross Beta		515	pCi/L		126	70	130	2.9	12.2	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-1020	
Sample ID: MB-GrAB-1020	6	Method Blank				Run: SUB-C141090			12/18/10 02:02	
Gross Alpha		-0.2	pCi/L							U
Gross Alpha precision (±)		0.8	pCi/L							
Gross Alpha MDC		0.9	pCi/L							
Gross Beta		-0.5	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		2	pCi/L							
Sample ID: Th230-GrAB-1020		Laboratory Control Sample				Run: SUB-C141090			12/18/10 02:02	
Gross Alpha		100	pCi/L		98	70	130			
Sample ID: Cs137-GrAB-1020		Laboratory Control Sample				Run: SUB-C141090			12/18/10 02:02	
Gross Beta		86	pCi/L		97	70	130			
Sample ID: C10120299-001DMS		Sample Matrix Spike				Run: SUB-C141090			12/18/10 02:02	
Gross Alpha		110	pCi/L		108	70	130			
Sample ID: C10120299-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C141090			12/18/10 02:02	
Gross Alpha		110	pCi/L		108	70	130	0.0	17.4	
Sample ID: C10120299-001DMS		Sample Matrix Spike				Run: SUB-C141090			12/18/10 02:02	
Gross Beta		90	pCi/L		98	70	130			
Sample ID: C10120299-001DMSD		Sample Matrix Spike Duplicate				Run: SUB-C141090			12/18/10 02:02	
Gross Beta		94	pCi/L		103	70	130	4.9	15.9	
Sample ID: C10120455-001EDUP	6	Sample Duplicate				Run: SUB-C141090			12/20/10 22:38	
Gross Alpha		-6.32	pCi/L					9.1	91	U
Gross Alpha precision (±)		2.69	pCi/L							
Gross Alpha MDC		5.30	pCi/L							
Gross Beta		-0.648	pCi/L					140	880.2	U
Gross Beta precision (±)		2.02	pCi/L							
Gross Beta MDC		3.42	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R140453
Sample ID: LCS-R140453	3	Laboratory Control Sample				Run: SUB-C140453				11/18/10 15:20
Americium 241		670	pCi/L	50	82	70	130			
Cesium 137		990	pCi/L	50	99	70	130			
Potassium 40		6500	pCi/L	50	98	70	130			
Sample ID: MB-R140453	23	Method Blank				Run: SUB-C140453				11/18/10 15:20
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		500	pCi/L							
Thorium 234 precision (±)		80	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		500	pCi/L							
Gross Gamma precision (±)		80	pCi/L							
- See Case Narrative regarding Gross Gamma analysis.										
Sample ID: R10110179-003H	23	Sample Duplicate				Run: SUB-C140453				11/18/10 15:20
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R140453
Sample ID: R10110179-003H	23	Sample Duplicate				Run: SUB-C140453				11/18/10 15:20
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		470	pCi/L	50				17	30	
Thorium 234 precision (±)		160	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		470	pCi/L					17	30	
Gross Gamma precision (±)		160	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-5019	
Sample ID: C10110690-007EMS		Sample Matrix Spike				Run: SUB-C140374			11/29/10 17:41	
Radium 226		15	pCi/L		86	70	130			
Sample ID: C10110690-007EMSD		Sample Matrix Spike Duplicate				Run: SUB-C140374			11/29/10 17:41	
Radium 226		15	pCi/L		87	70	130	1.7	20.4	
Sample ID: MB-RA226-5019	3	Method Blank				Run: SUB-C140374			11/29/10 21:30	
Radium 226		0.07	pCi/L							U
Radium 226 precision (±)		0.05	pCi/L							
Radium 226 MDC		0.07	pCi/L							
Sample ID: LCS-RA226-5019		Laboratory Control Sample				Run: SUB-C140374			11/29/10 21:30	
Radium 226		7.5	pCi/L		93	70	130			
Method: E903.0									Batch: C_28303	
Sample ID: R10110179-003I		Sample Matrix Spike				Run: SUB-C140646			12/06/10 16:46	
Radium 226		18	pCi/L		95	70	130			
Sample ID: R10110179-003I		Sample Matrix Spike Duplicate				Run: SUB-C140646			12/06/10 16:46	
Radium 226		21	pCi/L		108	70	130	13	19.9	
Sample ID: MB-28303	3	Method Blank				Run: SUB-C140646			12/06/10 16:46	
Radium 226		0.3	pCi/L							
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-28303		Laboratory Control Sample				Run: SUB-C140646			12/06/10 16:46	
Radium 226		11	pCi/L		70	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc

Report Date: 01/05/11

Project: Dewey Groundwater Sampling

Work Order: R10110179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_PB-210-0071
Sample ID: TAP WATERMSD		Laboratory Fortified Blank Duplicate				Run: SUB-T38878				02/11/11 04:01
Lead 210		55	pCi/L		104	70	130	2.0	15.4	
Sample ID: TAP WATERMS		Laboratory Fortified Blank				Run: SUB-T38878				02/11/11 01:50
Lead 210		57	pCi/L		106	70	130			
Sample ID: TAP WATER	3	Method Blank				Run: SUB-T38878				02/10/11 23:38
Lead 210		-0.78	pCi/L			0	0			U
Lead 210 precision (±)		0.79	pCi/L			0	0			
Lead 210 MDC		1.4	pCi/L			0	0			
Sample ID: LCS-PB-210-0071		Laboratory Control Sample				Run: SUB-T38878				02/10/11 21:27
Lead 210		58	pCi/L		106	70	130			
Sample ID: MB-PB-210-0071	3	Method Blank				Run: SUB-T38878				02/10/11 17:04
Lead 210		0.09	pCi/L							U
Lead 210 precision (±)		0.8	pCi/L							
Lead 210 MDC		1	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 01/05/11
Work Order: R10110179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0										Batch: C_PO210-0328
Sample ID: C10110614-004DMS		Sample Matrix Spike				Run: SUB-C140360				11/29/10 09:17
Polonium 210		27	pCi/L		76	70	130			
Sample ID: C10110614-004DMSD		Sample Matrix Spike Duplicate				Run: SUB-C140360				11/29/10 09:17
Polonium 210		28	pCi/L		79	70	130	4.0	56.6	
Sample ID: MB-PO210-0328	3	Method Blank				Run: SUB-C140360				11/29/10 09:17
Polonium 210		0.3	pCi/L							U
Polonium 210 MDC		0.7	pCi/L							
Polonium 210 precision (±)		0.5	pCi/L							
Sample ID: LCS-PO210-0328		Laboratory Control Sample				Run: SUB-C140360				11/29/10 09:17
Polonium 210		13	pCi/L		77	70	130			
Method: E912.0										Batch: C_28303
Sample ID: R10110179-001I		Sample Matrix Spike				Run: SUB-C140443				12/01/10 09:34
Polonium 210		37	pCi/L		95	70	130			
Sample ID: R10110179-001I		Sample Matrix Spike Duplicate				Run: SUB-C140443				12/01/10 09:34
Polonium 210		38	pCi/L		99	70	130	3.4	56.4	
Sample ID: LCS-28303		Laboratory Control Sample				Run: SUB-C140443				12/01/10 09:34
Polonium 210		70	pCi/L		93	70	130			
Sample ID: MB-28303	3	Method Blank				Run: SUB-C140443				12/01/10 09:34
Polonium 210		-0.1	pCi/L							U
Polonium 210 precision (±)		1	pCi/L							
Polonium 210 MDC		3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page _____ of _____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Env.	Project Name, PWS, Permit, Etc. Powertech, Inc. Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Scott Env. Powertech	Contact Name: Allen Scott Phone/Fax:	Email:	Sampler: (Please Print)
Invoice Address: Powertech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

a spor auto

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped By: hand del
Cooler ID(s):
Receipt Temp 3-2 °C
On Ice: Y N
Custody Seal
On Bottle Y N
On Cooler Y N
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	LABORATORY USE ONLY
705	1 DB-09-21-01	11-15-10		Water	R1011179-001
706	2 DB-09-21-02	11-15-10		"	002
706	3 DB-09-21-02 Dup	11-15-10		"	003
	4				
	5				
	6				
	7				
	8				
	9				
	10				

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	11-15-10 3:50pm				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Underwood	Date/Time: 11/15/10 1550	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 14, 2011

Powertech USA Inc
PO Box 812
Edgemont, SD 57735

Workorder No.: R10120179

Project Name: Dewey Groundwater Sampling

Energy Laboratories Inc. Rapid City SD received the following 2 samples for Powertech USA Inc on 12/15/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
R10120179-001	DB-09-21-01	12/14/10 0:00	12/15/10	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Suspended Metals by ICP/ICPMS, Total Alkalinity Anion - Cation Balance Conductivity Mercury, Total Selenium, Dissolved Selenium, Dissolved Selenium, Dissolved Anions by Ion Chromatography Nitrogen, Ammonia Oxidation Reduction Potential pH Digestion, Total Metals Digestion, Total Metals Dissolved Filtration Digestion, Mercury by CVAA Gross Alpha, Gross Beta Gross Gamma, Dissolved Lead 210, Dissolved Lead 210, Suspended Polonium 210, Dissolved Polonium 210, Suspended Radium 226, Dissolved Radium 226, Suspended Radon 222 Thorium, Isotopic Thorium, Suspended Isotopic Sodium Adsorption Ratio Solids, Total Dissolved
R10120179-002	DB-09-21-02	12/14/10 0:00	12/15/10	Aqueous	Same As Above

This report was prepared by Energy Laboratories, Inc., 2821 Plant St., Rapid City, SD 57702. As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

Linda K. Larson
Branch Manager

Digitally signed by Linda Larson
Date: 2011.02.15 09:37:15 -07:00

CLIENT: Powertech USA Inc
Project: Dewey Groundwater Sampling
Sample Delivery Group: R10120179

Revised Date: 02/14/11
Report Date: 02/01/11

CASE NARRATIVE

Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002 and WY00937.

Comments imported for SUBBED Workorder: C10120584
RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as recommended by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

GROSS GAMMA ANALYSIS
The gamma spectrometry software has identified Thorium 234 as a potential component of this sample. The value generated by the software has been reported here. However, the Thorium 234 gamma ray peaks reside in the middle of excessive background contributions from Compton scatter, x-rays from thorium, and interfering gamma ray peaks from other naturally occurring radionuclides present in the metal can and sample. This means that the value for Thorium 234 likely has a positive bias. The only method to determine the actual concentration of Th-234 would be by radiochemical separation of thorium and gamma spectrometric analysis on the isolate thorium fraction.
End of comments imported for SUBBED Workorder: C10120584
Comments imported for SUBBED Workorder: C10120584
RA226 ANALYSIS
The sample specific Minimum Detectable Concentration (MDC) as recommended by USNRC Regulatory Guide 4.14 could not be achieved due to significant matrix interferences, restricting the volume of sample to be used in the analysis. Please consult with your local regulatory agency prior to using these results for compliance purposes.

GROSS GAMMA ANALYSIS
The gamma spectrometry software has identified Thorium 234 as a potential component of this sample. The value generated by the software has been reported here. However, the Thorium 234 gamma ray peaks reside in the middle of excessive background contributions from Compton scatter, x-rays from thorium, and interfering gamma ray peaks from other naturally occurring radionuclides present in the metal can and sample. This means that the value for Thorium 234 likely has a positive bias. The only method to determine the actual concentration of Th-234 would be by radiochemical separation of thorium and gamma spectrometric analysis on the isolate thorium fraction.
End of comments imported for SUBBED Workorder: C10120584

Re-analysis done on SeVI. Initial results determined to be due to possible contamination in prep. Final results are in revised report.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Collection Date: 12/14/10
Date Received: 12/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10120179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	12/20/10 15:08/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/20/10 15:08/hv
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	12/20/10 15:08/hv
Calcium	95.8	mg/L		0.5		2	E200.7	12/22/10 18:59/eli-c
Chloride	8	mg/L		1		1	E300.0	12/16/10 23:25/tb
Fluoride	0.4	mg/L		0.1		1	E300.0	12/16/10 23:25/tb
Magnesium	34.4	mg/L		0.5		2	E200.7	12/22/10 18:59/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1		1	A4500-NH3 G	12/28/10 12:17/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	12/16/10 23:25/tb
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	12/16/10 23:25/tb
Potassium	11.7	mg/L		0.5		2	E200.7	12/22/10 18:59/eli-c
Sodium	163	mg/L	D	0.6		2	E200.7	12/22/10 18:59/eli-c
Sulfate	538	mg/L	D	10		10	E300.0	12/16/10 23:07/tb
Silica	10.4	mg/L		0.2		2	E200.7	01/17/11 12:46/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1350	umhos/cm		5.0		1	A2510 B	12/21/10 09:35/tb
Oxidation-Reduction Potential	190	mV				1	A2580 B	12/21/10 16:30/jmh
pH	7.59	s.u.		0.01		1	A4500-H B	12/15/10 14:07/hv
Sodium Adsorption Ratio (SAR)	3.6	unitless		0.10		1	Calculation	01/18/11 16:25/ADM
Solids, Total Dissolved TDS @ 180 C	990	mg/L	D	10		1	A2540 C	12/15/10 16:32/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	12/22/10 18:59/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	12/28/10 08:51/eli-c
Barium	ND	mg/L		0.1		2	E200.7	12/22/10 18:59/eli-c
Boron	ND	mg/L		0.1		2	E200.7	12/22/10 18:59/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	12/22/10 18:59/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	12/22/10 18:59/eli-c
Copper	ND	mg/L		0.01		2	E200.7	12/22/10 18:59/eli-c
Iron	0.03	mg/L		0.03		2	E200.7	12/22/10 18:59/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/28/10 08:51/eli-c
Manganese	0.05	mg/L		0.01		2	E200.7	12/22/10 18:59/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/28/10 08:51/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	12/22/10 18:59/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	12/22/10 18:59/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/04/11 13:04/eli-c
Silver	ND	mg/L		0.005		2	E200.7	12/22/10 18:59/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/13/11 21:27/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Collection Date: 12/14/10
Date Received: 12/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10120179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	ND	mg/L		0.0003		1	E200.8	12/28/10 08:51/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	12/22/10 18:59/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	12/22/10 18:59/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	01/06/11 02:05/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/04/11 11:24/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	02/04/11 13:53/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	-0.3	pCi/L	U			1	E900.0	01/04/11 22:52/eli-ca
Gross Alpha precision (±)	3.3	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Alpha MDC	5.6	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta	11.0	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta precision (±)	4.2	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta MDC	6.6	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Lead 210	-0.2	pCi/L	U			1	E909.0	01/03/11 15:01/eli-cs
Lead 210 precision (±)	0.8	pCi/L				1	E909.0	01/03/11 15:01/eli-cs
Lead 210 MDC	1.4	pCi/L				1	E909.0	01/03/11 15:01/eli-cs
Polonium 210	0.10	pCi/L	U			1	E912.0	01/05/11 11:54/eli-ca
Polonium 210 MDC	0.66	pCi/L				1	E912.0	01/05/11 11:54/eli-ca
Polonium 210 precision (±)	0.34	pCi/L				1	E912.0	01/05/11 11:54/eli-ca
Radium 226	1.9	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Thorium 230	0.05	pCi/L	U			1	E908.0	01/09/11 13:55/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E908.0	01/09/11 13:55/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E908.0	01/09/11 13:55/eli-c
Gross Gamma	390	pCi/L				1	E901.1	12/22/01 06:10/eli-c
Gross Gamma precision (±)	130	pCi/L				1	E901.1	12/22/01 06:10/eli-c
- See Case Narrative regarding Gross Gamma analysis.								
RADIONUCLIDES - SUSPENDED								
Lead 210	0.6	pCi/L	U			1	E909.0	01/06/11 17:33/eli-cs
Lead 210 precision (±)	1.7	pCi/L				1	E909.0	01/06/11 17:33/eli-cs
Lead 210 MDC	2.8	pCi/L				1	E909.0	01/06/11 17:33/eli-cs
Polonium 210	0.0	pCi/L	U			1	E912.0	01/30/11 12:31/eli-ca
Polonium 210 precision (±)	0.25	pCi/L				1	E912.0	01/30/11 12:31/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Collection Date: 12/14/10
Date Received: 12/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10120179-001
Client Sample ID: DB-09-21-01

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Polonium 210 MDC	0.61	pCi/L				1	E912.0	01/30/11 12:31/eli-ca
Radium 226	-0.2	pCi/L	U			1	E903.0	01/03/11 12:21/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	01/03/11 12:21/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	01/03/11 12:21/eli-c
Thorium 230	-0.2	pCi/L	U			1	E908.0	01/02/11 13:19/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E908.0	01/02/11 13:19/eli-c
Thorium 230 precision (±)	0.08	pCi/L				1	E908.0	01/02/11 13:19/eli-c
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	269	pCi/L		100		1	D5072-92	12/16/10 16:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	01/04/11 17:55/eli-c
Arsenic	0.003	mg/L	B	0.001		1	E200.8	12/30/10 15:13/eli-c
Barium	ND	mg/L		0.1		1	E200.7	12/28/10 16:13/eli-c
Beryllium	ND	mg/L		0.001		1	E200.7	12/28/10 16:13/eli-c
Boron	ND	mg/L		0.1		1	E200.7	12/28/10 16:13/eli-c
Cadmium	ND	mg/L		0.005		1	E200.7	12/28/10 16:13/eli-c
Chromium	ND	mg/L		0.05		1	E200.7	12/28/10 16:13/eli-c
Copper	ND	mg/L		0.01		1	E200.7	12/28/10 16:13/eli-c
Iron	0.20	mg/L		0.03		1	E200.7	12/28/10 16:13/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/30/10 15:13/eli-c
Manganese	0.05	mg/L		0.01		1	E200.7	12/28/10 16:13/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	12/20/10 16:53/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.7	12/28/10 16:13/eli-c
Nickel	ND	mg/L		0.05		1	E200.7	12/28/10 16:13/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	01/06/11 04:24/eli-c
Silver	ND	mg/L		0.005		1	E200.7	12/28/10 16:13/eli-c
Strontium	2.7	mg/L		0.1		1	E200.7	12/28/10 16:13/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	12/30/10 15:13/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	01/04/11 17:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.7	12/28/10 16:13/eli-c
DATA QUALITY								
A/C Balance (± 5)	0.940	%				1	A1030 E	01/24/11 00:00/jmh
Anions	14.8	meq/L				1	A1030 E	01/24/11 00:00/jmh
Cations	15.0	meq/L				1	A1030 E	01/24/11 00:00/jmh
Solids, Total Dissolved Calculated	979	mg/L				1	A1030 E	01/24/11 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01					1	A1030 E	01/24/11 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Collection Date: 12/14/10
Date Received: 12/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10120179-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
MAJOR IONS								
Alkalinity, Total as CaCO3	194	mg/L		5		1	A2320 B	12/20/10 15:12/hv
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/20/10 15:12/hv
Bicarbonate as HCO3	236	mg/L		5		1	A2320 B	12/20/10 15:12/hv
Calcium	167	mg/L		0.5		2	E200.7	12/22/10 19:03/eli-c
Chloride	10	mg/L		1		1	E300.0	12/17/10 00:00/tb
Fluoride	0.6	mg/L		0.1		1	E300.0	12/17/10 00:00/tb
Magnesium	47.8	mg/L		0.5		2	E200.7	12/22/10 19:03/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/28/10 12:20/hv
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	12/17/10 00:00/tb
Nitrogen, Nitrite as N	ND	mg/L		0.1		1	E300.0	12/17/10 00:00/tb
Potassium	11.9	mg/L		0.5		2	E200.7	12/22/10 19:03/eli-c
Sodium	128	mg/L	D	0.6		2	E200.7	12/22/10 19:03/eli-c
Sulfate	682	mg/L	D	10		10	E300.0	12/16/10 23:43/tb
Silica	9.3	mg/L		0.2		2	E200.7	01/17/11 12:58/eli-c
PHYSICAL PROPERTIES								
Conductivity @ 25 C	1540	umhos/cm		5.0		1	A2510 B	12/21/10 09:39/tb
Oxidation-Reduction Potential	200	mV				1	A2580 B	12/21/10 16:30/jmh
pH	7.30	s.u.		0.01		1	A4500-H B	12/15/10 14:12/hv
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.10		1	Calculation	01/18/11 16:25/ADM
Solids, Total Dissolved TDS @ 180 C	1200	mg/L	D	10		1	A2540 C	12/15/10 16:33/jmh
METALS - DISSOLVED								
Aluminum	ND	mg/L		0.1		2	E200.7	12/22/10 19:03/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	12/28/10 08:58/eli-c
Barium	ND	mg/L		0.1		2	E200.7	12/22/10 19:03/eli-c
Boron	ND	mg/L		0.1		2	E200.7	12/22/10 19:03/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	12/22/10 19:03/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	12/22/10 19:03/eli-c
Copper	ND	mg/L		0.01		2	E200.7	12/22/10 19:03/eli-c
Iron	ND	mg/L		0.03		2	E200.7	12/22/10 19:03/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/28/10 08:58/eli-c
Manganese	0.58	mg/L		0.01		2	E200.7	12/22/10 19:03/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/28/10 08:58/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	12/22/10 19:03/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	12/22/10 19:03/eli-c
Selenium	0.002	mg/L		0.001		1	A3114 B	02/04/11 13:06/eli-c
Silver	ND	mg/L		0.005		2	E200.7	12/22/10 19:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/13/11 21:31/eli-c

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Collection Date: 12/14/10
Date Received: 12/15/10
Matrix: AQUEOUS

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling
Lab ID: R10120179-002
Client Sample ID: DB-09-21-02

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
METALS - DISSOLVED								
Uranium	0.0083	mg/L		0.0003		1	E200.8	12/28/10 08:58/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	12/22/10 19:03/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	12/22/10 19:03/eli-c
METALS - SUSPENDED								
Uranium	ND	mg/L		0.0003		1	E200.8	01/06/11 02:09/eli-c
METALS - SPECIATED								
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/04/11 11:26/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	02/04/11 13:53/eli-c
RADIONUCLIDES - DISSOLVED								
Gross Alpha	18.2	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Alpha precision (±)	5.0	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Alpha MDC	6.6	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta	22.4	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta precision (±)	5.0	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Gross Beta MDC	7.7	pCi/L				1	E900.0	01/04/11 22:52/eli-ca
Lead 210	-0.8	pCi/L	U			1	E909.0	01/03/11 21:35/eli-cs
Lead 210 precision (±)	0.8	pCi/L				1	E909.0	01/03/11 21:35/eli-cs
Lead 210 MDC	1.4	pCi/L				1	E909.0	01/03/11 21:35/eli-cs
Polonium 210	0.096	pCi/L	U			1	E912.0	01/05/11 11:54/eli-ca
Polonium 210 MDC	0.62	pCi/L				1	E912.0	01/05/11 11:54/eli-ca
Polonium 210 precision (±)	0.32	pCi/L				1	E912.0	01/05/11 11:54/eli-ca
Radium 226	2.5	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	12/29/10 22:07/eli-c
Thorium 230	0.04	pCi/L	U			1	E908.0	01/09/11 13:55/eli-c
Thorium 230 MDC	0.1	pCi/L				1	E908.0	01/09/11 13:55/eli-c
Thorium 230 precision (±)	0.07	pCi/L				1	E908.0	01/09/11 13:55/eli-c
Gross Gamma	<162.4	pCi/L	U			1	E901.1	12/22/01 06:10/eli-c
RADIONUCLIDES - SUSPENDED								
Lead 210	0.3	pCi/L	U			1	E909.0	01/07/11 00:08/eli-cs
Lead 210 precision (±)	1.5	pCi/L				1	E909.0	01/07/11 00:08/eli-cs
Lead 210 MDC	2.5	pCi/L				1	E909.0	01/07/11 00:08/eli-cs
Polonium 210	0.0	pCi/L	U			1	E912.0	01/30/11 12:31/eli-ca
Polonium 210 precision (±)	0.27	pCi/L				1	E912.0	01/30/11 12:31/eli-ca
Polonium 210 MDC	0.66	pCi/L				1	E912.0	01/30/11 12:31/eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc
Report Date: 02/01/11
Project: Dewey Groundwater Sampling
Collection Date: 12/14/10
Lab ID: R10120179-002
Date Received: 12/15/10
Client Sample ID: DB-09-21-02
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
RADIONUCLIDES - SUSPENDED								
Radium 226	-0.1	pCi/L	U			1	E903.0	01/03/11 12:21/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	01/03/11 12:21/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	01/03/11 12:21/eli-c
Thorium 230	-0.1	pCi/L	U			1	E908.0	01/02/11 13:19/eli-c
Thorium 230 MDC	0.2	pCi/L				1	E908.0	01/02/11 13:19/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E908.0	01/02/11 13:19/eli-c
- See Case Narrative regarding Ra226 analysis.								
RADIONUCLIDES - TOTAL								
Radon 222	241	pCi/L		100		1	D5072-92	12/16/10 16:27/eli-c
TOTAL METALS ANALYSES								
Antimony	ND	mg/L		0.003		1	E200.8	12/28/10 09:32/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	12/28/10 09:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/28/10 09:32/eli-c
Beryllium	ND	mg/L		0.001		1	E200.8	12/28/10 09:32/eli-c
Boron	ND	mg/L		0.1		2	E200.7	12/28/10 16:45/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/28/10 09:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	12/28/10 09:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	12/28/10 09:32/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	12/28/10 16:45/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/28/10 09:32/eli-c
Manganese	0.52	mg/L		0.01		1	E200.8	12/28/10 09:32/eli-c
Mercury	ND	mg/L		0.001		1	E245.1	12/20/10 16:54/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	12/28/10 09:32/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	12/28/10 09:32/eli-c
Selenium	ND	mg/L		0.001		1	E200.8	12/28/10 09:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	12/28/10 09:32/eli-c
Strontium	2.2	mg/L		0.1		1	E200.8	12/28/10 09:32/eli-c
Thallium	ND	mg/L		0.001		1	E200.8	12/28/10 09:32/eli-c
Uranium	0.0084	mg/L		0.0003		1	E200.8	12/28/10 09:32/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	12/28/10 09:32/eli-c
DATA QUALITY								
A/C Balance (± 5)	-0.560	%				1	A1030 E	01/24/11 00:00/jmh
Anions	18.4	meq/L				1	A1030 E	01/24/11 00:00/jmh
Cations	18.2	meq/L				1	A1030 E	01/24/11 00:00/jmh
Solids, Total Dissolved Calculated	1190	mg/L				1	A1030 E	01/24/11 00:00/jmh
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	01/24/11 00:00/jmh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: 101220A-ALK-SEL-W	
Sample ID: LCS1_101220A		Laboratory Control Sample				Run: PH_COND1-R_101220A			12/20/10 11:29	
Alkalinity, Total as CaCO3		964	mg/L	5.0	96	90	110			
Sample ID: MBLK1_101220A		Method Blank				Run: PH_COND1-R_101220A			12/20/10 11:34	
Alkalinity, Total as CaCO3		ND	mg/L	7						
Sample ID: R10120199-002AMS		Sample Matrix Spike				Run: PH_COND1-R_101220A			12/20/10 15:24	
Alkalinity, Total as CaCO3		136	mg/L	5.0	98	80	120			
Sample ID: R10120199-002AMSD		Sample Matrix Spike Duplicate				Run: PH_COND1-R_101220A			12/20/10 15:27	
Alkalinity, Total as CaCO3		136	mg/L	5.0	98	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B									Batch: 101221_2_COND-PROBE-W	
Sample ID: LCS1-1_101221		Laboratory Control Sample				Run: PH_COND2-R_101221B			12/21/10 09:26	
Conductivity @ 25 C		149	umhos/cm	5.0	99	90	110			
Sample ID: LCS_COND-1_101221		Laboratory Control Sample				Run: PH_COND2-R_101221B			12/21/10 09:28	
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Sample ID: LCS2-1_101221		Laboratory Control Sample				Run: PH_COND2-R_101221B			12/21/10 09:30	
Conductivity @ 25 C		5000	umhos/cm	5.0	100	90	110			
Sample ID: MBLK-1_101221		Method Blank				Run: PH_COND2-R_101221B			12/21/10 09:33	
Conductivity @ 25 C		ND	umhos/cm	5						
Sample ID: R10120179-001ADUP		Sample Duplicate				Run: PH_COND2-R_101221B			12/21/10 09:37	
Conductivity @ 25 C		1350	umhos/cm	5.0				0.0	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Client: Powertech USA Inc
Report Date: 02/01/11
Project: Dewey Groundwater Sampling
Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: 101215A-SLDS-TDS-W	
Sample ID: LCS1_101215A		Laboratory Control Sample				Run: BAL-4-R_101215A			12/15/10 16:27	
Solids, Total Dissolved TDS @ 180 C		180	mg/L	10	90	90	110			
Sample ID: MBLK1_101215A		Method Blank				Run: BAL-4-R_101215A			12/15/10 16:27	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	3						
Sample ID: R10120135-001ADUP		Sample Duplicate				Run: BAL-4-R_101215A			12/15/10 16:29	
Solids, Total Dissolved TDS @ 180 C		1200	mg/L	10				2.3	5	
Sample ID: R10120179-002AMS		Sample Matrix Spike				Run: BAL-4-R_101215A			12/15/10 16:33	
Solids, Total Dissolved TDS @ 180 C		2300	mg/L	10	108	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2580 B									Batch: 101221-ORP-ISE-W	
Sample ID: LCS		Laboratory Control Sample				Run: PH_COND1-R_101221A			12/21/10 16:30	
Oxidation-Reduction Potential		480	mV		100	95	105			
Sample ID: R10120179-001F		Sample Duplicate				Run: PH_COND1-R_101221A			12/21/10 16:30	
Oxidation-Reduction Potential		180	mV					3.2	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B										Batch: C_28638
Sample ID: LCS-28638		Laboratory Control Sample				Run: SUB-C141280				12/28/10 12:29
Selenium-IV		0.050	mg/L	0.0010	99	90	110			
Sample ID: MB-28638		Method Blank				Run: SUB-C141280				12/28/10 12:27
Selenium-IV		ND	mg/L	0.0003						
Sample ID: R10120179-002E		Sample Matrix Spike Duplicate				Run: SUB-C141280				12/28/10 12:38
Selenium-IV		0.048	mg/L	0.0010	97	85	115	15	15	
Sample ID: R10120179-002E		Sample Matrix Spike				Run: SUB-C141280				12/28/10 12:36
Selenium-IV		0.056	mg/L	0.0010	112	85	115			
Method: A3114 B										Batch: C_28638
Sample ID: R10120179-002E		Sample Matrix Spike				Run: SUB-C141299				12/28/10 14:33
Selenium		0.061	mg/L	0.0010	91	85	115			
Sample ID: LCS-28638		Laboratory Control Sample				Run: SUB-C141299				12/28/10 14:26
Selenium		0.054	mg/L	0.0010	107	90	110			
Sample ID: R10120179-002E		Sample Matrix Spike Duplicate				Run: SUB-C141299				12/28/10 14:35
Selenium		0.059	mg/L	0.0010	86	85	115	3.5	15	
Sample ID: MB-28638		Method Blank				Run: SUB-C141299				12/28/10 14:24
Selenium		ND	mg/L	0.0002						
Method: A3114 B										Batch: C_28638
Sample ID: MB-28638		Method Blank				Run: SUB-C142470				02/04/11 11:20
Selenium-IV		ND	mg/L	0.0003						
Sample ID: LCS-28638		Laboratory Control Sample				Run: SUB-C142470				02/04/11 11:22
Selenium-IV		0.024	mg/L	0.0010	96	90	110			
Sample ID: R10120179-002E		Sample Matrix Spike				Run: SUB-C142470				02/04/11 11:27
Selenium-IV		0.025	mg/L	0.0010	102	85	115			
Sample ID: R10120179-002E		Sample Matrix Spike Duplicate				Run: SUB-C142470				02/04/11 11:29
Selenium-IV		0.025	mg/L	0.0010	102	85	115	0.3	15	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc

Report Date: 02/01/11

Project: Dewey Groundwater Sampling

Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B										Batch: C_28638
Sample ID: R10120179-002E		Sample Matrix Spike Duplicate				Run: SUB-C142475				02/04/11 13:09
Selenium		0.024	mg/L	0.0010	88	85	115	11	15	
Sample ID: MB-28638		Method Blank				Run: SUB-C142475				02/04/11 13:00
Selenium		ND	mg/L	0.0003						
Sample ID: LCS-28638		Laboratory Control Sample				Run: SUB-C142475				02/04/11 13:02
Selenium		0.025	mg/L	0.0010	102	90	110			
Sample ID: R10120179-002E		Sample Matrix Spike				Run: SUB-C142475				02/04/11 13:07
Selenium		0.021	mg/L	0.0010	78	85	115			S

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc

Report Date: 02/01/11

Project: Dewey Groundwater Sampling

Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B									Batch: 101215_1_PH-W	
Sample ID: LCS_pH-1_101215		Laboratory Control Sample				Run: PH_COND2-R_101215A			12/15/10 13:37	
pH		7.43	s.u.	0.010	100	98.55	101.45			
Sample ID: R10120153-001ADUP		Sample Duplicate				Run: PH_COND2-R_101215A			12/15/10 13:45	
pH		8.46	s.u.	0.010				0.4	1.25	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G									Batch: A2010-12-28_2_NH3_01	
Sample ID: MBLK-2		Method Blank				Run: TECHAA2-R_101228A			12/28/10 11:48	
Nitrogen, Ammonia as N		ND	mg/L	0.02						
Sample ID: LFB-3		Laboratory Fortified Blank				Run: TECHAA2-R_101228A			12/28/10 11:49	
Nitrogen, Ammonia as N		0.23	mg/L	0.10	91	90	110			
Sample ID: R10120179-001BMS		Sample Matrix Spike				Run: TECHAA2-R_101228A			12/28/10 12:18	
Nitrogen, Ammonia as N		0.43	mg/L	0.10	94	80	120			
Sample ID: R10120179-001BMSD		Sample Matrix Spike Duplicate				Run: TECHAA2-R_101228A			12/28/10 12:19	
Nitrogen, Ammonia as N		0.42	mg/L	0.10	91	80	120	1.9	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D5072-92										Batch: C_R141031
Sample ID: R10120179-002G		Sample Duplicate				Run: SUB-C141031				12/16/10 16:27
Radon 222		270	pCi/L	100				12	30	
Sample ID: MB-R141031		Method Blank				Run: SUB-C141031				12/16/10 16:27
Radon 222		10	pCi/L							U
Sample ID: LCS-R141031		Laboratory Control Sample				Run: SUB-C141031				12/16/10 16:27
Radon 222		300	pCi/L	100	94	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_R141199	
Sample ID: C10120365-002AMSD2	17	Sample Matrix Spike Duplicate				Run: SUB-C141199			12/22/10 18:22	
Aluminum		1.88	mg/L	0.10	92	70	130	2.2	20	
Barium		2.03	mg/L	0.10	98	70	130	1.3	20	
Boron		2.47	mg/L	0.10	100	70	130	1.5	20	
Cadmium		1.96	mg/L	0.010	96	70	130	2.4	20	
Chromium		1.97	mg/L	0.050	97	70	130	1.4	20	
Copper		2.03	mg/L	0.010	99	70	130	1.4	20	
Iron		1.99	mg/L	0.030	97	70	130	2.1	20	
Manganese		2.00	mg/L	0.010	98	70	130	0.8	20	
Molybdenum		2.01	mg/L	0.10	96	70	130	0.8	20	
Nickel		1.97	mg/L	0.050	97	70	130	0.8	20	
Silver		1.97	mg/L	0.010	97	70	130	1.7	20	
Vanadium		1.97	mg/L	0.10	97	70	130	0.3	20	
Zinc		2.03	mg/L	0.010	97	70	130	1.1	20	
Calcium		292	mg/L	1.0	94	70	130	0.2	20	
Magnesium		276	mg/L	1.0	99	70	130	1.2	20	
Potassium		127	mg/L	1.0	80	70	130	0.2	20	
Sodium		627	mg/L	1.0		70	130	0.3	20	A
Sample ID: C10120365-002AMS2	17	Sample Matrix Spike				Run: SUB-C141199			12/22/10 18:18	
Aluminum		1.84	mg/L	0.10	90	70	130			
Barium		2.00	mg/L	0.10	97	70	130			
Boron		2.43	mg/L	0.10	98	70	130			
Cadmium		1.92	mg/L	0.010	94	70	130			
Chromium		1.95	mg/L	0.050	95	70	130			
Copper		2.00	mg/L	0.010	98	70	130			
Iron		1.95	mg/L	0.030	95	70	130			
Manganese		1.98	mg/L	0.010	97	70	130			
Molybdenum		2.00	mg/L	0.10	95	70	130			
Nickel		1.99	mg/L	0.050	97	70	130			
Silver		1.94	mg/L	0.010	95	70	130			
Vanadium		1.97	mg/L	0.10	97	70	130			
Zinc		2.01	mg/L	0.010	96	70	130			
Calcium		292	mg/L	1.0	94	70	130			
Magnesium		273	mg/L	1.0	96	70	130			
Potassium		127	mg/L	1.0	80	70	130			
Sodium		625	mg/L	1.0		70	130			A
Sample ID: LFB-101222A	17	Laboratory Fortified Blank				Run: SUB-C141199			12/22/10 11:33	
Aluminum		0.94	mg/L	0.10	94	85	115			
Barium		0.94	mg/L	0.10	94	85	115			
Boron		0.97	mg/L	0.10	97	85	115			
Cadmium		0.97	mg/L	0.010	97	85	115			
Calcium		48	mg/L	0.50	96	85	115			
Chromium		0.95	mg/L	0.050	95	85	115			
Copper		0.97	mg/L	0.010	97	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_R141199
Sample ID: LFB-101222A	17	Laboratory Fortified Blank				Run: SUB-C141199				12/22/10 11:33
Iron		0.95	mg/L	0.030	95	85	115			
Magnesium		47	mg/L	0.50	95	85	115			
Manganese		0.96	mg/L	0.010	96	85	115			
Molybdenum		0.95	mg/L	0.10	95	85	115			
Nickel		0.94	mg/L	0.050	94	85	115			
Potassium		44	mg/L	0.50	88	85	115			
Silver		0.95	mg/L	0.010	95	85	115			
Sodium		47	mg/L	0.50	94	85	115			
Vanadium		0.98	mg/L	0.10	98	85	115			
Zinc		0.96	mg/L	0.010	96	85	115			
Sample ID: MB-101222A	17	Method Blank				Run: SUB-C141199				12/22/10 11:29
Aluminum		ND	mg/L	0.01						
Barium		0.0009	mg/L	0.0005						
Boron		ND	mg/L	0.009						
Cadmium		ND	mg/L	0.001						
Calcium		ND	mg/L	0.2						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		0.002	mg/L	0.002						
Magnesium		ND	mg/L	0.05						
Manganese		ND	mg/L	0.0004						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Potassium		ND	mg/L	0.02						
Silver		ND	mg/L	0.001						
Sodium		ND	mg/L	0.3						
Vanadium		ND	mg/L	0.03						
Zinc		0.002	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: C_28617
Sample ID: MB-28617	13	Method Blank				Run: SUB-C141316				12/28/10 15:57
Barium		ND	mg/L	0.002						
Beryllium		ND	mg/L	0.0001						
Boron		0.01	mg/L	0.008						
Cadmium		ND	mg/L	0.001						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.008						
Manganese		ND	mg/L	0.0008						
Molybdenum		ND	mg/L	0.005						
Nickel		ND	mg/L	0.003						
Silver		ND	mg/L	0.001						
Strontium		ND	mg/L	0.0002						
Zinc		ND	mg/L	0.008						
Sample ID: C10120619-002CMS3	13	Sample Matrix Spike				Run: SUB-C141316				12/28/10 16:37
Barium		0.345	mg/L	0.10	69	70	130			S
Beryllium		0.235	mg/L	0.010	94	70	130			
Boron		2.40	mg/L	0.41		70	130			A
Cadmium		0.225	mg/L	0.056	90	70	130			
Chromium		0.440	mg/L	0.12	88	70	130			
Copper		0.575	mg/L	0.071	115	70	130			
Iron		6.96	mg/L	0.41	113	70	130			
Manganese		3.10	mg/L	0.038	93	70	130			
Molybdenum		0.540	mg/L	0.26	108	70	130			
Nickel		0.455	mg/L	0.13	91	70	130			
Silver		ND	mg/L	0.071		70	130			S
Strontium		9.64	mg/L	0.10		70	130			A
Zinc		0.635	mg/L	0.40	127	70	130			
Sample ID: LCS3-28617	13	Laboratory Control Sample				Run: SUB-C141316				12/28/10 16:01
Barium		0.501	mg/L	0.10	100	85	115			
Beryllium		0.258	mg/L	0.010	103	85	115			
Boron		0.507	mg/L	0.10	99	85	115			
Cadmium		0.247	mg/L	0.010	99	85	115			
Chromium		0.502	mg/L	0.050	100	85	115			
Copper		0.511	mg/L	0.010	102	85	115			
Iron		2.54	mg/L	0.030	102	85	115			
Manganese		2.52	mg/L	0.010	101	85	115			
Molybdenum		0.518	mg/L	0.10	104	85	115			
Nickel		0.514	mg/L	0.050	103	85	115			
Silver		0.0504	mg/L	0.010	101	85	115			
Strontium		0.508	mg/L	0.10	102	85	115			
Zinc		0.512	mg/L	0.010	102	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: C_28617	
Sample ID: C10120619-002CMSD3	13	Sample Matrix Spike Duplicate				Run: SUB-C141316			12/28/10 16:41	
Barium		0.370	mg/L	0.10	74	70	130	7.0	20	
Beryllium		0.235	mg/L	0.010	94	70	130	0.0	20	
Boron		2.26	mg/L	0.41		70	130	6.2	20	A
Cadmium		0.230	mg/L	0.056	92	70	130	2.2	20	
Chromium		0.435	mg/L	0.12	87	70	130	1.1	20	
Copper		0.550	mg/L	0.071	110	70	130	4.4	20	
Iron		7.13	mg/L	0.41	120	70	130	2.4	20	
Manganese		3.15	mg/L	0.038	95	70	130	1.6	20	
Molybdenum		0.545	mg/L	0.26	109	70	130	0.9	20	
Nickel		0.490	mg/L	0.13	98	70	130	7.4	20	
Silver		ND	mg/L	0.071		70	130		20	S
Strontium		19.1	mg/L	0.10		70	130	66	20	AR
Zinc		0.675	mg/L	0.40	135	70	130	6.1	20	S
Method: E200.7									Batch: C_R141316	
Sample ID: MB-101228A	2	Method Blank				Run: SUB-C141316			12/28/10 14:29	
Boron		ND	mg/L	0.009						
Iron		ND	mg/L	0.002						
Sample ID: LFB-101228A	2	Laboratory Fortified Blank				Run: SUB-C141316			12/28/10 14:33	
Boron		0.95	mg/L	0.10	95	85	115			
Iron		0.98	mg/L	0.030	98	85	115			
Sample ID: C10110844-005BMS2	2	Sample Matrix Spike				Run: SUB-C141316			12/28/10 15:28	
Boron		2.19	mg/L	0.10	97	70	130			
Iron		1.96	mg/L	0.030	96	70	130			
Sample ID: C10110844-005BMSD2	2	Sample Matrix Spike Duplicate				Run: SUB-C141316			12/28/10 15:32	
Boron		2.17	mg/L	0.10	96	70	130	0.9	20	
Iron		1.95	mg/L	0.030	95	70	130	0.5	20	
Method: E200.7									Batch: C_R141904	
Sample ID: LFB-110117B		Laboratory Fortified Blank				Run: SUB-C141904			01/17/11 11:54	
Silicon		0.43	mg/L	0.10	92	85	115			
Sample ID: R10120179-001C		Sample Matrix Spike				Run: SUB-C141904			01/17/11 12:50	
Silicon		5.62	mg/L	0.10		70	130			A
Sample ID: R10120179-001C		Sample Matrix Spike Duplicate				Run: SUB-C141904			01/17/11 12:54	
Silicon		5.61	mg/L	0.10		70	130	0.2	20	A
Sample ID: MB-110117B		Method Blank				Run: SUB-C141904			01/17/11 11:50	
Silicon		ND	mg/L	0.007						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R141273	
Sample ID: C10120614-001CMS4	18	Post Digestion Spike				Run: SUB-C141273			12/28/10 09:45	
Antimony		0.261	mg/L	0.050	102	70	130			
Arsenic		0.510	mg/L	0.0015	89	70	130			
Barium		0.737	mg/L	0.10	98	70	130			
Beryllium		0.221	mg/L	0.010	88	70	130			
Cadmium		0.213	mg/L	0.010	85	70	130			
Chromium		0.228	mg/L	0.050	91	70	130			
Copper		0.217	mg/L	0.010	85	70	130			
Lead		0.251	mg/L	0.050	100	70	130			
Manganese		0.278	mg/L	0.010	90	70	130			
Mercury		0.0250	mg/L	0.0010	99	70	130			
Molybdenum		0.284	mg/L	0.10	100	70	130			
Nickel		0.237	mg/L	0.050	84	70	130			
Selenium		0.240	mg/L	0.0035	84	70	130			
Silver		0.0770	mg/L	0.010	77	70	130			
Strontium		40.4	mg/L	0.10		70	130			A
Thallium		0.255	mg/L	0.10	101	70	130			
Uranium		0.277	mg/L	0.00030	111	70	130			
Zinc		0.215	mg/L	0.010	81	70	130			
Sample ID: LRB	18	Method Blank				Run: SUB-C141273			12/27/10 16:48	
Antimony		ND	mg/L	7E-05						
Arsenic		ND	mg/L	6E-05						
Barium		ND	mg/L	3E-05						
Beryllium		ND	mg/L	3E-05						
Cadmium		ND	mg/L	1E-05						
Chromium		ND	mg/L	4E-05						
Copper		ND	mg/L	7E-05						
Lead		ND	mg/L	3E-05						
Manganese		ND	mg/L	5E-05						
Mercury		ND	mg/L	8E-05						
Molybdenum		0.0007	mg/L	5E-05						
Nickel		ND	mg/L	0.0007						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	3E-05						
Strontium		ND	mg/L	3E-05						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0003						
Sample ID: LFB	18	Laboratory Fortified Blank				Run: SUB-C141273			12/27/10 16:55	
Antimony		0.0552	mg/L	0.0010	110	85	115			
Arsenic		0.0549	mg/L	0.0010	110	85	115			
Barium		0.0554	mg/L	0.0010	111	85	115			
Beryllium		0.0569	mg/L	0.0010	114	85	115			
Cadmium		0.0548	mg/L	0.0010	110	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: C_R141273	
Sample ID: LFB	18	Laboratory Fortified Blank				Run: SUB-C141273			12/27/10 16:55	
Chromium		0.0540	mg/L	0.0010	108	85	115			
Copper		0.0533	mg/L	0.0010	107	85	115			
Lead		0.0554	mg/L	0.0010	111	85	115			
Manganese		0.0544	mg/L	0.0010	109	85	115			
Mercury		0.00567	mg/L	0.0010	113	85	115			
Molybdenum		0.0562	mg/L	0.0010	111	85	115			
Nickel		0.0538	mg/L	0.0010	108	85	115			
Selenium		0.0550	mg/L	0.0010	110	85	115			
Silver		0.0213	mg/L	0.0010	106	85	115			
Strontium		0.0544	mg/L	0.0010	109	85	115			
Thallium		0.0548	mg/L	0.0010	110	85	115			
Uranium		0.0563	mg/L	0.00030	113	85	115			
Zinc		0.0566	mg/L	0.0010	113	85	115			
Sample ID: C10120614-001CMSD4	18	Post Digestion Spike Duplicate				Run: SUB-C141273			12/28/10 09:52	
Antimony		0.282	mg/L	0.050	111	70	130	8.0	20	
Arsenic		0.532	mg/L	0.0015	98	70	130	4.1	20	
Barium		0.789	mg/L	0.10	119	70	130	6.7	20	
Beryllium		0.230	mg/L	0.010	92	70	130	4.4	20	
Cadmium		0.227	mg/L	0.010	91	70	130	6.4	20	
Chromium		0.240	mg/L	0.050	96	70	130	5.3	20	
Copper		0.224	mg/L	0.010	88	70	130	3.5	20	
Lead		0.265	mg/L	0.050	106	70	130	5.5	20	
Manganese		0.299	mg/L	0.010	98	70	130	7.1	20	
Mercury		0.0274	mg/L	0.0010	109	70	130	9.0	20	
Molybdenum		0.302	mg/L	0.10	107	70	130	6.1	20	
Nickel		0.244	mg/L	0.050	87	70	130	2.9	20	
Selenium		0.247	mg/L	0.0035	87	70	130	3.2	20	
Silver		0.0832	mg/L	0.010	83	70	130	7.7	20	
Strontium		41.6	mg/L	0.10		70	130	3.0	20	A
Thallium		0.271	mg/L	0.10	107	70	130	6.0	20	
Uranium		0.289	mg/L	0.00030	116	70	130	4.4	20	
Zinc		0.277	mg/L	0.010	106	70	130	25	20	R

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_28617
Sample ID: C10120619-002CMSD3	3	Sample Matrix Spike Duplicate				Run: SUB-C141375			12/30/10 16:14	
Arsenic		0.431	mg/L	0.0010	83	70	130	0.5	20	
Lead		0.525	mg/L	0.050	104	70	130	4.6	20	
Thallium		0.541	mg/L	0.10	108	70	130	3.7	20	
Sample ID: C10120619-002CMS3	3	Sample Matrix Spike				Run: SUB-C141375			12/30/10 16:07	
Arsenic		0.433	mg/L	0.0010	83	70	130			
Lead		0.501	mg/L	0.050	99	70	130			
Thallium		0.522	mg/L	0.10	104	70	130			
Sample ID: LCS3-28617	3	Laboratory Control Sample				Run: SUB-C141375			12/30/10 14:53	
Arsenic		0.494	mg/L	0.0010	98	85	115			
Lead		0.523	mg/L	0.050	105	85	115			
Thallium		0.511	mg/L	0.10	102	85	115			
Sample ID: MB-28617	3	Method Blank				Run: SUB-C141375			12/30/10 14:46	
Arsenic		0.002	mg/L	0.0003						
Lead		ND	mg/L	5E-05						
Thallium		0.0004	mg/L	5E-05						
Method: E200.8										Batch: C_28617
Sample ID: C10120619-002CMS3	2	Sample Matrix Spike				Run: SUB-C141484			01/04/11 18:22	
Antimony		0.491	mg/L	0.050	98	70	130			
Selenium		0.192	mg/L	0.0010	38	70	130			S
Sample ID: C10120619-002CMSD3	2	Sample Matrix Spike Duplicate				Run: SUB-C141484			01/04/11 18:28	
Antimony		0.493	mg/L	0.050	98	70	130	0.4	20	
Selenium		0.242	mg/L	0.0010	49	70	130	23	20	SR
Sample ID: LCS3-28617	2	Laboratory Control Sample				Run: SUB-C141484			01/04/11 17:08	
Antimony		0.563	mg/L	0.050	113	85	115			
Selenium		0.513	mg/L	0.0010	103	85	115			
Sample ID: MB-28617	2	Method Blank				Run: SUB-C141484			01/04/11 17:01	
Antimony		0.0003	mg/L	0.0002						
Selenium		ND	mg/L	0.0007						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: C_28617
Sample ID: MB-28617		Method Blank				Run: SUB-C141538				01/06/11 04:04
Selenium		ND	mg/L	0.0007						
Sample ID: C10120619-002CMSD3		Sample Matrix Spike Duplicate				Run: SUB-C141538				01/06/11 05:25
Selenium		0.397	mg/L	0.0010	79	70	130	5.8	20	
Sample ID: LCS3-28617		Laboratory Control Sample				Run: SUB-C141538				01/06/11 04:10
Selenium		0.452	mg/L	0.0010	90	85	115			
Sample ID: C10120619-002CMS3		Sample Matrix Spike				Run: SUB-C141538				01/06/11 05:18
Selenium		0.421	mg/L	0.0010	84	70	130			
Method: E200.8										Batch: C_28598
Sample ID: R10120179-002I		Post Digestion Spike Duplicate				Run: SUB-C141539				01/06/11 02:17
Uranium		0.0670	mg/L	0.00030	134	70	130	0.6	20	S
Sample ID: R10120179-002I		Post Digestion Spike				Run: SUB-C141539				01/06/11 02:13
Uranium		0.0673	mg/L	0.00030	135	70	130			S
Sample ID: MB-28598		Method Blank				Run: SUB-C141539				01/06/11 01:36
Uranium		0.0002	mg/L	7E-05						
Sample ID: LCS2-28598		Laboratory Control Sample				Run: SUB-C141539				01/06/11 01:40
Uranium		0.119	mg/L	0.00030	118	85	115			S

- Response is above standard QA limit. This could indicate a high bias for the sample results. Since there were no detectable analyte responses, and the remainder of the run QA is within acceptance range, this batch is approved.

Method: E200.8										Batch: C_R141821
Sample ID: LRB		Method Blank				Run: SUB-C141821				01/13/11 12:12
Thorium 232		4E-05	mg/L	3E-05						
Sample ID: LFB		Laboratory Fortified Blank				Run: SUB-C141821				01/13/11 12:16
Thorium 232		0.0526	mg/L	0.0010	105	85	115			
Sample ID: R10120179-002C		Post Digestion Spike				Run: SUB-C141821				01/13/11 21:36
Thorium 232		0.0559	mg/L	0.0010	109	70	130			
Sample ID: R10120179-002C		Post Digestion Spike Duplicate				Run: SUB-C141821				01/13/11 21:40
Thorium 232		0.0583	mg/L	0.0010	114	70	130	4.2	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Analytical Run: SUB-B158820	
Sample ID: QCS		Initial Calibration Verification Standard							12/20/10 15:34	
Mercury		0.0020	mg/L	0.0010	102	90	110			
Method: E245.1									Batch: B_51167	
Sample ID: MB-51167		Method Blank				Run: SUB-B158820			12/20/10 16:39	
Mercury		3E-05	mg/L	1E-05						
Sample ID: LCS-51167		Laboratory Control Sample				Run: SUB-B158820			12/20/10 16:41	
Mercury		0.0019	mg/L	0.0010	92	85	115			
Sample ID: B10121480-001BMS		Sample Matrix Spike				Run: SUB-B158820			12/20/10 16:46	
Mercury		0.0015	mg/L	0.0010	75	70	130			
Sample ID: B10121480-001BMSD		Sample Matrix Spike Duplicate				Run: SUB-B158820			12/20/10 16:49	
Mercury		0.0016	mg/L	0.0010	80	70	130	5.8	30	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0										Batch: R49463
Sample ID: LFB121610-14	5	Laboratory Fortified Blank				Run: DIONEX_101216A				12/16/10 21:57
Chloride		38.1	mg/L	1.00	95	90	110			
Fluoride		3.88	mg/L	0.10	97	90	110			
Nitrogen, Nitrate as N		3.79	mg/L	0.10	95	90	110			
Nitrogen, Nitrite as N		3.91	mg/L	0.10	98	90	110			
Sulfate		37.4	mg/L	1.0	94	90	110			
Sample ID: R10120177-001BMS	5	Sample Matrix Spike				Run: DIONEX_101216A				12/16/10 22:32
Chloride		54.1	mg/L	1.00	98	90	110			
Fluoride		4.64	mg/L	0.10	92	90	110			
Nitrogen, Nitrate as N		4.26	mg/L	0.10	91	90	110			
Nitrogen, Nitrite as N		3.91	mg/L	0.10	98	90	110			
Sulfate		108	mg/L	1.0	106	90	110			
Sample ID: R10120177-001BMSD	5	Sample Matrix Spike Duplicate				Run: DIONEX_101216A				12/16/10 22:50
Chloride		54.2	mg/L	1.00	98	90	110	0.2	10	
Fluoride		4.65	mg/L	0.10	92	90	110	0.3	10	
Nitrogen, Nitrate as N		4.26	mg/L	0.10	91	90	110	0.1	10	
Nitrogen, Nitrite as N		3.90	mg/L	0.10	98	90	110	0.3	10	
Sulfate		109	mg/L	1.0	107	90	110	0.3	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0									Batch: C_GrAB-1025	
Sample ID: MB-GrAB-1025	6	Method Blank				Run: SUB-C141522			01/04/11 22:52	
Gross Alpha		-0.8	pCi/L							U
Gross Alpha precision (±)		0.6	pCi/L							
Gross Alpha MDC		0.7	pCi/L							
Gross Beta		-1	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-1025		Laboratory Control Sample				Run: SUB-C141522			01/04/11 22:52	
Gross Alpha		100	pCi/L		98	70	130			
Sample ID: R10120179-001H	6	Sample Duplicate				Run: SUB-C141522			01/04/11 22:52	
Gross Alpha		-0.63	pCi/L					77	1337.7	U
Gross Alpha precision (±)		3.2	pCi/L							
Gross Alpha MDC		5.5	pCi/L							
Gross Beta		8.0	pCi/L					32	95.6	
Gross Beta precision (±)		4.1	pCi/L							
Gross Beta MDC		6.6	pCi/L							
Sample ID: C10120819-001FMS		Sample Matrix Spike				Run: SUB-C141522			01/05/11 11:01	
Gross Alpha		112	pCi/L		98	70	130			
Sample ID: C10120819-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C141522			01/05/11 11:01	
Gross Beta		90.0	pCi/L		96	70	130	0.3	15.6	
Sample ID: C10120819-001FMSD		Sample Matrix Spike Duplicate				Run: SUB-C141522			01/05/11 11:01	
Gross Alpha		109	pCi/L		95	70	130	2.8	17.3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1									Batch: C_R141237	
Sample ID: R10120179-002H	23	Sample Duplicate				Run: SUB-C141237			12/22/01 06:10	
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		360	pCi/L	50					30	
Thorium 234 precision (±)		130	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		360	pCi/L					200	30	R
Gross Gamma precision (±)		130	pCi/L							
- Activity of original sample is below detection limit; duplicate is above detection limit, but within the limits of precision. RER is acceptable, therefore the batch is acceptable										
Sample ID: LCS-R141237	3	Laboratory Control Sample				Run: SUB-C141237			12/22/01 06:10	
Americium 241		660	pCi/L	50	81	70	130			
Cesium 137		990	pCi/L	50	99	70	130			
Potassium 40		6600	pCi/L	50	99	70	130			
Sample ID: MB-R141237	23	Method Blank				Run: SUB-C141237			12/22/01 06:10	
Americium 241 precision (±)		ND	pCi/L							
Barium 133 precision (±)		ND	pCi/L							
Bismuth 212 precision (±)		ND	pCi/L							
Bismuth 214 precision (±)		ND	pCi/L							
Cesium 134 precision (±)		ND	pCi/L							
Cesium 137 precision (±)		ND	pCi/L							
Cobalt 60 precision (±)		ND	pCi/L							
Iodine 125 precision (±)		ND	pCi/L							
Iodine 131 precision (±)		ND	pCi/L							
Lead 212 precision (±)		ND	pCi/L							
Lead 214 precision (±)		ND	pCi/L							
Manganese 54 precision (±)		ND	pCi/L							
Potassium 40 precision (±)		ND	pCi/L							
Radium 223 precision (±)		ND	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1										Batch: C_R141237
Sample ID: MB-R141237	23	Method Blank				Run: SUB-C141237				12/22/01 06:10
Radium 224 precision (±)		ND	pCi/L							
Thallium 208 precision (±)		ND	pCi/L							
Thorium 228 precision (±)		ND	pCi/L							
Thorium 234		400	pCi/L							
Thorium 234 precision (±)		80	pCi/L							
Zinc 65 precision (±)		ND	pCi/L							
Radium 228 precision (±)		ND	pCi/L							
Gross Gamma		400	pCi/L							
Gross Gamma precision (±)		80	pCi/L							

- See Case Narrative regarding Gross Gamma analysis.

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Report Date: 02/01/11
Work Order: R10120179

Client: Powertech USA Inc
Project: Dewey Groundwater Sampling

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: C_RA226-5079	
Sample ID: LCS-RA226-5079		Laboratory Control Sample				Run: SUB-C141391			12/29/10 22:07	
Radium 226		8.1	pCi/L		129	70	130			
Sample ID: C10120676-001AMSD		Sample Matrix Spike Duplicate				Run: SUB-C141391			12/29/10 16:43	
Radium 226		16.4	pCi/L		106	70	130	8.6	22.9	
Sample ID: C10120676-001AMS		Sample Matrix Spike				Run: SUB-C141391			12/29/10 16:43	
Radium 226		15.0	pCi/L		95	70	130			
Sample ID: MB-RA226-5079	3	Method Blank				Run: SUB-C141391			12/29/10 22:07	
Radium 226		-0.05	pCi/L							U
Radium 226 precision (±)		0.08	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Method: E903.0									Batch: C_R141421	
Sample ID: LCS-28598		Laboratory Control Sample				Run: SUB-C141421			01/03/11 12:21	
Radium 226		14	pCi/L		113	70	130			
Sample ID: R10120179-001I		Sample Matrix Spike Duplicate				Run: SUB-C141421			01/03/11 12:21	
Radium 226		30	pCi/L		115	70	130	3.8	24.7	
Sample ID: MB-28598	3	Method Blank				Run: SUB-C141421			01/03/11 12:21	
Radium 226		0.02	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Sample ID: R10120179-001I		Sample Matrix Spike				Run: SUB-C141421			01/03/11 12:21	
Radium 226		29	pCi/L		110	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11

Client: Powertech USA Inc

Report Date: 02/01/11

Project: Dewey Groundwater Sampling

Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: C_R141572
Sample ID: C10120734-007HMS		Sample Matrix Spike				Run: SUB-C141572				01/02/11 13:19
Thorium 230		9.1	pCi/L		104	70	130			
Sample ID: MB-28598	3	Method Blank				Run: SUB-C141572				01/02/11 13:19
Thorium 230		0.04	pCi/L							U
Thorium 230 MDC		0.10	pCi/L							
Thorium 230 precision (±)		0.1	pCi/L							
Sample ID: C10120734-007HMSD		Sample Matrix Spike Duplicate				Run: SUB-C141572				01/04/11 09:07
Thorium 230		9.3	pCi/L		106	70	130	1.6	30.3	
Sample ID: LCS-28598		Laboratory Control Sample				Run: SUB-C141572				01/02/11 13:19
Thorium 230		11	pCi/L		112	70	130			
Method: E908.0										Batch: C_RA-TH-ISO-1314
Sample ID: LCS-RA-TH-ISO-1314		Laboratory Control Sample				Run: SUB-C141753				01/09/11 13:55
Thorium 230		5.3	pCi/L		93	70	130			
Sample ID: C10120463-001AMS		Sample Matrix Spike				Run: SUB-C141753				01/09/11 13:55
Thorium 230		11	pCi/L		95	70	130			
Sample ID: C10120463-001AMSD		Sample Matrix Spike Duplicate				Run: SUB-C141753				01/09/11 13:55
Thorium 230		13	pCi/L		115	70	130	19	45.5	
Sample ID: MB-RA-TH-ISO-1314	3	Method Blank				Run: SUB-C141753				01/10/11 08:55
Thorium 230		0.06	pCi/L							U
Thorium 230 MDC		0.09	pCi/L							
Thorium 230 precision (±)		0.06	pCi/L							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Client: Powertech USA Inc
Report Date: 02/01/11
Project: Dewey Groundwater Sampling
Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0									Analytical Run: SUB-T38341	
Sample ID: STD-PB-210-0060	3	Continuing Calibration Verification Standard							01/03/11 01:52	
Lead 210		32	pCi/L		100	70	130	0.0	30	
Lead 210 precision (±)		1.2	pCi/L			0	0			
Lead 210 MDC		1.4	pCi/L			0	0			
Method: E909.0									Batch: T_PB-210-0060	
Sample ID: MB-PB-210-0060	3	Method Blank				Run: SUB-T38341			01/03/11 04:03	
Lead 210		-0.7	pCi/L							U
Lead 210 precision (±)		0.8	pCi/L							
Lead 210 MDC		1	pCi/L							
Sample ID: LCS-PB-210-0060		Laboratory Control Sample				Run: SUB-T38341			01/03/11 06:15	
Lead 210		40	pCi/L		75	70	130			
Sample ID: R10120179-001H		Sample Matrix Spike				Run: SUB-T38341			01/03/11 17:12	
Lead 210		89	pCi/L		82	70	130			
Sample ID: R10120179-001H		Sample Matrix Spike Duplicate				Run: SUB-T38341			01/03/11 19:23	
Lead 210		79	pCi/L		74	70	130	11	16.4	
Method: E909.0									Batch: T_PB-210-0061	
Sample ID: MB-12991	3	Method Blank				Run: SUB-T38403			01/06/11 13:11	
Lead 210			pCi/L							U
Lead 210 precision (±)		7	pCi/L							
Lead 210 MDC		10	pCi/L							
Sample ID: LCS-12991		Laboratory Control Sample				Run: SUB-T38403			01/06/11 15:22	
Lead 210		480	pCi/L		89	70	130			
Sample ID: R10120179-001I		Sample Matrix Spike				Run: SUB-T38403			01/06/11 19:45	
Lead 210		120	pCi/L		83	70	130			
Sample ID: R10120179-001I		Sample Matrix Spike Duplicate				Run: SUB-T38403			01/06/11 21:56	
Lead 210		120	pCi/L		89	70	130	5.7	15.3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Rapid City, SD Branch

Revised Date: 02/14/11
Client: Powertech USA Inc
Report Date: 02/01/11
Project: Dewey Groundwater Sampling
Work Order: R10120179

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E912.0									Batch: C_PO210-0335	
Sample ID: MB-PO210-0335	3	Method Blank				Run: SUB-C141523			01/05/11 11:54	
Polonium 210		0.3	pCi/L							U
Polonium 210 MDC		0.6	pCi/L							
Polonium 210 precision (±)		0.4	pCi/L							
Sample ID: C10120734-007FMSD		Sample Matrix Spike Duplicate				Run: SUB-C141523			01/05/11 11:54	
Polonium 210		26	pCi/L		80	70	130	20	60.9	
Sample ID: LCS-PO210-0335		Laboratory Control Sample				Run: SUB-C141523			01/05/11 11:54	
Polonium 210		16	pCi/L		99	70	130			
Sample ID: C10120734-007FMS		Sample Matrix Spike				Run: SUB-C141523			01/05/11 11:54	
Polonium 210		31	pCi/L		98	70	130			
Method: E912.0									Batch: C_R142293	
Sample ID: R10120179-002I		Sample Matrix Spike Duplicate				Run: SUB-C142293			01/30/11 12:31	
Polonium 210		42	pCi/L		110	70	130	9.4	61.7	
Sample ID: R10120179-002I		Sample Matrix Spike				Run: SUB-C142293			01/30/11 12:31	
Polonium 210		46	pCi/L		121	70	130			
Sample ID: MB-28543	3	Method Blank				Run: SUB-C142293			01/30/11 12:31	
Polonium 210		-0.03	pCi/L							U
Polonium 210 precision (±)		1	pCi/L							
Polonium 210 MDC		3	pCi/L							
Sample ID: LCS-28543		Laboratory Control Sample				Run: SUB-C142293			01/30/11 12:31	
Polonium 210		64	pCi/L		84	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT (Provide as much information as possible.)

Company Name: Scott Env.	Project Name, PWS, Permit, Etc.: Powertech Dewey Burdock	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Scott Env. / Powertech	Contact Name: Allen Scott Phone/Fax:	Email:	Sampler: (Please Print)
Invoice Address: Powertech	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other
DW - Drinking Water

As per Quote

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by:
Cooler ID(s):
Receipt Temp 3.8 °C
On Ice: Y N
Custody Seal
On Bottle Y N
On Cooler Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY: R10120179-001 / 002

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX
705	1 DB-09-21-01	12-14-10		Water
706	2 DB-09-21-02	12-14-10		"
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Allen Scott	12-15-10 10:00				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Steve Fruiland	Date/Time: 12-15-10 1000	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.