

January 30, 2012

Project No. 923-1000-002.R273

Mr. Bill Kombol
Palmer Coking Coal Company
31407 Highway 169
PO Box 10
Black Diamond, Washington 98010

**RE: LANDSBURG MINE SITE INTERIM GROUNDWATER MONITORING
RESULTS – NOVEMBER 2011**

Dear Bill:

Golder Associates Inc. (Golder) completed an interim groundwater monitoring event at the Landsburg Mine Site during November, 2011. Groundwater samples were collected from monitoring wells LMW-2, LMW-3, LMW-4, LMW-5, LMW-6, LMW-7, LMW-8, LMW-9, LMW-10, and LMW-11 (see Figure 1). Monitoring wells LMW-2, LMW-4 and LMW-10 are completed to monitor shallow and deeper zones within the Rogers coal seam north of the Rogers Coal mine subsidence trench. Monitoring wells LMW-3 and LMW-5 are completed to monitor the shallow (~40 feet depth) and deeper zone (~250 feet depth), respectively, within the Rogers coal seam at the south end of the mine. See Figure 2 for a cross-section along the strike at the coal seam that also depicts the location of the monitoring wells. Monitoring well LMW-8 is receiving groundwater before discharge from Portal 3 and the mine access incline at the south end on the Rogers Coal Mine. These wells lay along the primary pathways for detection of a chemical release from the mine, were one to occur. Groundwater samples were also collected from well LMW-9 and the deep well LMW-11, which monitor groundwater from within the Rogers Coal Mine near its south end. Wells LMW-9 and LMW-11 are receiving groundwater from near the top of the water table and near the bottom of the mine, respectively. Wells LMW-6 and LMW-7 monitor groundwater from the Frasier and Landsburg coal mines to the west and east of the Rogers coal mine, respectively.

Groundwater sampling was conducted in accordance with the *Draft Interim Groundwater Monitoring Plan, Landsburg Mine Site* (Golder, 1997), and included the following activities:

- Measurement of static water levels at monitoring wells;
- Well purging to insure sample representativeness with the currently installed dedicated pumping systems;
- Measurement of field parameters including: pH, specific conductance, temperature, dissolved oxygen, Eh, and turbidity;
- Collection of representative samples in appropriate containers; only the dissolved metals samples were field filtered (total metals were not); however the dissolved metals samples were not analyzed; and
- Analyses of groundwater for volatile organic compounds (EPA Method 8260B), semi-volatile organic compounds (EPA Method 8270C), polychlorinated biphenyls (PCBs; EPA 8082), pesticides (EPA 8081A), priority pollutant metals (EPA Method 6000/7000 Series), and a petroleum hydrocarbon identification scan (HCID).

The attached Appendix A presents the laboratory analytical reports for all analyses. Sampling activities were documented on Sample Integrity Data Sheets (SIDS). Copies of the completed SIDS are provided in Appendix B. Table 1 presents water depth measurements and elevations that were collected from wells prior to sampling activities. Groundwater levels are similar to previous monitoring periods and indicate that groundwater is discharging out both ends of the Rogers Coal mine.

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Following sample collection, all bottles were sealed, labeled, and placed in an iced cooler until delivery to the laboratory. All groundwater samples from monitoring wells were transported under chain-of-custody procedures to Test America Corporation, of Tacoma, Washington, for analyses. Screening levels are based on maximum contaminant levels (MCLs) or State of Washington MTCA Method B groundwater cleanup levels whichever value is less. In cases where an established MCL or Method B Cleanup Level does not exist, a similar (surrogate) compound regulatory screening level is identified for comparison.

The analytical results indicate no significant changes in groundwater conditions from those observed during the remedial investigation (RI) and on-going interim groundwater monitoring. Table 2 presents the field parameter measurements and laboratory analytical results for each groundwater sample. Laboratory analyses did not detect any PCBs, pesticides, or petroleum hydrocarbon (HCID) in any of the groundwater samples. Only one volatile organic compound was detected in any of the samples: carbon disulfide (detected at 0.15 µg/L) in the sample collected from LMW-10. These detections were considerably below the MTCA Method B groundwater cleanup level for carbon disulfide (800 µg/L). Data validation and inspection of the gas chromatographs of the carbon disulfide detections could not eliminate this analyte. Carbon disulfide has been detected at these low levels in site groundwater in previous sampling events. The detection of carbon disulfide is attributed to being present in the coal bed material as a natural constituent. Research has confirmed the presence of carbon disulfide in coal bed materials¹ and is similar to results previously detected at LMW-10.

One semi-volatile organic compound (SVOC) was detected for bis (2-ethylhexyl) phthalate at 66 µg/L for LMW-3. This result is above the MTCA level of 6.3 µg/L. This compound is very insoluble in water and is extremely immobile in a groundwater flow system (K_{oc} over 100,000 ml/g). It is very unlikely that this compound would be detected at this well without having other, more mobile contaminants being detected as well. Upon evaluation of the laboratory data, the result could not be definitively eliminated; although Golder and Test America both believe the result is due to a contaminated laboratory extraction solvent. Even though the archived groundwater sample from well LMW-3 was beyond the quality assurance (QA) holding time, the laboratory re-extracted an aliquot with a different batch of extraction solvent and reanalyzed the sample for bis (2-ethylhexyl) phthalate. The result was non-detect with a reporting limit of 14 µg/L. The data from the reanalysis are in Appendix C.

Since the re-analysis of the original groundwater sample from LMW-3 was beyond the acceptable holding time, Golder resampled the groundwater from LMW-3 on December 30, 2011 and had two laboratories analyze the sample (Test America and Analytical Resources Inc.) for bis (2-ethylhexyl) phthalate. The results were non-detect with reporting limits of 1.4 µg/L and 1.0 µg/L for Test America and Analytical Resources Inc., respectively. The laboratory data for the resampling of LMW-3 are found in Appendix D. The final results for bis (2-ethylhexyl) phthalate in groundwater from LMW-3 is non-detect at a reporting limit of 1.4 µg/L as presented in Table 2.

The primary parameters detected in groundwater samples during this sampling event were metals that are naturally occurring. The method reporting limits (MRLs) and method detection limits (MDLs) for all analytes were at or below acceptable concentrations under the Model Toxics Control Act (MTCA).

Several groundwater samples from site wells contained iron and manganese concentrations above State of Washington secondary drinking water levels (SMCLs) of 0.3µg/L and 0.05µg/L, respectively, which are not health-based standards, but are protective of aesthetic qualities of water. Iron and Manganese have been detected in mine groundwater above MTCA Cleanup Levels in every monitoring event at the Site and are naturally occurring metals that are typically associated with groundwater from coal mines (Fuste, et. Al. 1983)². The concentrations of iron and manganese detected during the November 2011 sampling

¹ Kozinc, J., Treeby, M., and Zupancic-Kralj, L., 2004. *Determination of Sulfur Gases from Velenje Coal Stockpile*. Acta Chim. Slov., Volume 51, pages 529-536.

² Fuste, L.A., Packard, F.A., Fretwell, M.O., and Garland, D.P. 1983 *Data Supplement To: Quality of Coal Mine Drainage in Washington, 1975-77*. Open-File Report 83-205. Tacoma, Washington: U.S. Geological Survey.

event are similar to concentrations detected during the RI (Golder, 1996)³ and the Interim Groundwater Sampling events previously conducted at the site.

The groundwater sample from the deep well (LMW-11) contained total arsenic at a concentration of 10 µg/L, which is the same as the Washington State primary drinking water MCL of 10 µg/L, but higher than the MTCA groundwater cleanup level of 5 µg/L. Arsenic also has been detected in groundwater from LMW-11 near or above MTCA Cleanup levels during every monitoring event since LMW-11 was installed. Arsenic is also a naturally occurring metal commonly detectable in groundwater, especially in older more stagnant groundwater having low REDOX and dissolved oxygen levels. The MTCA groundwater cleanup level is based on typical groundwater background levels in the State. It is probable that the arsenic concentrations are naturally occurring deep within the mine where groundwater is more stagnant and its geochemistry may be different than shallow groundwater within the mine.

Acetone was detected in the equipment blank and trip blank samples. Acetone was not detected in any groundwater samples. It is suspected that this detection of acetone in the equipment blank and trip blank was caused by the laboratory.

If you have any questions or require any additional information, please contact Douglas Morell at
(425) 883-0777.

Sincerely,

GOLDER ASSOCIATES INC.



Jill Lamberts
Staff Environmental Scientist



Douglas J. Morell, PhD, LHY
Principal

Attachments: Tables 1 & 2
Figures 1 & 2
Appendices A, B, C, & D

JL/DJM

³ Golder Associates Inc., 1996. *Remedial Investigation and Feasibility Study for the Landsburg Mine Site*. Landsburg PLP Steering Committee.

TABLES

TABLE 1
Groundwater Elevation Data Collection November 14, 2011
Landsburg Mine Site

	UNITS	LMW-1	LMW-1a	LMW-2	LMW-3	LMW-3 ¹	LMW-4 ²	LMW-5	LMW-6	LMW-7 ²	LMW-8	LMW-9	LMW-10	LMW-11	P-2	Water Drainage	Seam Tunnel
Water Depths																	
Time of data collection	ft bgs	10:40 AM	10:32 AM	10:00 AM	11:16 AM	9:05 AM	10:05 AM	11:07 AM	10:20 AM	9:40 AM	11:18 AM	11:25 AM	10:07 AM	11:33 AM	11:20 AM	NA	NA
Measured to Top of PVC	ft bgs	NC	141.01	NC	NC	NC	NC	NC	NC	213.51	4.32	99.82	0.00	157.62	7.12	NA	NA
Measured to Top of Monument	ft bgs	145.33	NC	8.31	13.30	12.67	9.86	14.72	40.69	NC	NC	NC	NC	NC	NC	NA	NA
Surveyed Elevation																	
Top of PVC	ft asl	765.16	759.51	617.73	656.75	656.75	619.26	658.27	632.33	771.51	646.97	743.99	618.87	801.87	651.37	NA	NA
Top of Monument	ft asl	765.89	NC	618.29	657.48	657.48	619.85	658.87	633.00	771.88	NC	NC	NC	802.20	NC	NA	NA
Ground Level	ft asl	762.90	756.59	615.35	654.40	654.40	617.09	655.63	629.95	768.79	645.25	741.13	615.75	799.50	648.54	551.38	542.15
Corrected Water Elevation																	
Using PVC elevation	ft asl	NA	618.50	NA	NA	NA	NA	NA	NA	558.00	642.65	644.17	618.87	644.25	644.25	NA	NA
Using Monument elevation	ft asl	620.56	NA	609.98	644.18	644.81	609.99	644.15	592.31	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
1 = Groundwater Level collected on 12/30/2011 as part of resampling effort
2 = Data corrected to accomodate well inclination of 20° from vertical
NA = Not applicable.
NC = Data not collected.

TABLE 2
November 2011 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-3	LMW-3*	LMW-4	LMW-5	LMW-6	LMW-7	LMW-7 Duplicate	LMW-8	LMW-9	LMW-10	LMW-11	Equipment Blank	Trip Blank
Field Parameter															
pH	std	6.89	7.77	7.79 *	6.91	6.89	6.87	7.15	NA	6.92	7.07	8.72	7.30	NA	NA
Conductivity	uS/cm	993	308	318 *	995	758	256.3	560	NA	694	730	346	550	NA	NA
Dissolved Oxygen	mg/L	0.02	0.03	0.04 *	0.04	0.03	0.04	0.06	NA	0.14	0.05	0.06	0.80	NA	NA
Temperature	°C	10.6	10.7	10.7 *	10.6	10.9	9.9	12.2	NA	11.0	12.0	9.9	10.3	NA	NA
E _h	Rel mV	25.0	166.4	157.6 *	14.5	47.1	153.7	124.2	NA	117.2	112.2	-3.3	131.0	NA	NA
Turbidity	NTU	0.83	0.69	1.26 *	1.20	0.43	0.76	0.85	NA	1.49	0.61	0.84	1.65	NA	NA
Metals (Total)															
Aluminum	mg/L	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA
Antimony	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Arsenic	mg/L	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
Barium	mg/L	0.4	0.08	NA	0.39	0.29	0.11	0.56	0.56	0.065	0.35	0.038	0.3	0.006 U	NA
Beryllium	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Cadmium	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Calcium	mg/L	120	38	NA	110	90	28	56	54	79	81	6.8	54	1.1 U	NA
Chromium	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Cobalt	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Copper	mg/L	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
Iron	mg/L	0.2 U	0.2 U	NA	0.92	0.21	0.33	1.1	1	12	1.5	0.2 U	2.1	0.2 U	NA
Lead	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Magnesium	mg/L	67	15	NA	63	48	14	25	24	42	43	2.8	27	1.1 U	NA
Manganese	mg/L	0.25	0.047	NA	0.18	0.23	0.032	0.16	0.16	0.53	0.19	0.0094	0.13	0.002 U	NA
Mercury	mg/L	0.0002 U	0.0002 U	NA	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	NA
Nickel	mg/L	0.015 U	0.015 U	NA	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	NA
Potassium	mg/L	3.7	3.3 U	NA	3.8	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	NA
Selenium	mg/L	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
Silver	mg/L	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA
Sodium	mg/L	22	10	NA	29	18	7.4	45	44	16	16	82	25	2 U	NA
Thallium	mg/L	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA
Vanadium	mg/L	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA
Zinc	mg/L	0.007 U	0.007 U	NA	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	NA
Volatile Organic Compounds															
Acetone	µg/L	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	14	6.1
Acrolein	µg/L	6 U	6 U	NA	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Acrylonitrile	µg/L	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromobenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromochloromethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Butanone	µg/L	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
n-Butylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
sec-Butylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
tert-Butylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon disulfide	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U	0.1 U	0.1 U
Carbon tetrachloride	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	µg/L	0.25 U	0.25 U	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Chloroethyl vinyl ether	µg/L	6 U	6 U	NA	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Chloroform	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U



TABLE 2
November 2011 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-3	LMW-3*	LMW-4	LMW-5	LMW-6	LMW-7	LMW-7 Duplicate	LMW-8	LMW-9	LMW-10	LMW-11	Equipment Blank	Trip Blank
2-Chlorotoluene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4-Chlorotoluene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorodibromomethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dibromo-3-Chloropropane	µg/L	0.4 U	0.4 U	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dibromoethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromomethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	µg/L	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichloropropane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2,2-Dichloropropane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloropropene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachloro-1,3-butadiene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone	µg/L	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Iodomethane	µg/L	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4-Isopropyltoluene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	µg/L	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-pentanone	µg/L	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	µg/L	0.4 U	0.4 U	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
N-Propylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Styrene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2,3-Trichlorobenzene	µg/L	0.4 U	0.4 U	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2,4-Trichlorobenzene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trichlorobenzene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1,2-Tetrachloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,1,2,2-Tetrachloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,1-Trichloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloroethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichloropropane	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3,5-Trimethylbenzene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl acetate	µg/L	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	µg/L	0.02 U	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
m-Xylene & p-Xylene	µg/L	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Xylenes, Total	µg/L	0.1 U	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U



TABLE 2
November 2011 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-3	LMW-3*	LMW-4	LMW-5	LMW-6	LMW-7	LMW-7 Duplicate	LMW-8	LMW-9	LMW-10	LMW-11	Equipment Blank	Trip Blank
Semivolatile Organic Compounds															
Acenaphthene	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Acenaphthylene	µg/L	0.38 U	0.38 U	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	NA
Anthracene	µg/L	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA
Benzo(a)anthracene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Benzo(a)pyrene	µg/L	0.19 U	0.28 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA
Benzo(b)fluoranthene	µg/L	0.38 U	0.28 U	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	NA
Benzo(ghi)perylene	µg/L	0.28 U	1.9 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Benzo(k)fluoranthene	µg/L	0.28 U	1.9 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Benzoic Acid	µg/L	9.4 U	9.4 U	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	NA
Benzyl Alcohol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Bis(2-chloroethoxy)methane	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Bis(2-chloroethyl)ether	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Bis(2-chloroisopropyl)ether	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Bis(2-ethylhexyl)phthalate	µg/L	14 U	14 U *	1.4 U *	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	NA
4-Bromophenyl phenyl ether	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Butyl benzyl phthalate	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
Carbazole	µg/L	1.9 U	0.28 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4-Chloroaniline	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4-Chloro-3-methylphenol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2-Chloronaphthalene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
2-Chlorophenol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4-Chlorophenyl phenyl ether	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
3 & 4-Methylphenol (m,p-Cresols)	µg/L	3.8 U	3.8 U	NA	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	NA
2-Methylphenol (o-Cresol)	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Chrysene	µg/L	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA
Di-n-butyl phthalate	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Dibenz(a,h)anthracene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Dibenzofuran	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
1,2-Dichlorobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
1,3-Dichlorobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
1,4-Dichlorobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.4 U	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	NA
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Diethyl phthalate	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	NA
Dimethyl phthalate	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4,6-Dinitro-2-methylphenol	µg/L	19 U	19 U	NA	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	NA
2,4-Dinitrophenol	µg/L	24 U	24 U	NA	24 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U	NA
2,4-Dinitrotoluene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2,6-Dinitrotoluene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
N-Nitrosodiphenylamine	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Fluoranthene	µg/L	0.24 U	0.24 U	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	NA
Fluorene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Hexachlorobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Hexachlorobutadiene	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
Hexachlorocyclopentadiene	µg/L	9.4 U	9.4 U	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	NA
Hexachloroethane	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
Indeno(1,2,3-cd)pyrene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
Isophorone	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
1-Methylnaphthalene	µg/L	0.28 U	0.38 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
2-Methylnaphthalene	µg/L	0.94 U	0.94 U	NA	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	NA



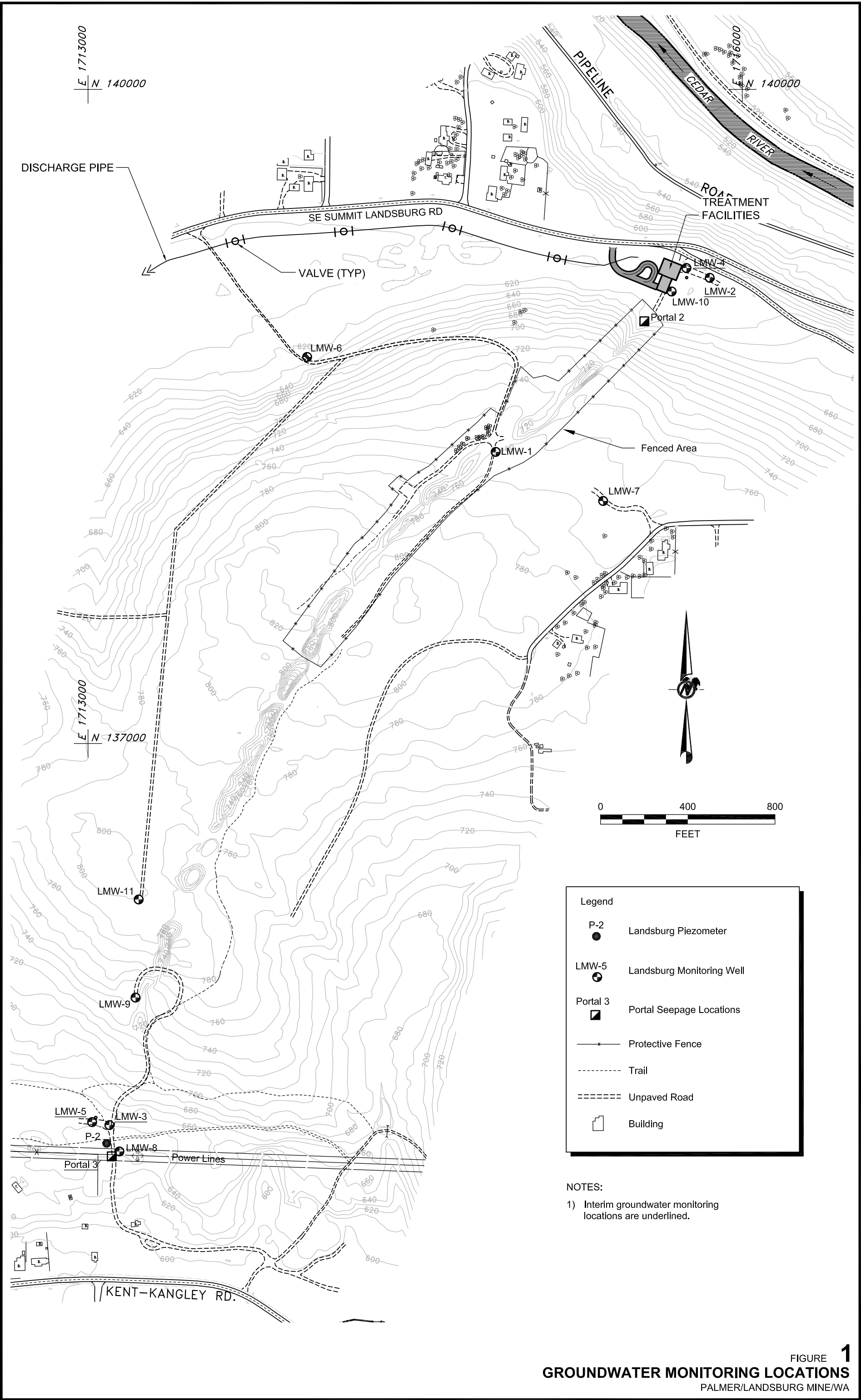
TABLE 2
November 2011 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2	LMW-3	LMW-3*	LMW-4	LMW-5	LMW-6	LMW-7	LMW-7 Duplicate	LMW-8	LMW-9	LMW-10	LMW-11	Equipment Blank	Trip Blank
Naphthalene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2-Nitroaniline	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
3-Nitroaniline	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4-Nitroaniline	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
Nitrobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2-Nitrophenol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
4-Nitrophenol	µg/L	9.4 U	9.4 U	NA	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	NA
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Di-n-octyl phthalate	µg/L	1.9 U	0.19 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
Pentachlorophenol	µg/L	3.3 U	3.3 U	NA	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	NA
Phenanthrene	µg/L	0.38 U	0.38 U	NA	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	NA
Phenol	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
Pyrene	µg/L	0.28 U	0.28 U	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	NA
1,2,4-Trichlorobenzene	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2,4,5-Trichlorophenol	µg/L	1.9 U	1.9 U	NA	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	NA
2,4,6-Trichlorophenol	µg/L	2.8 U	2.8 U	NA	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	NA
PCBs															
Aroclor 1016 (2C)	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1221	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1232	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1242	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1248	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1254	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Aroclor 1260	µg/L	0.47 U	0.47 U	NA	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	NA
Pesticides															
Aldrin (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
alpha-BHC (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
beta-BHC (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
delta-BHC (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
gamma-BHC (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
alpha-Chloradine (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
gamma-Chloradine (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
4,4'-DDD (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
4,4'-DDE (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
4,4'-DDT (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Dieldrin (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Endosulfan I (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Endosulfan II (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Endosulfan sulfate (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Endrin	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Endrin aldehyde (2C)	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone (2C)	µg/L	0.019 U	0.019 U	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	NA
Heptachlor (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
Heptachlor epoxide (2C)	µg/L	0.0094 U	0.0094 U	NA	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	0.0094 U	NA
Methoxychlor (2C)	µg/L	0.094 U ^	0.094 U ^	NA	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	0.094 U ^	NA
Toxaphene	µg/L	0.94 U	0.94 U	NA	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	NA
Hydrocarbon Identification															
Diesel Range	mg/L	0.24 U	0.24 U	NA	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	NA
Gas Range	mg/L	0.095 U	0.095 U	NA	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	NA
Heavy Fuel Oil	mg/L	0.48 U	0.48 U	NA	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	NA

Notes:
NA - not analyzed
U - the analyte was not detected above the level of the reporting limit
^ Instrument related QC exceeds the control limits



FIGURES



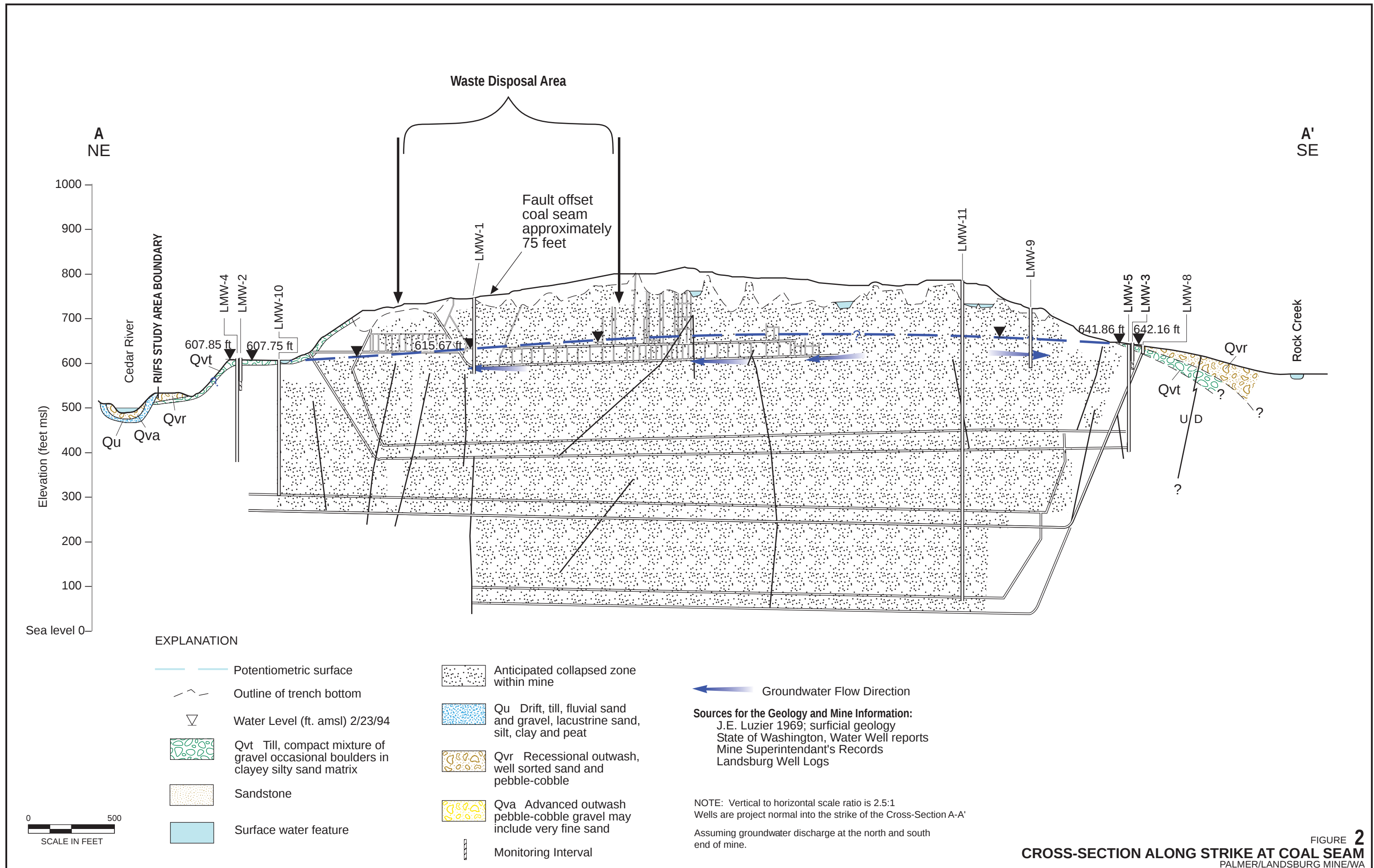


FIGURE 2
CROSS-SECTION ALONG STRIKE AT COAL SEAM
 PALMER/LANDBURG MINE/WA
Golder Associates

APPENDIX A
LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424

Tel: (253)922-2310

TestAmerica Job ID: 580-29897-1

Client Project/Site: Landsburg Mine

For:

Golder Associates Inc.

18300 NE Union Hill Road

Suite 200

Redmond, Washington 98052-3333

Attn: Douglas Morell



Authorized for release by:

12/6/2011 10:23:52 AM

Terri Torres

Project Manager II

terri.torres@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Job ID: 580-29897-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The following samples submitted for metals analysis was received with insufficient preservation (pH >2): Adjusted pH with HNO3 from lot J41037.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

GC Semi VOA - Method(s) 8081A:

The continuing calibration verifications (CCVs) for Methoxychlor associated with batch 101307 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been properly qualified and reported.

Surrogate recovery of Decachlorobiphenyl for the following sample(s) was outside control limits: LMW- EB -1111 (580-29897-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The affected surrogate has been qualified with the "X" and "I" qualifiers and reported.

GC Semi VOA - Method(s) 8082:

The following sample(s) required a sulfuric acid clean-up to reduce matrix interferences: (MB 580-100485/1-A), (LCS 580-100485/2-A), (LCSD 580-100485/3-A), LMW- 11 -1111 (580-29897-2), LMW- 9 -1111 (580-29897-3), LMW- 7 -1111 (580-29897-4), LMW- 7 -1111-D (580-29897-5), LMW- 6 -1111 (580-29897-6), LMW- 10 -1111 (580-29897-7), LMW- 2 -1111 (580-29897-8), LMW- 4 -1111 (580-29897-9), LMW- 5 -1111 (580-29897-10), LMW- 3 -1111 (580-29897-11), LMW- 8 -1111 (580-29897-12) and LMW- EB -1111 (580-29897-13). H2SO4 ID: 737209.

Surrogate recovery for the following sample(s) was outside control limits: LMW- EB -1111 (580-29897-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The affected samples has been qualified with the "X" and "I" qualifiers and reported.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Definitions/Glossary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
I	Indicates the presence of an interference, recovery is not calculated.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: Trip Blank

Date Collected: 11/15/11 00:00

Date Received: 11/17/11 16:10

Lab Sample ID: 580-29897-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 17:36	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 17:36	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 17:36	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 17:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 17:36	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 17:36	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 17:36	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 17:36	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 17:36	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 17:36	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 17:36	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 17:36	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 17:36	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 17:36	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 17:36	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 17:36	1
2-Butanone	ND		2.0		ug/L			11/25/11 17:36	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 17:36	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 17:36	1
2-Hexanone	ND		1.0		ug/L			11/25/11 17:36	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 17:36	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 17:36	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 17:36	1
Acetone	6.1		2.0		ug/L			11/25/11 17:36	1
Acrolein	ND		6.0		ug/L			11/25/11 17:36	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 17:36	1
Benzene	ND		0.10		ug/L			11/25/11 17:36	1
Bromobenzene	ND		0.10		ug/L			11/25/11 17:36	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 17:36	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 17:36	1
Bromoform	ND		0.10		ug/L			11/25/11 17:36	1
Bromomethane	ND		0.10		ug/L			11/25/11 17:36	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 17:36	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 17:36	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 17:36	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 17:36	1
Chloroethane	ND		0.25		ug/L			11/25/11 17:36	1
Chloroform	ND		0.10		ug/L			11/25/11 17:36	1
Chloromethane	ND		0.10		ug/L			11/25/11 17:36	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 17:36	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 17:36	1
Dibromomethane	ND		0.10		ug/L			11/25/11 17:36	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 17:36	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-29897-1

Date Collected: 11/15/11 00:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 17:36	1
Iodomethane	ND		0.50		ug/L			11/25/11 17:36	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 17:36	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 17:36	1
Naphthalene	ND		0.40		ug/L			11/25/11 17:36	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
o-Xylene	ND		0.10		ug/L			11/25/11 17:36	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
Styrene	ND		0.10		ug/L			11/25/11 17:36	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 17:36	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 17:36	1
Toluene	ND		0.10		ug/L			11/25/11 17:36	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 17:36	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 17:36	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 17:36	1
Trichloroethene	ND		0.10		ug/L			11/25/11 17:36	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 17:36	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 17:36	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 17:36	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 120					11/25/11 17:36	1
Ethylbenzene-d10	102		75 - 125					11/25/11 17:36	1
Fluorobenzene (Surr)	97		70 - 130					11/25/11 17:36	1
Toluene-d8 (Surr)	97		75 - 125					11/25/11 17:36	1
Trifluorotoluene (Surr)	88		80 - 125					11/25/11 17:36	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 11 -1111

Lab Sample ID: 580-29897-2

Date Collected: 11/15/11 11:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 20:36	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 20:36	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 20:36	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 20:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 20:36	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 20:36	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 20:36	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 20:36	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 20:36	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 20:36	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 20:36	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 20:36	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 20:36	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 20:36	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 20:36	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 20:36	1
2-Butanone	ND		2.0		ug/L			11/25/11 20:36	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 20:36	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 20:36	1
2-Hexanone	ND		1.0		ug/L			11/25/11 20:36	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 20:36	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 20:36	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 20:36	1
Acetone	ND		2.0		ug/L			11/25/11 20:36	1
Acrolein	ND		6.0		ug/L			11/25/11 20:36	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 20:36	1
Benzene	ND		0.10		ug/L			11/25/11 20:36	1
Bromobenzene	ND		0.10		ug/L			11/25/11 20:36	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 20:36	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 20:36	1
Bromoform	ND		0.10		ug/L			11/25/11 20:36	1
Bromomethane	ND		0.10		ug/L			11/25/11 20:36	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 20:36	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 20:36	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 20:36	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 20:36	1
Chloroethane	ND		0.25		ug/L			11/25/11 20:36	1
Chloroform	ND		0.10		ug/L			11/25/11 20:36	1
Chloromethane	ND		0.10		ug/L			11/25/11 20:36	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 20:36	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 20:36	1
Dibromomethane	ND		0.10		ug/L			11/25/11 20:36	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 20:36	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 11 -1111

Lab Sample ID: 580-29897-2

Date Collected: 11/15/11 11:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 20:36	1
Iodomethane	ND		0.50		ug/L			11/25/11 20:36	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 20:36	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 20:36	1
Naphthalene	ND		0.40		ug/L			11/25/11 20:36	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
o-Xylene	ND		0.10		ug/L			11/25/11 20:36	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
Styrene	ND		0.10		ug/L			11/25/11 20:36	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 20:36	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 20:36	1
Toluene	ND		0.10		ug/L			11/25/11 20:36	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 20:36	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 20:36	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 20:36	1
Trichloroethene	ND		0.10		ug/L			11/25/11 20:36	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 20:36	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 20:36	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 20:36	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 20:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120		11/25/11 20:36	1
Ethylbenzene-d10	102		75 - 125		11/25/11 20:36	1
Fluorobenzene (Surr)	97		70 - 130		11/25/11 20:36	1
Toluene-d8 (Surr)	95		75 - 125		11/25/11 20:36	1
Trifluorotoluene (Surr)	82		80 - 125		11/25/11 20:36	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:13	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 11 -1111

Lab Sample ID: 580-29897-2

Date Collected: 11/15/11 11:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 11:13	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:13	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 11:13	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 11:13	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:13	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:13	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 11:13	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:13	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:13	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 11:13	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:13	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:13	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:13	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:13	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 11 -1111

Lab Sample ID: 580-29897-2

Date Collected: 11/15/11 11:15

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		20 - 134	11/22/11 11:04	12/02/11 11:13	1
Phenol-d5	79		55 - 125	11/22/11 11:04	12/02/11 11:13	1
Nitrobenzene-d5	82		62 - 125	11/22/11 11:04	12/02/11 11:13	1
2-Fluorobiphenyl	84		66 - 140	11/22/11 11:04	12/02/11 11:13	1
2,4,6-Tribromophenol	76		44 - 125	11/22/11 11:04	12/02/11 11:13	1
Terphenyl-d14	81		20 - 150	11/22/11 11:04	12/02/11 11:13	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
Methoxychlor	ND ^		0.094		ug/L		11/20/11 12:57	12/05/11 12:58	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 12:58	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 12:58	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		18 - 181	11/20/11 12:57	12/05/11 12:58	1
DCB Decachlorobiphenyl	69		53 - 122	11/20/11 12:57	12/05/11 12:58	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		60 - 150	11/20/11 12:57	11/21/11 09:06	1
DCB Decachlorobiphenyl	72		40 - 135	11/20/11 12:57	11/21/11 09:06	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 12:49	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 12:49	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 11 -1111

Lab Sample ID: 580-29897-2

Date Collected: 11/15/11 11:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 12:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				11/23/11 11:10	11/28/11 12:49	1
4-Bromofluorobenzene (Surr)	78		50 - 150				11/23/11 11:10	11/28/11 12:49	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 16:22	1
Calcium	54		1.1		mg/L		11/28/11 10:54	11/28/11 16:22	1
Iron	2.1		0.20		mg/L		11/28/11 10:54	11/28/11 16:22	1
Magnesium	27		1.1		mg/L		11/28/11 10:54	11/28/11 16:22	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 16:22	1
Sodium	25		2.0		mg/L		11/28/11 10:54	11/28/11 16:22	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010		0.0050		mg/L		11/28/11 10:54	11/28/11 15:18	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Barium	0.30		0.0060		mg/L		11/28/11 10:54	11/28/11 15:18	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:18	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Manganese	0.13		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 15:18	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:18	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:18	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:18	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 15:18	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 15:18	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 13:09	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 9 -1111

Lab Sample ID: 580-29897-3

Date Collected: 11/15/11 14:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 21:02	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 21:02	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 21:02	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 21:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 21:02	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:02	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 21:02	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 21:02	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:02	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 21:02	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:02	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:02	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:02	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 21:02	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:02	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:02	1
2-Butanone	ND		2.0		ug/L			11/25/11 21:02	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 21:02	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 21:02	1
2-Hexanone	ND		1.0		ug/L			11/25/11 21:02	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 21:02	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 21:02	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 21:02	1
Acetone	ND		2.0		ug/L			11/25/11 21:02	1
Acrolein	ND		6.0		ug/L			11/25/11 21:02	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 21:02	1
Benzene	ND		0.10		ug/L			11/25/11 21:02	1
Bromobenzene	ND		0.10		ug/L			11/25/11 21:02	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 21:02	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 21:02	1
Bromoform	ND		0.10		ug/L			11/25/11 21:02	1
Bromomethane	ND		0.10		ug/L			11/25/11 21:02	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 21:02	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 21:02	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 21:02	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 21:02	1
Chloroethane	ND		0.25		ug/L			11/25/11 21:02	1
Chloroform	ND		0.10		ug/L			11/25/11 21:02	1
Chloromethane	ND		0.10		ug/L			11/25/11 21:02	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:02	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:02	1
Dibromomethane	ND		0.10		ug/L			11/25/11 21:02	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 21:02	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 9 -1111

Lab Sample ID: 580-29897-3

Date Collected: 11/15/11 14:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 21:02	1
Iodomethane	ND		0.50		ug/L			11/25/11 21:02	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 21:02	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 21:02	1
Naphthalene	ND		0.40		ug/L			11/25/11 21:02	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
o-Xylene	ND		0.10		ug/L			11/25/11 21:02	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
Styrene	ND		0.10		ug/L			11/25/11 21:02	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 21:02	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 21:02	1
Toluene	ND		0.10		ug/L			11/25/11 21:02	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:02	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:02	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 21:02	1
Trichloroethene	ND		0.10		ug/L			11/25/11 21:02	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 21:02	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 21:02	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 21:02	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 120		11/25/11 21:02	1
Ethylbenzene-d10	99		75 - 125		11/25/11 21:02	1
Fluorobenzene (Surr)	97		70 - 130		11/25/11 21:02	1
Toluene-d8 (Surr)	96		75 - 125		11/25/11 21:02	1
Trifluorotoluene (Surr)	90		80 - 125		11/25/11 21:02	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:34	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 9 -1111

Lab Sample ID: 580-29897-3

Date Collected: 11/15/11 14:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 11:34	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:34	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 11:34	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 11:34	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:34	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:34	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 11:34	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:34	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:34	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 11:34	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:34	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:34	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:34	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:34	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 9 -1111

Lab Sample ID: 580-29897-3

Date Collected: 11/15/11 14:00

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		20 - 134	11/22/11 11:04	12/02/11 11:34	1
Phenol-d5	72		55 - 125	11/22/11 11:04	12/02/11 11:34	1
Nitrobenzene-d5	72		62 - 125	11/22/11 11:04	12/02/11 11:34	1
2-Fluorobiphenyl	76		66 - 140	11/22/11 11:04	12/02/11 11:34	1
2,4,6-Tribromophenol	67		44 - 125	11/22/11 11:04	12/02/11 11:34	1
Terphenyl-d14	71		20 - 150	11/22/11 11:04	12/02/11 11:34	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 13:17	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:17	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 13:17	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		18 - 181	11/20/11 12:57	12/05/11 13:17	1
DCB Decachlorobiphenyl	68		53 - 122	11/20/11 12:57	12/05/11 13:17	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		60 - 150	11/20/11 12:57	11/21/11 09:19	1
DCB Decachlorobiphenyl	78		40 - 135	11/20/11 12:57	11/21/11 09:19	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 13:13	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 13:13	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 9 -1111

Lab Sample ID: 580-29897-3

Date Collected: 11/15/11 14:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 13:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				11/23/11 11:10	11/28/11 13:13	1
4-Bromofluorobenzene (Surr)	76		50 - 150				11/23/11 11:10	11/28/11 13:13	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 17:08	1
Calcium	81		1.1		mg/L		11/28/11 10:54	11/28/11 17:08	1
Iron	1.5		0.20		mg/L		11/28/11 10:54	11/28/11 17:08	1
Magnesium	43		1.1		mg/L		11/28/11 10:54	11/28/11 17:08	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 17:08	1
Sodium	16		2.0		mg/L		11/28/11 10:54	11/28/11 17:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:57	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Barium	0.35		0.0060		mg/L		11/28/11 10:54	11/28/11 15:57	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:57	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Manganese	0.19		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 15:57	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:57	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:57	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:57	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 15:57	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 15:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 13:11	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 21:28	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 21:28	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 21:28	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 21:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 21:28	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:28	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 21:28	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 21:28	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:28	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 21:28	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:28	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:28	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:28	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 21:28	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:28	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:28	1
2-Butanone	ND		2.0		ug/L			11/25/11 21:28	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 21:28	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 21:28	1
2-Hexanone	ND		1.0		ug/L			11/25/11 21:28	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 21:28	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 21:28	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 21:28	1
Acetone	ND		2.0		ug/L			11/25/11 21:28	1
Acrolein	ND		6.0		ug/L			11/25/11 21:28	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 21:28	1
Benzene	ND		0.10		ug/L			11/25/11 21:28	1
Bromobenzene	ND		0.10		ug/L			11/25/11 21:28	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 21:28	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 21:28	1
Bromoform	ND		0.10		ug/L			11/25/11 21:28	1
Bromomethane	ND		0.10		ug/L			11/25/11 21:28	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 21:28	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 21:28	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 21:28	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 21:28	1
Chloroethane	ND		0.25		ug/L			11/25/11 21:28	1
Chloroform	ND		0.10		ug/L			11/25/11 21:28	1
Chloromethane	ND		0.10		ug/L			11/25/11 21:28	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:28	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:28	1
Dibromomethane	ND		0.10		ug/L			11/25/11 21:28	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 21:28	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 21:28	1
Iodomethane	ND		0.50		ug/L			11/25/11 21:28	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 21:28	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 21:28	1
Naphthalene	ND		0.40		ug/L			11/25/11 21:28	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
o-Xylene	ND		0.10		ug/L			11/25/11 21:28	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
Styrene	ND		0.10		ug/L			11/25/11 21:28	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 21:28	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 21:28	1
Toluene	ND		0.10		ug/L			11/25/11 21:28	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:28	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:28	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 21:28	1
Trichloroethene	ND		0.10		ug/L			11/25/11 21:28	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 21:28	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 21:28	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 21:28	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 21:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 120		11/25/11 21:28	1
Ethylbenzene-d10	99		75 - 125		11/25/11 21:28	1
Fluorobenzene (Surr)	95		70 - 130		11/25/11 21:28	1
Toluene-d8 (Surr)	94		75 - 125		11/25/11 21:28	1
Trifluorotoluene (Surr)	88		80 - 125		11/25/11 21:28	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:55	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 11:55	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:55	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 11:55	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 11:55	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:55	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:55	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 11:55	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 11:55	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:55	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 11:55	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 11:55	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 11:55	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 11:55	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 11:55	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	78		20 - 134	11/22/11 11:04	12/02/11 11:55	1
Phenol-d5	73		55 - 125	11/22/11 11:04	12/02/11 11:55	1
Nitrobenzene-d5	71		62 - 125	11/22/11 11:04	12/02/11 11:55	1
2-Fluorobiphenyl	73		66 - 140	11/22/11 11:04	12/02/11 11:55	1
2,4,6-Tribromophenol	66		44 - 125	11/22/11 11:04	12/02/11 11:55	1
Terphenyl-d14	72		20 - 150	11/22/11 11:04	12/02/11 11:55	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 13:37	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:37	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 13:37	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		18 - 181	11/20/11 12:57	12/05/11 13:37	1
DCB Decachlorobiphenyl	66		53 - 122	11/20/11 12:57	12/05/11 13:37	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		60 - 150	11/20/11 12:57	11/21/11 09:32	1
DCB Decachlorobiphenyl	73		40 - 135	11/20/11 12:57	11/21/11 09:32	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 13:38	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 13:38	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 13:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				11/23/11 11:10	11/28/11 13:38	1
4-Bromofluorobenzene (Surr)	80		50 - 150				11/23/11 11:10	11/28/11 13:38	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 17:19	1
Calcium	56		1.1		mg/L		11/28/11 10:54	11/28/11 17:19	1
Iron	1.1		0.20		mg/L		11/28/11 10:54	11/28/11 17:19	1
Magnesium	25		1.1		mg/L		11/28/11 10:54	11/28/11 17:19	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 17:19	1
Sodium	45		2.0		mg/L		11/28/11 10:54	11/28/11 17:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:02	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Barium	0.56		0.0060		mg/L		11/28/11 10:54	11/28/11 16:02	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:02	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Manganese	0.16		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:02	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:02	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:02	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:02	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:02	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:40	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 21:54	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 21:54	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 21:54	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 21:54	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 21:54	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:54	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 21:54	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 21:54	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:54	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 21:54	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:54	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 21:54	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:54	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 21:54	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 21:54	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 21:54	1
2-Butanone	ND		2.0		ug/L			11/25/11 21:54	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 21:54	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 21:54	1
2-Hexanone	ND		1.0		ug/L			11/25/11 21:54	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 21:54	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 21:54	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 21:54	1
Acetone	ND		2.0		ug/L			11/25/11 21:54	1
Acrolein	ND		6.0		ug/L			11/25/11 21:54	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 21:54	1
Benzene	ND		0.10		ug/L			11/25/11 21:54	1
Bromobenzene	ND		0.10		ug/L			11/25/11 21:54	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 21:54	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 21:54	1
Bromoform	ND		0.10		ug/L			11/25/11 21:54	1
Bromomethane	ND		0.10		ug/L			11/25/11 21:54	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 21:54	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 21:54	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 21:54	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 21:54	1
Chloroethane	ND		0.25		ug/L			11/25/11 21:54	1
Chloroform	ND		0.10		ug/L			11/25/11 21:54	1
Chloromethane	ND		0.10		ug/L			11/25/11 21:54	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:54	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:54	1
Dibromomethane	ND		0.10		ug/L			11/25/11 21:54	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 21:54	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 21:54	1
Iodomethane	ND		0.50		ug/L			11/25/11 21:54	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 21:54	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 21:54	1
Naphthalene	ND		0.40		ug/L			11/25/11 21:54	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
o-Xylene	ND		0.10		ug/L			11/25/11 21:54	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
Styrene	ND		0.10		ug/L			11/25/11 21:54	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 21:54	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 21:54	1
Toluene	ND		0.10		ug/L			11/25/11 21:54	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 21:54	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 21:54	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 21:54	1
Trichloroethene	ND		0.10		ug/L			11/25/11 21:54	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 21:54	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 21:54	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 21:54	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 21:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 120		11/25/11 21:54	1
Ethylbenzene-d10	100		75 - 125		11/25/11 21:54	1
Fluorobenzene (Surr)	95		70 - 130		11/25/11 21:54	1
Toluene-d8 (Surr)	94		75 - 125		11/25/11 21:54	1
Trifluorotoluene (Surr)	92		80 - 125		11/25/11 21:54	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:16	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 12:16	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:16	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 12:16	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 12:16	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:16	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:16	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 12:16	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:16	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:16	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 12:16	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:16	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:16	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:16	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:16	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		20 - 134	11/22/11 11:04	12/02/11 12:16	1
Phenol-d5	81		55 - 125	11/22/11 11:04	12/02/11 12:16	1
Nitrobenzene-d5	80		62 - 125	11/22/11 11:04	12/02/11 12:16	1
2-Fluorobiphenyl	83		66 - 140	11/22/11 11:04	12/02/11 12:16	1
2,4,6-Tribromophenol	75		44 - 125	11/22/11 11:04	12/02/11 12:16	1
Terphenyl-d14	81		20 - 150	11/22/11 11:04	12/02/11 12:16	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 13:56	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 13:56	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 13:56	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		18 - 181	11/20/11 12:57	12/05/11 13:56	1
DCB Decachlorobiphenyl	60		53 - 122	11/20/11 12:57	12/05/11 13:56	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		60 - 150	11/20/11 12:57	11/21/11 09:45	1
DCB Decachlorobiphenyl	68		40 - 135	11/20/11 12:57	11/21/11 09:45	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 14:02	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 14:02	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				11/23/11 11:10	11/28/11 14:02	1
4-Bromofluorobenzene (Surr)	78		50 - 150				11/23/11 11:10	11/28/11 14:02	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 17:31	1
Calcium	54		1.1		mg/L		11/28/11 10:54	11/28/11 17:31	1
Iron	1.0		0.20		mg/L		11/28/11 10:54	11/28/11 17:31	1
Magnesium	24		1.1		mg/L		11/28/11 10:54	11/28/11 17:31	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 17:31	1
Sodium	44		2.0		mg/L		11/28/11 10:54	11/28/11 17:31	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:06	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Barium	0.56		0.0060		mg/L		11/28/11 10:54	11/28/11 16:06	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:06	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Manganese	0.16		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:06	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:06	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:06	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:06	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:06	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:43	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 22:19	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 22:19	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 22:19	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 22:19	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 22:19	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 22:19	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 22:19	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 22:19	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:19	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 22:19	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 22:19	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 22:19	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:19	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 22:19	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:19	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 22:19	1
2-Butanone	ND		2.0		ug/L			11/25/11 22:19	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 22:19	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 22:19	1
2-Hexanone	ND		1.0		ug/L			11/25/11 22:19	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 22:19	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 22:19	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 22:19	1
Acetone	ND		2.0		ug/L			11/25/11 22:19	1
Acrolein	ND		6.0		ug/L			11/25/11 22:19	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 22:19	1
Benzene	ND		0.10		ug/L			11/25/11 22:19	1
Bromobenzene	ND		0.10		ug/L			11/25/11 22:19	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 22:19	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 22:19	1
Bromoform	ND		0.10		ug/L			11/25/11 22:19	1
Bromomethane	ND		0.10		ug/L			11/25/11 22:19	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 22:19	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 22:19	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 22:19	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 22:19	1
Chloroethane	ND		0.25		ug/L			11/25/11 22:19	1
Chloroform	ND		0.10		ug/L			11/25/11 22:19	1
Chloromethane	ND		0.10		ug/L			11/25/11 22:19	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 22:19	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 22:19	1
Dibromomethane	ND		0.10		ug/L			11/25/11 22:19	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 22:19	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 22:19	1
Iodomethane	ND		0.50		ug/L			11/25/11 22:19	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 22:19	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 22:19	1
Naphthalene	ND		0.40		ug/L			11/25/11 22:19	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
o-Xylene	ND		0.10		ug/L			11/25/11 22:19	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
Styrene	ND		0.10		ug/L			11/25/11 22:19	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 22:19	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 22:19	1
Toluene	ND		0.10		ug/L			11/25/11 22:19	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 22:19	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 22:19	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 22:19	1
Trichloroethene	ND		0.10		ug/L			11/25/11 22:19	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 22:19	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 22:19	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 22:19	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 22:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 120		11/25/11 22:19	1
Ethylbenzene-d10	99		75 - 125		11/25/11 22:19	1
Fluorobenzene (Surr)	94		70 - 130		11/25/11 22:19	1
Toluene-d8 (Surr)	94		75 - 125		11/25/11 22:19	1
Trifluorotoluene (Surr)	93		80 - 125		11/25/11 22:19	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:37	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 12:37	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:37	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 12:37	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 12:37	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:37	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:37	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 12:37	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:37	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:37	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 12:37	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:37	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:37	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:37	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:37	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		20 - 134	11/22/11 11:04	12/02/11 12:37	1
Phenol-d5	80		55 - 125	11/22/11 11:04	12/02/11 12:37	1
Nitrobenzene-d5	79		62 - 125	11/22/11 11:04	12/02/11 12:37	1
2-Fluorobiphenyl	81		66 - 140	11/22/11 11:04	12/02/11 12:37	1
2,4,6-Tribromophenol	72		44 - 125	11/22/11 11:04	12/02/11 12:37	1
Terphenyl-d14	78		20 - 150	11/22/11 11:04	12/02/11 12:37	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
Methoxychlor	ND ^		0.094		ug/L		11/20/11 12:57	12/05/11 14:15	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:15	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 14:15	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		18 - 181	11/20/11 12:57	12/05/11 14:15	1
DCB Decachlorobiphenyl	69		53 - 122	11/20/11 12:57	12/05/11 14:15	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 09:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	100		60 - 150	11/20/11 12:57	11/21/11 09:58	1
DCB Decachlorobiphenyl	73		40 - 135	11/20/11 12:57	11/21/11 09:58	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 14:26	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 14:26	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				11/23/11 11:10	11/28/11 14:26	1
4-Bromofluorobenzene (Surr)	82		50 - 150				11/23/11 11:10	11/28/11 14:26	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 17:42	1
Calcium	28		1.1		mg/L		11/28/11 10:54	11/28/11 17:42	1
Iron	0.33		0.20		mg/L		11/28/11 10:54	11/28/11 17:42	1
Magnesium	14		1.1		mg/L		11/28/11 10:54	11/28/11 17:42	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 17:42	1
Sodium	7.4		2.0		mg/L		11/28/11 10:54	11/28/11 17:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:10	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Barium	0.11		0.0060		mg/L		11/28/11 10:54	11/28/11 16:10	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:10	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Manganese	0.032		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:10	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:10	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:10	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:10	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:10	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:45	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 22:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 22:45	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 22:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 22:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 22:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 22:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 22:45	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 22:45	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:45	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 22:45	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 22:45	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 22:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:45	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 22:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 22:45	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 22:45	1
2-Butanone	ND		2.0		ug/L			11/25/11 22:45	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 22:45	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 22:45	1
2-Hexanone	ND		1.0		ug/L			11/25/11 22:45	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 22:45	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 22:45	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 22:45	1
Acetone	ND		2.0		ug/L			11/25/11 22:45	1
Acrolein	ND		6.0		ug/L			11/25/11 22:45	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 22:45	1
Benzene	ND		0.10		ug/L			11/25/11 22:45	1
Bromobenzene	ND		0.10		ug/L			11/25/11 22:45	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 22:45	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 22:45	1
Bromoform	ND		0.10		ug/L			11/25/11 22:45	1
Bromomethane	ND		0.10		ug/L			11/25/11 22:45	1
Carbon disulfide	0.15		0.10		ug/L			11/25/11 22:45	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 22:45	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 22:45	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 22:45	1
Chloroethane	ND		0.25		ug/L			11/25/11 22:45	1
Chloroform	ND		0.10		ug/L			11/25/11 22:45	1
Chloromethane	ND		0.10		ug/L			11/25/11 22:45	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 22:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 22:45	1
Dibromomethane	ND		0.10		ug/L			11/25/11 22:45	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 22:45	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 22:45	1
Iodomethane	ND		0.50		ug/L			11/25/11 22:45	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 22:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 22:45	1
Naphthalene	ND		0.40		ug/L			11/25/11 22:45	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
o-Xylene	ND		0.10		ug/L			11/25/11 22:45	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
Styrene	ND		0.10		ug/L			11/25/11 22:45	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 22:45	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 22:45	1
Toluene	ND		0.10		ug/L			11/25/11 22:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 22:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 22:45	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 22:45	1
Trichloroethene	ND		0.10		ug/L			11/25/11 22:45	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 22:45	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 22:45	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 22:45	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 22:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 120		11/25/11 22:45	1
Ethylbenzene-d10	102		75 - 125		11/25/11 22:45	1
Fluorobenzene (Surr)	97		70 - 130		11/25/11 22:45	1
Toluene-d8 (Surr)	90		75 - 125		11/25/11 22:45	1
Trifluorotoluene (Surr)	83		80 - 125		11/25/11 22:45	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:58	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 12:58	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:58	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 12:58	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 12:58	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:58	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:58	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 12:58	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 12:58	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:58	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 12:58	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 12:58	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 12:58	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 12:58	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 12:58	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	86		20 - 134	11/22/11 11:04	12/02/11 12:58	1
Phenol-d5	81		55 - 125	11/22/11 11:04	12/02/11 12:58	1
Nitrobenzene-d5	80		62 - 125	11/22/11 11:04	12/02/11 12:58	1
2-Fluorobiphenyl	82		66 - 140	11/22/11 11:04	12/02/11 12:58	1
2,4,6-Tribromophenol	72		44 - 125	11/22/11 11:04	12/02/11 12:58	1
Terphenyl-d14	78		20 - 150	11/22/11 11:04	12/02/11 12:58	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 14:35	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 14:35	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 14:35	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		18 - 181	11/20/11 12:57	12/05/11 14:35	1
DCB Decachlorobiphenyl	61		53 - 122	11/20/11 12:57	12/05/11 14:35	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		60 - 150	11/20/11 12:57	11/21/11 10:11	1
DCB Decachlorobiphenyl	62		40 - 135	11/20/11 12:57	11/21/11 10:11	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 14:52	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 14:52	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				11/23/11 11:10	11/28/11 14:52	1
4-Bromofluorobenzene (Surr)	78		50 - 150				11/23/11 11:10	11/28/11 14:52	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 17:53	1
Calcium	6.8		1.1		mg/L		11/28/11 10:54	11/28/11 17:53	1
Iron	ND		0.20		mg/L		11/28/11 10:54	11/28/11 17:53	1
Magnesium	2.8		1.1		mg/L		11/28/11 10:54	11/28/11 17:53	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 17:53	1
Sodium	82		2.0		mg/L		11/28/11 10:54	11/28/11 17:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:15	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Barium	0.038		0.0060		mg/L		11/28/11 10:54	11/28/11 16:15	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:15	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Manganese	0.0094		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:15	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:15	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:15	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:15	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:15	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:47	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 23:10	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 23:10	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 23:10	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 23:10	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 23:10	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 23:10	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 23:10	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 23:10	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:10	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 23:10	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 23:10	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 23:10	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:10	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 23:10	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:10	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 23:10	1
2-Butanone	ND		2.0		ug/L			11/25/11 23:10	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 23:10	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 23:10	1
2-Hexanone	ND		1.0		ug/L			11/25/11 23:10	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 23:10	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 23:10	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 23:10	1
Acetone	ND		2.0		ug/L			11/25/11 23:10	1
Acrolein	ND		6.0		ug/L			11/25/11 23:10	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 23:10	1
Benzene	ND		0.10		ug/L			11/25/11 23:10	1
Bromobenzene	ND		0.10		ug/L			11/25/11 23:10	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 23:10	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 23:10	1
Bromoform	ND		0.10		ug/L			11/25/11 23:10	1
Bromomethane	ND		0.10		ug/L			11/25/11 23:10	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 23:10	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 23:10	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 23:10	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 23:10	1
Chloroethane	ND		0.25		ug/L			11/25/11 23:10	1
Chloroform	ND		0.10		ug/L			11/25/11 23:10	1
Chloromethane	ND		0.10		ug/L			11/25/11 23:10	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 23:10	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 23:10	1
Dibromomethane	ND		0.10		ug/L			11/25/11 23:10	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 23:10	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 23:10	1
Iodomethane	ND		0.50		ug/L			11/25/11 23:10	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 23:10	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 23:10	1
Naphthalene	ND		0.40		ug/L			11/25/11 23:10	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
o-Xylene	ND		0.10		ug/L			11/25/11 23:10	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
Styrene	ND		0.10		ug/L			11/25/11 23:10	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 23:10	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 23:10	1
Toluene	ND		0.10		ug/L			11/25/11 23:10	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 23:10	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 23:10	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 23:10	1
Trichloroethene	ND		0.10		ug/L			11/25/11 23:10	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 23:10	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 23:10	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 23:10	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120		11/25/11 23:10	1
Ethylbenzene-d10	98		75 - 125		11/25/11 23:10	1
Fluorobenzene (Surr)	96		70 - 130		11/25/11 23:10	1
Toluene-d8 (Surr)	91		75 - 125		11/25/11 23:10	1
Trifluorotoluene (Surr)	84		80 - 125		11/25/11 23:10	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:19	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 13:19	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:19	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 13:19	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 13:19	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:19	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:19	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 13:19	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:19	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:19	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 13:19	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:19	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:19	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:19	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:19	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	85		20 - 134	11/22/11 11:04	12/02/11 13:19	1
Phenol-d5	82		55 - 125	11/22/11 11:04	12/02/11 13:19	1
Nitrobenzene-d5	81		62 - 125	11/22/11 11:04	12/02/11 13:19	1
2-Fluorobiphenyl	83		66 - 140	11/22/11 11:04	12/02/11 13:19	1
2,4,6-Tribromophenol	75		44 - 125	11/22/11 11:04	12/02/11 13:19	1
Terphenyl-d14	81		20 - 150	11/22/11 11:04	12/02/11 13:19	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 15:52	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 15:52	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 15:52	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		18 - 181	11/20/11 12:57	12/05/11 15:52	1
DCB Decachlorobiphenyl	72		53 - 122	11/20/11 12:57	12/05/11 15:52	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 10:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		60 - 150	11/20/11 12:57	11/21/11 10:50	1
DCB Decachlorobiphenyl	95		40 - 135	11/20/11 12:57	11/21/11 10:50	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 15:16	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 15:16	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				11/23/11 11:10	11/28/11 15:16	1
4-Bromofluorobenzene (Surr)	70		50 - 150				11/23/11 11:10	11/28/11 15:16	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 18:18	1
Calcium	120		1.1		mg/L		11/28/11 10:54	11/28/11 18:18	1
Iron	ND		0.20		mg/L		11/28/11 10:54	11/28/11 18:18	1
Magnesium	67		1.1		mg/L		11/28/11 10:54	11/28/11 18:18	1
Potassium	3.7		3.3		mg/L		11/28/11 10:54	11/28/11 18:18	1
Sodium	22		2.0		mg/L		11/28/11 10:54	11/28/11 18:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:19	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Barium	0.40		0.0060		mg/L		11/28/11 10:54	11/28/11 16:19	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:19	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Manganese	0.25		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:19	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:19	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:19	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:19	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:19	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:49	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 23:36	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 23:36	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 23:36	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 23:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 23:36	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 23:36	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 23:36	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 23:36	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:36	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 23:36	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 23:36	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 23:36	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:36	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 23:36	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 23:36	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 23:36	1
2-Butanone	ND		2.0		ug/L			11/25/11 23:36	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 23:36	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 23:36	1
2-Hexanone	ND		1.0		ug/L			11/25/11 23:36	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 23:36	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 23:36	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 23:36	1
Acetone	ND		2.0		ug/L			11/25/11 23:36	1
Acrolein	ND		6.0		ug/L			11/25/11 23:36	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 23:36	1
Benzene	ND		0.10		ug/L			11/25/11 23:36	1
Bromobenzene	ND		0.10		ug/L			11/25/11 23:36	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 23:36	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 23:36	1
Bromoform	ND		0.10		ug/L			11/25/11 23:36	1
Bromomethane	ND		0.10		ug/L			11/25/11 23:36	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 23:36	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 23:36	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 23:36	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 23:36	1
Chloroethane	ND		0.25		ug/L			11/25/11 23:36	1
Chloroform	ND		0.10		ug/L			11/25/11 23:36	1
Chloromethane	ND		0.10		ug/L			11/25/11 23:36	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 23:36	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 23:36	1
Dibromomethane	ND		0.10		ug/L			11/25/11 23:36	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 23:36	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 23:36	1
Iodomethane	ND		0.50		ug/L			11/25/11 23:36	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 23:36	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 23:36	1
Naphthalene	ND		0.40		ug/L			11/25/11 23:36	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
o-Xylene	ND		0.10		ug/L			11/25/11 23:36	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
Styrene	ND		0.10		ug/L			11/25/11 23:36	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 23:36	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 23:36	1
Toluene	ND		0.10		ug/L			11/25/11 23:36	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 23:36	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 23:36	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 23:36	1
Trichloroethene	ND		0.10		ug/L			11/25/11 23:36	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 23:36	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 23:36	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 23:36	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 23:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		75 - 120		11/25/11 23:36	1
Ethylbenzene-d10	100		75 - 125		11/25/11 23:36	1
Fluorobenzene (Surr)	95		70 - 130		11/25/11 23:36	1
Toluene-d8 (Surr)	94		75 - 125		11/25/11 23:36	1
Trifluorotoluene (Surr)	85		80 - 125		11/25/11 23:36	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:40	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 13:40	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:40	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 13:40	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 13:40	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:40	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:40	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 13:40	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 13:40	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:40	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 13:40	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 13:40	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 13:40	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 13:40	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 13:40	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		20 - 134	11/22/11 11:04	12/02/11 13:40	1
Phenol-d5	78		55 - 125	11/22/11 11:04	12/02/11 13:40	1
Nitrobenzene-d5	76		62 - 125	11/22/11 11:04	12/02/11 13:40	1
2-Fluorobiphenyl	79		66 - 140	11/22/11 11:04	12/02/11 13:40	1
2,4,6-Tribromophenol	74		44 - 125	11/22/11 11:04	12/02/11 13:40	1
Terphenyl-d14	75		20 - 150	11/22/11 11:04	12/02/11 13:40	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
Methoxychlor	ND ^		0.094		ug/L		11/20/11 12:57	12/05/11 16:11	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:11	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 16:11	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		18 - 181	11/20/11 12:57	12/05/11 16:11	1
DCB Decachlorobiphenyl	73		53 - 122	11/20/11 12:57	12/05/11 16:11	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		60 - 150	11/20/11 12:57	11/21/11 11:02	1
DCB Decachlorobiphenyl	86		40 - 135	11/20/11 12:57	11/21/11 11:02	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 15:41	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 15:41	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				11/23/11 11:10	11/28/11 15:41	1
4-Bromofluorobenzene (Surr)	78		50 - 150				11/23/11 11:10	11/28/11 15:41	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 18:30	1
Calcium	110		1.1		mg/L		11/28/11 10:54	11/28/11 18:30	1
Iron	0.92		0.20		mg/L		11/28/11 10:54	11/28/11 18:30	1
Magnesium	63		1.1		mg/L		11/28/11 10:54	11/28/11 18:30	1
Potassium	3.8		3.3		mg/L		11/28/11 10:54	11/28/11 18:30	1
Sodium	29		2.0		mg/L		11/28/11 10:54	11/28/11 18:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:23	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Barium	0.39		0.0060		mg/L		11/28/11 10:54	11/28/11 16:23	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:23	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Manganese	0.18		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:23	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:23	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:23	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:23	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:23	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:51	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/26/11 00:01	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,1-Dichloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,1-Dichloroethene	ND		0.10		ug/L			11/26/11 00:01	1
1,1-Dichloropropene	ND		0.10		ug/L			11/26/11 00:01	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/26/11 00:01	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/26/11 00:01	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:01	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/26/11 00:01	1
1,2-Dibromoethane	ND		0.10		ug/L			11/26/11 00:01	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:01	1
1,2-Dichloroethane	ND		0.10		ug/L			11/26/11 00:01	1
1,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:01	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:01	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:01	1
1,3-Dichloropropane	ND		0.10		ug/L			11/26/11 00:01	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:01	1
2,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:01	1
2-Butanone	ND		2.0		ug/L			11/26/11 00:01	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/26/11 00:01	1
2-Chlorotoluene	ND		0.10		ug/L			11/26/11 00:01	1
2-Hexanone	ND		1.0		ug/L			11/26/11 00:01	1
4-Chlorotoluene	ND		0.20		ug/L			11/26/11 00:01	1
4-Isopropyltoluene	ND		0.20		ug/L			11/26/11 00:01	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/26/11 00:01	1
Acetone	ND		2.0		ug/L			11/26/11 00:01	1
Acrolein	ND		6.0		ug/L			11/26/11 00:01	1
Acrylonitrile	ND		2.0		ug/L			11/26/11 00:01	1
Benzene	ND		0.10		ug/L			11/26/11 00:01	1
Bromobenzene	ND		0.10		ug/L			11/26/11 00:01	1
Bromochloromethane	ND		0.10		ug/L			11/26/11 00:01	1
Bromodichloromethane	ND		0.10		ug/L			11/26/11 00:01	1
Bromoform	ND		0.10		ug/L			11/26/11 00:01	1
Bromomethane	ND		0.10		ug/L			11/26/11 00:01	1
Carbon disulfide	ND		0.10		ug/L			11/26/11 00:01	1
Carbon tetrachloride	ND		0.10		ug/L			11/26/11 00:01	1
Chlorobenzene	ND		0.10		ug/L			11/26/11 00:01	1
Chlorodibromomethane	ND		0.10		ug/L			11/26/11 00:01	1
Chloroethane	ND		0.25		ug/L			11/26/11 00:01	1
Chloroform	ND		0.10		ug/L			11/26/11 00:01	1
Chloromethane	ND		0.10		ug/L			11/26/11 00:01	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:01	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:01	1
Dibromomethane	ND		0.10		ug/L			11/26/11 00:01	1
Ethylbenzene	ND		0.10		ug/L			11/26/11 00:01	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/26/11 00:01	1
Iodomethane	ND		0.50		ug/L			11/26/11 00:01	1
Isopropylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
Methylene Chloride	ND		0.50		ug/L			11/26/11 00:01	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/26/11 00:01	1
Naphthalene	ND		0.40		ug/L			11/26/11 00:01	1
n-Butylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
N-Propylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
o-Xylene	ND		0.10		ug/L			11/26/11 00:01	1
sec-Butylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
Styrene	ND		0.10		ug/L			11/26/11 00:01	1
tert-Butylbenzene	ND		0.10		ug/L			11/26/11 00:01	1
Tetrachloroethene	ND		0.10		ug/L			11/26/11 00:01	1
Toluene	ND		0.10		ug/L			11/26/11 00:01	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:01	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:01	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/26/11 00:01	1
Trichloroethene	ND		0.10		ug/L			11/26/11 00:01	1
Trichlorofluoromethane	ND		0.10		ug/L			11/26/11 00:01	1
Vinyl acetate	ND		0.50		ug/L			11/26/11 00:01	1
Vinyl chloride	ND		0.020		ug/L			11/26/11 00:01	1
Xylenes, Total	ND		0.10		ug/L			11/26/11 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 120		11/26/11 00:01	1
Ethylbenzene-d10	99		75 - 125		11/26/11 00:01	1
Fluorobenzene (Surr)	98		70 - 130		11/26/11 00:01	1
Toluene-d8 (Surr)	94		75 - 125		11/26/11 00:01	1
Trifluorotoluene (Surr)	89		80 - 125		11/26/11 00:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:01	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 14:01	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:01	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 14:01	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 14:01	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:01	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:01	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 14:01	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:01	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:01	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 14:01	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:01	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:01	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:01	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:01	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	84		20 - 134	11/22/11 11:04	12/02/11 14:01	1
Phenol-d5	79		55 - 125	11/22/11 11:04	12/02/11 14:01	1
Nitrobenzene-d5	78		62 - 125	11/22/11 11:04	12/02/11 14:01	1
2-Fluorobiphenyl	80		66 - 140	11/22/11 11:04	12/02/11 14:01	1
2,4,6-Tribromophenol	74		44 - 125	11/22/11 11:04	12/02/11 14:01	1
Terphenyl-d14	75		20 - 150	11/22/11 11:04	12/02/11 14:01	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 16:31	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:31	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 16:31	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		18 - 181	11/20/11 12:57	12/05/11 16:31	1
DCB Decachlorobiphenyl	70		53 - 122	11/20/11 12:57	12/05/11 16:31	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	105		60 - 150	11/20/11 12:57	11/21/11 11:15	1
DCB Decachlorobiphenyl	91		40 - 135	11/20/11 12:57	11/21/11 11:15	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 16:05	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 16:05	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				11/23/11 11:10	11/28/11 16:05	1
4-Bromofluorobenzene (Surr)	86		50 - 150				11/23/11 11:10	11/28/11 16:05	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 18:41	1
Calcium	90		1.1		mg/L		11/28/11 10:54	11/28/11 18:41	1
Iron	0.21		0.20		mg/L		11/28/11 10:54	11/28/11 18:41	1
Magnesium	48		1.1		mg/L		11/28/11 10:54	11/28/11 18:41	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 18:41	1
Sodium	18		2.0		mg/L		11/28/11 10:54	11/28/11 18:41	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:28	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Barium	0.29		0.0060		mg/L		11/28/11 10:54	11/28/11 16:28	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:28	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Manganese	0.23		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:28	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:28	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:28	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:28	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:28	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:54	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/26/11 00:27	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,1-Dichloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,1-Dichloroethene	ND		0.10		ug/L			11/26/11 00:27	1
1,1-Dichloropropene	ND		0.10		ug/L			11/26/11 00:27	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/26/11 00:27	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/26/11 00:27	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:27	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/26/11 00:27	1
1,2-Dibromoethane	ND		0.10		ug/L			11/26/11 00:27	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:27	1
1,2-Dichloroethane	ND		0.10		ug/L			11/26/11 00:27	1
1,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:27	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:27	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:27	1
1,3-Dichloropropane	ND		0.10		ug/L			11/26/11 00:27	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:27	1
2,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:27	1
2-Butanone	ND		2.0		ug/L			11/26/11 00:27	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/26/11 00:27	1
2-Chlorotoluene	ND		0.10		ug/L			11/26/11 00:27	1
2-Hexanone	ND		1.0		ug/L			11/26/11 00:27	1
4-Chlorotoluene	ND		0.20		ug/L			11/26/11 00:27	1
4-Isopropyltoluene	ND		0.20		ug/L			11/26/11 00:27	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/26/11 00:27	1
Acetone	ND		2.0		ug/L			11/26/11 00:27	1
Acrolein	ND		6.0		ug/L			11/26/11 00:27	1
Acrylonitrile	ND		2.0		ug/L			11/26/11 00:27	1
Benzene	ND		0.10		ug/L			11/26/11 00:27	1
Bromobenzene	ND		0.10		ug/L			11/26/11 00:27	1
Bromochloromethane	ND		0.10		ug/L			11/26/11 00:27	1
Bromodichloromethane	ND		0.10		ug/L			11/26/11 00:27	1
Bromoform	ND		0.10		ug/L			11/26/11 00:27	1
Bromomethane	ND		0.10		ug/L			11/26/11 00:27	1
Carbon disulfide	ND		0.10		ug/L			11/26/11 00:27	1
Carbon tetrachloride	ND		0.10		ug/L			11/26/11 00:27	1
Chlorobenzene	ND		0.10		ug/L			11/26/11 00:27	1
Chlorodibromomethane	ND		0.10		ug/L			11/26/11 00:27	1
Chloroethane	ND		0.25		ug/L			11/26/11 00:27	1
Chloroform	ND		0.10		ug/L			11/26/11 00:27	1
Chloromethane	ND		0.10		ug/L			11/26/11 00:27	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:27	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:27	1
Dibromomethane	ND		0.10		ug/L			11/26/11 00:27	1
Ethylbenzene	ND		0.10		ug/L			11/26/11 00:27	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/26/11 00:27	1
Iodomethane	ND		0.50		ug/L			11/26/11 00:27	1
Isopropylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
Methylene Chloride	ND		0.50		ug/L			11/26/11 00:27	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/26/11 00:27	1
Naphthalene	ND		0.40		ug/L			11/26/11 00:27	1
n-Butylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
N-Propylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
o-Xylene	ND		0.10		ug/L			11/26/11 00:27	1
sec-Butylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
Styrene	ND		0.10		ug/L			11/26/11 00:27	1
tert-Butylbenzene	ND		0.10		ug/L			11/26/11 00:27	1
Tetrachloroethene	ND		0.10		ug/L			11/26/11 00:27	1
Toluene	ND		0.10		ug/L			11/26/11 00:27	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:27	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:27	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/26/11 00:27	1
Trichloroethene	ND		0.10		ug/L			11/26/11 00:27	1
Trichlorofluoromethane	ND		0.10		ug/L			11/26/11 00:27	1
Vinyl acetate	ND		0.50		ug/L			11/26/11 00:27	1
Vinyl chloride	ND		0.020		ug/L			11/26/11 00:27	1
Xylenes, Total	ND		0.10		ug/L			11/26/11 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 120		11/26/11 00:27	1
Ethylbenzene-d10	96		75 - 125		11/26/11 00:27	1
Fluorobenzene (Surr)	96		70 - 130		11/26/11 00:27	1
Toluene-d8 (Surr)	92		75 - 125		11/26/11 00:27	1
Trifluorotoluene (Surr)	90		80 - 125		11/26/11 00:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:22	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 14:22	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:22	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 14:22	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 14:22	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:22	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:22	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 14:22	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:22	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:22	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:22	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:22	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:22	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	83		20 - 134	11/22/11 11:04	12/02/11 14:22	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5	79		55 - 125	11/22/11 11:04	12/02/11 14:22	1
Nitrobenzene-d5	80		62 - 125	11/22/11 11:04	12/02/11 14:22	1
2-Fluorobiphenyl	81		66 - 140	11/22/11 11:04	12/02/11 14:22	1
2,4,6-Tribromophenol	70		44 - 125	11/22/11 11:04	12/02/11 14:22	1
Terphenyl-d14	77		20 - 150	11/22/11 11:04	12/02/11 14:22	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	66		28		ug/L		11/22/11 11:04	12/05/11 12:15	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	87		20 - 134	11/22/11 11:04	12/05/11 12:15	2
Phenol-d5	84		55 - 125	11/22/11 11:04	12/05/11 12:15	2
Nitrobenzene-d5	79		62 - 125	11/22/11 11:04	12/05/11 12:15	2
2-Fluorobiphenyl	80		66 - 140	11/22/11 11:04	12/05/11 12:15	2
2,4,6-Tribromophenol	78		44 - 125	11/22/11 11:04	12/05/11 12:15	2
Terphenyl-d14	74		20 - 150	11/22/11 11:04	12/05/11 12:15	2

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
Methoxychlor	ND ^		0.094		ug/L		11/20/11 12:57	12/05/11 16:50	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 16:50	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 16:50	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		18 - 181	11/20/11 12:57	12/05/11 16:50	1
DCB Decachlorobiphenyl	68		53 - 122	11/20/11 12:57	12/05/11 16:50	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		60 - 150				11/20/11 12:57	11/21/11 11:28	1
DCB Decachlorobiphenyl	86		40 - 135				11/20/11 12:57	11/21/11 11:28	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 16:30	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 16:30	1
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 16:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	93		50 - 150				11/23/11 11:10	11/28/11 16:30	1
4-Bromofluorobenzene (Surr)	80		50 - 150				11/23/11 11:10	11/28/11 16:30	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 19:06	1
Calcium	38		1.1		mg/L		11/28/11 10:54	11/28/11 19:06	1
Iron	ND		0.20		mg/L		11/28/11 10:54	11/28/11 19:06	1
Magnesium	15		1.1		mg/L		11/28/11 10:54	11/28/11 19:06	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 19:06	1
Sodium	10		2.0		mg/L		11/28/11 10:54	11/28/11 19:06	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:32	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Barium	0.080		0.0060		mg/L		11/28/11 10:54	11/28/11 16:32	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:32	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Manganese	0.047		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:32	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:32	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:32	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:32	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:32	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 13:13	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/26/11 00:52	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,1-Dichloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,1-Dichloroethene	ND		0.10		ug/L			11/26/11 00:52	1
1,1-Dichloropropene	ND		0.10		ug/L			11/26/11 00:52	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/26/11 00:52	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/26/11 00:52	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:52	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/26/11 00:52	1
1,2-Dibromoethane	ND		0.10		ug/L			11/26/11 00:52	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:52	1
1,2-Dichloroethane	ND		0.10		ug/L			11/26/11 00:52	1
1,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:52	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/26/11 00:52	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:52	1
1,3-Dichloropropane	ND		0.10		ug/L			11/26/11 00:52	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/26/11 00:52	1
2,2-Dichloropropane	ND		0.10		ug/L			11/26/11 00:52	1
2-Butanone	ND		2.0		ug/L			11/26/11 00:52	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/26/11 00:52	1
2-Chlorotoluene	ND		0.10		ug/L			11/26/11 00:52	1
2-Hexanone	ND		1.0		ug/L			11/26/11 00:52	1
4-Chlorotoluene	ND		0.20		ug/L			11/26/11 00:52	1
4-Isopropyltoluene	ND		0.20		ug/L			11/26/11 00:52	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/26/11 00:52	1
Acetone	ND		2.0		ug/L			11/26/11 00:52	1
Acrolein	ND		6.0		ug/L			11/26/11 00:52	1
Acrylonitrile	ND		2.0		ug/L			11/26/11 00:52	1
Benzene	ND		0.10		ug/L			11/26/11 00:52	1
Bromobenzene	ND		0.10		ug/L			11/26/11 00:52	1
Bromochloromethane	ND		0.10		ug/L			11/26/11 00:52	1
Bromodichloromethane	ND		0.10		ug/L			11/26/11 00:52	1
Bromoform	ND		0.10		ug/L			11/26/11 00:52	1
Bromomethane	ND		0.10		ug/L			11/26/11 00:52	1
Carbon disulfide	ND		0.10		ug/L			11/26/11 00:52	1
Carbon tetrachloride	ND		0.10		ug/L			11/26/11 00:52	1
Chlorobenzene	ND		0.10		ug/L			11/26/11 00:52	1
Chlorodibromomethane	ND		0.10		ug/L			11/26/11 00:52	1
Chloroethane	ND		0.25		ug/L			11/26/11 00:52	1
Chloroform	ND		0.10		ug/L			11/26/11 00:52	1
Chloromethane	ND		0.10		ug/L			11/26/11 00:52	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:52	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:52	1
Dibromomethane	ND		0.10		ug/L			11/26/11 00:52	1
Ethylbenzene	ND		0.10		ug/L			11/26/11 00:52	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/26/11 00:52	1
Iodomethane	ND		0.50		ug/L			11/26/11 00:52	1
Isopropylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
Methylene Chloride	ND		0.50		ug/L			11/26/11 00:52	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/26/11 00:52	1
Naphthalene	ND		0.40		ug/L			11/26/11 00:52	1
n-Butylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
N-Propylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
o-Xylene	ND		0.10		ug/L			11/26/11 00:52	1
sec-Butylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
Styrene	ND		0.10		ug/L			11/26/11 00:52	1
tert-Butylbenzene	ND		0.10		ug/L			11/26/11 00:52	1
Tetrachloroethene	ND		0.10		ug/L			11/26/11 00:52	1
Toluene	ND		0.10		ug/L			11/26/11 00:52	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/26/11 00:52	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/26/11 00:52	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/26/11 00:52	1
Trichloroethene	ND		0.10		ug/L			11/26/11 00:52	1
Trichlorofluoromethane	ND		0.10		ug/L			11/26/11 00:52	1
Vinyl acetate	ND		0.50		ug/L			11/26/11 00:52	1
Vinyl chloride	ND		0.020		ug/L			11/26/11 00:52	1
Xylenes, Total	ND		0.10		ug/L			11/26/11 00:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120		11/26/11 00:52	1
Ethylbenzene-d10	97		75 - 125		11/26/11 00:52	1
Fluorobenzene (Surr)	98		70 - 130		11/26/11 00:52	1
Toluene-d8 (Surr)	95		75 - 125		11/26/11 00:52	1
Trifluorotoluene (Surr)	95		80 - 125		11/26/11 00:52	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:43	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 14:43	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:43	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 14:43	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 14:43	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:43	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:43	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 14:43	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 14:43	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:43	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 14:43	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 14:43	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 14:43	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 14:43	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 14:43	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		20 - 134	11/22/11 11:04	12/02/11 14:43	1
Phenol-d5	83		55 - 125	11/22/11 11:04	12/02/11 14:43	1
Nitrobenzene-d5	82		62 - 125	11/22/11 11:04	12/02/11 14:43	1
2-Fluorobiphenyl	83		66 - 140	11/22/11 11:04	12/02/11 14:43	1
2,4,6-Tribromophenol	81		44 - 125	11/22/11 11:04	12/02/11 14:43	1
Terphenyl-d14	80		20 - 150	11/22/11 11:04	12/02/11 14:43	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 17:09	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:09	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 17:09	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		18 - 181	11/20/11 12:57	12/05/11 17:09	1
DCB Decachlorobiphenyl	67		53 - 122	11/20/11 12:57	12/05/11 17:09	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		60 - 150	11/20/11 12:57	11/21/11 11:41	1
DCB Decachlorobiphenyl	83		40 - 135	11/20/11 12:57	11/21/11 11:41	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 16:55	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 16:55	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 16:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				11/23/11 11:10	11/28/11 16:55	1
4-Bromofluorobenzene (Surr)	76		50 - 150				11/23/11 11:10	11/28/11 16:55	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 19:17	1
Calcium	79		1.1		mg/L		11/28/11 10:54	11/28/11 19:17	1
Iron	12		0.20		mg/L		11/28/11 10:54	11/28/11 19:17	1
Magnesium	42		1.1		mg/L		11/28/11 10:54	11/28/11 19:17	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 19:17	1
Sodium	16		2.0		mg/L		11/28/11 10:54	11/28/11 19:17	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:36	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Barium	0.065		0.0060		mg/L		11/28/11 10:54	11/28/11 16:36	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:36	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Manganese	0.53		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 16:36	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:36	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 16:36	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 16:36	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 16:36	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 16:36	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 13:02	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 18:02	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 18:02	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 18:02	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 18:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 18:02	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 18:02	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 18:02	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 18:02	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 18:02	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 18:02	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 18:02	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 18:02	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 18:02	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 18:02	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 18:02	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 18:02	1
2-Butanone	ND		2.0		ug/L			11/25/11 18:02	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 18:02	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 18:02	1
2-Hexanone	ND		1.0		ug/L			11/25/11 18:02	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 18:02	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 18:02	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 18:02	1
Acetone	14		2.0		ug/L			11/25/11 18:02	1
Acrolein	ND		6.0		ug/L			11/25/11 18:02	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 18:02	1
Benzene	ND		0.10		ug/L			11/25/11 18:02	1
Bromobenzene	ND		0.10		ug/L			11/25/11 18:02	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 18:02	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 18:02	1
Bromoform	ND		0.10		ug/L			11/25/11 18:02	1
Bromomethane	ND		0.10		ug/L			11/25/11 18:02	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 18:02	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 18:02	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 18:02	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 18:02	1
Chloroethane	ND		0.25		ug/L			11/25/11 18:02	1
Chloroform	ND		0.10		ug/L			11/25/11 18:02	1
Chloromethane	ND		0.10		ug/L			11/25/11 18:02	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 18:02	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 18:02	1
Dibromomethane	ND		0.10		ug/L			11/25/11 18:02	1
Ethylbenzene	ND		0.10		ug/L			11/25/11 18:02	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 18:02	1
Iodomethane	ND		0.50		ug/L			11/25/11 18:02	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 18:02	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 18:02	1
Naphthalene	ND		0.40		ug/L			11/25/11 18:02	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
o-Xylene	ND		0.10		ug/L			11/25/11 18:02	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
Styrene	ND		0.10		ug/L			11/25/11 18:02	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 18:02	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 18:02	1
Toluene	ND		0.10		ug/L			11/25/11 18:02	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 18:02	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 18:02	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 18:02	1
Trichloroethene	ND		0.10		ug/L			11/25/11 18:02	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 18:02	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 18:02	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 18:02	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 120		11/25/11 18:02	1
Ethylbenzene-d10	105		75 - 125		11/25/11 18:02	1
Fluorobenzene (Surr)	97		70 - 130		11/25/11 18:02	1
Toluene-d8 (Surr)	93		75 - 125		11/25/11 18:02	1
Trifluorotoluene (Surr)	88		80 - 125		11/25/11 18:02	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
Bis(2-chloroethyl)ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Chlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
1,3-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
1,4-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzyl alcohol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
1,2-Dichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
3 & 4 Methylphenol	ND		3.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
N-Nitrosodi-n-propylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Hexachloroethane	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
Nitrobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Isophorone	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Nitrophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4-Dimethylphenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzoic acid	ND		9.4		ug/L		11/22/11 11:04	12/02/11 15:04	1
Bis(2-chloroethoxy)methane	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4-Dichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
1,2,4-Trichlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Chloroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Hexachlorobutadiene	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Chloro-3-methylphenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Methylnaphthalene	ND		0.94		ug/L		11/22/11 11:04	12/02/11 15:04	1
Hexachlorocyclopentadiene	ND		9.4		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4,6-Trichlorophenol	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4,5-Trichlorophenol	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Chloronaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
2-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Dimethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Acenaphthylene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,6-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
3-Nitroaniline	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Acenaphthene	ND		0.47		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4-Dinitrophenol	ND		24		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Nitrophenol	ND		9.4		ug/L		11/22/11 11:04	12/02/11 15:04	1
Dibenzofuran	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,4-Dinitrotoluene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Diethyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Chlorophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Fluorene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Nitroaniline	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
4,6-Dinitro-2-methylphenol	ND		19		ug/L		11/22/11 11:04	12/02/11 15:04	1
N-Nitrosodiphenylamine	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
4-Bromophenyl phenyl ether	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Hexachlorobenzene	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Pentachlorophenol	ND		3.3		ug/L		11/22/11 11:04	12/02/11 15:04	1
Phenanthrene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 15:04	1
Anthracene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 15:04	1
Di-n-butyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Fluoranthene	ND		0.24		ug/L		11/22/11 11:04	12/02/11 15:04	1
Pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Butyl benzyl phthalate	ND		2.8		ug/L		11/22/11 11:04	12/02/11 15:04	1
3,3'-Dichlorobenzidine	ND		9.4		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzo[a]anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Chrysene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 15:04	1
Bis(2-ethylhexyl) phthalate	ND		14		ug/L		11/22/11 11:04	12/02/11 15:04	1
Di-n-octyl phthalate	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzo[a]pyrene	ND		0.19		ug/L		11/22/11 11:04	12/02/11 15:04	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Carbazole	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1
1-Methylnaphthalene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzo[b]fluoranthene	ND		0.38		ug/L		11/22/11 11:04	12/02/11 15:04	1
Benzo[k]fluoranthene	ND		0.28		ug/L		11/22/11 11:04	12/02/11 15:04	1
2,2'-oxybis[1-chloropropane]	ND		1.9		ug/L		11/22/11 11:04	12/02/11 15:04	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	88		20 - 134	11/22/11 11:04	12/02/11 15:04	1
Phenol-d5	83		55 - 125	11/22/11 11:04	12/02/11 15:04	1
Nitrobenzene-d5	83		62 - 125	11/22/11 11:04	12/02/11 15:04	1
2-Fluorobiphenyl	85		66 - 140	11/22/11 11:04	12/02/11 15:04	1
2,4,6-Tribromophenol	75		44 - 125	11/22/11 11:04	12/02/11 15:04	1
Terphenyl-d14	80		20 - 150	11/22/11 11:04	12/02/11 15:04	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
alpha-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
beta-BHC	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
delta-BHC	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
gamma-BHC (Lindane)	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
4,4'-DDD	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
4,4'-DDE	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
4,4'-DDT	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Dieldrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Endosulfan I	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Endosulfan II	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Endosulfan sulfate	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Endrin	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Heptachlor	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
Heptachlor epoxide	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
Methoxychlor	ND	^	0.094		ug/L		11/20/11 12:57	12/05/11 17:29	1
Endrin ketone	ND		0.019		ug/L		11/20/11 12:57	12/05/11 17:29	1
Toxaphene	ND		0.94		ug/L		11/20/11 12:57	12/05/11 17:29	1
alpha-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1
gamma-Chlordane	ND		0.0094		ug/L		11/20/11 12:57	12/05/11 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		18 - 181	11/20/11 12:57	12/05/11 17:29	1
DCB Decachlorobiphenyl	47	X I	53 - 122	11/20/11 12:57	12/05/11 17:29	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1221	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1232	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1242	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1248	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1254	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1
PCB-1260	ND		0.47		ug/L		11/20/11 12:57	11/21/11 11:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		60 - 150	11/20/11 12:57	11/21/11 11:54	1
DCB Decachlorobiphenyl	33	I X	40 - 135	11/20/11 12:57	11/21/11 11:54	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.48		mg/L		11/23/11 11:10	11/28/11 17:19	1
Gasoline	ND		0.095		mg/L		11/23/11 11:10	11/28/11 17:19	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC) (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (>C12-C24)	ND		0.24		mg/L		11/23/11 11:10	11/28/11 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				11/23/11 11:10	11/28/11 17:19	1
4-Bromofluorobenzene (Surr)	83		50 - 150				11/23/11 11:10	11/28/11 17:19	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 19:28	1
Calcium	ND		1.1		mg/L		11/28/11 10:54	11/28/11 19:28	1
Iron	ND		0.20		mg/L		11/28/11 10:54	11/28/11 19:28	1
Magnesium	ND		1.1		mg/L		11/28/11 10:54	11/28/11 19:28	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 19:28	1
Sodium	ND		2.0		mg/L		11/28/11 10:54	11/28/11 19:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:09	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Barium	ND		0.0060		mg/L		11/28/11 10:54	11/28/11 15:09	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:09	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Manganese	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 15:09	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:09	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:09	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:09	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 15:09	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 15:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 13:05	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-100796/5

Matrix: Water

Analysis Batch: 100796

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,1,1-Trichloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ug/L			11/25/11 15:03	1
1,1,2-Trichloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,1-Dichloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,1-Dichloroethene	ND		0.10		ug/L			11/25/11 15:03	1
1,1-Dichloropropene	ND		0.10		ug/L			11/25/11 15:03	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			11/25/11 15:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			11/25/11 15:03	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			11/25/11 15:03	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			11/25/11 15:03	1
1,2-Dibromoethane	ND		0.10		ug/L			11/25/11 15:03	1
1,2-Dichlorobenzene	ND		0.20		ug/L			11/25/11 15:03	1
1,2-Dichloroethane	ND		0.10		ug/L			11/25/11 15:03	1
1,2-Dichloropropane	ND		0.10		ug/L			11/25/11 15:03	1
1,3,5-Trichlorobenzene	ND		0.20		ug/L			11/25/11 15:03	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
1,3-Dichlorobenzene	ND		0.20		ug/L			11/25/11 15:03	1
1,3-Dichloropropane	ND		0.10		ug/L			11/25/11 15:03	1
1,4-Dichlorobenzene	ND		0.20		ug/L			11/25/11 15:03	1
2,2-Dichloropropane	ND		0.10		ug/L			11/25/11 15:03	1
2-Butanone	ND		2.0		ug/L			11/25/11 15:03	1
2-Chloroethyl vinyl ether	ND		6.0		ug/L			11/25/11 15:03	1
2-Chlorotoluene	ND		0.10		ug/L			11/25/11 15:03	1
2-Hexanone	ND		1.0		ug/L			11/25/11 15:03	1
4-Chlorotoluene	ND		0.20		ug/L			11/25/11 15:03	1
4-Isopropyltoluene	ND		0.20		ug/L			11/25/11 15:03	1
4-Methyl-2-pentanone	ND		0.50		ug/L			11/25/11 15:03	1
Acetone	ND		2.0		ug/L			11/25/11 15:03	1
Acrolein	ND		6.0		ug/L			11/25/11 15:03	1
Acrylonitrile	ND		2.0		ug/L			11/25/11 15:03	1
Benzene	ND		0.10		ug/L			11/25/11 15:03	1
Bromobenzene	ND		0.10		ug/L			11/25/11 15:03	1
Bromochloromethane	ND		0.10		ug/L			11/25/11 15:03	1
Bromodichloromethane	ND		0.10		ug/L			11/25/11 15:03	1
Bromoform	ND		0.10		ug/L			11/25/11 15:03	1
Bromomethane	ND		0.10		ug/L			11/25/11 15:03	1
Carbon disulfide	ND		0.10		ug/L			11/25/11 15:03	1
Carbon tetrachloride	ND		0.10		ug/L			11/25/11 15:03	1
Chlorobenzene	ND		0.10		ug/L			11/25/11 15:03	1
Chlorodibromomethane	ND		0.10		ug/L			11/25/11 15:03	1
Chloroethane	ND		0.25		ug/L			11/25/11 15:03	1
Chloroform	ND		0.10		ug/L			11/25/11 15:03	1
Chloromethane	ND		0.10		ug/L			11/25/11 15:03	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 15:03	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 15:03	1
Dibromomethane	ND		0.10		ug/L			11/25/11 15:03	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-100796/5

Matrix: Water

Analysis Batch: 100796

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
Hexachloro-1,3-butadiene	ND		0.20		ug/L			11/25/11 15:03	1
Iodomethane	ND		0.50		ug/L			11/25/11 15:03	1
Isopropylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
Methylene Chloride	ND		0.50		ug/L			11/25/11 15:03	1
m-Xylene & p-Xylene	ND		0.20		ug/L			11/25/11 15:03	1
Naphthalene	ND		0.40		ug/L			11/25/11 15:03	1
n-Butylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
N-Propylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
o-Xylene	ND		0.10		ug/L			11/25/11 15:03	1
sec-Butylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
Styrene	ND		0.10		ug/L			11/25/11 15:03	1
tert-Butylbenzene	ND		0.10		ug/L			11/25/11 15:03	1
Tetrachloroethene	ND		0.10		ug/L			11/25/11 15:03	1
Toluene	ND		0.10		ug/L			11/25/11 15:03	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			11/25/11 15:03	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			11/25/11 15:03	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			11/25/11 15:03	1
Trichloroethene	ND		0.10		ug/L			11/25/11 15:03	1
Trichlorofluoromethane	ND		0.10		ug/L			11/25/11 15:03	1
Vinyl acetate	ND		0.50		ug/L			11/25/11 15:03	1
Vinyl chloride	ND		0.020		ug/L			11/25/11 15:03	1
Xylenes, Total	ND		0.10		ug/L			11/25/11 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 120		11/25/11 15:03	1
Ethylbenzene-d10	100		75 - 125		11/25/11 15:03	1
Fluorobenzene (Surr)	96		70 - 130		11/25/11 15:03	1
Toluene-d8 (Surr)	91		75 - 125		11/25/11 15:03	1
Trifluorotoluene (Surr)	88		80 - 125		11/25/11 15:03	1

Lab Sample ID: LCS 580-100796/6

Matrix: Water

Analysis Batch: 100796

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.01	5.17		ug/L		103	80 - 131
1,1,1,1-Trichloroethane	5.00	5.00		ug/L		100	60 - 160
1,1,1,2,2-Tetrachloroethane	5.01	4.26		ug/L		85	73 - 121
1,1,1,2-Trichloro-1,2,2-trifluoroethane	4.99	5.07		ug/L		102	66 - 120
1,1,2-Trichloroethane	5.01	4.52		ug/L		90	80 - 121
1,1-Dichloroethane	5.00	5.28		ug/L		106	73 - 158
1,1-Dichloroethene	5.00	5.22		ug/L		104	78 - 151
1,1-Dichloropropene	4.96	4.95		ug/L		100	59 - 160
1,2,3-Trichlorobenzene	4.97	4.67		ug/L		94	40 - 160
1,2,3-Trichloropropane	5.04	4.30		ug/L		85	70 - 137
1,2,4-Trichlorobenzene	4.97	4.99		ug/L		100	47 - 135
1,2,4-Trimethylbenzene	5.02	5.39		ug/L		107	80 - 137
1,2-Dibromo-3-Chloropropane	5.01	4.65		ug/L		93	47 - 138

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-100796/6

Matrix: Water

Analysis Batch: 100796

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	5.01	4.64		ug/L		93	75 - 126
1,2-Dichlorobenzene	5.00	4.74		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.81		ug/L		96	54 - 160
1,2-Dichloropropane	5.09	4.85		ug/L		95	71 - 127
1,3,5-Trichlorobenzene	5.00	5.14		ug/L		103	78 - 120
1,3,5-Trimethylbenzene	5.00	5.36		ug/L		107	80 - 136
1,3-Dichlorobenzene	5.00	4.98		ug/L		100	76 - 120
1,3-Dichloropropane	5.00	4.47		ug/L		89	78 - 129
1,4-Dichlorobenzene	5.00	4.69		ug/L		94	80 - 120
2,2-Dichloropropane	5.00	4.99		ug/L		100	49 - 160
2-Butanone	25.0	29.2		ug/L		117	20 - 220
2-Chlorotoluene	5.02	5.53		ug/L		110	79 - 127
2-Hexanone	25.0	23.5		ug/L		94	52 - 160
4-Chlorotoluene	5.01	4.94		ug/L		99	76 - 127
4-Isopropyltoluene	5.00	4.71		ug/L		94	80 - 132
4-Methyl-2-pentanone	25.0	26.0		ug/L		104	54 - 134
Acetone	25.0	31.9		ug/L		128	33 - 220
Acrylonitrile	25.0	21.0		ug/L		84	64 - 148
Benzene	5.00	4.91		ug/L		98	75 - 142
Bromobenzene	5.03	4.87		ug/L		97	80 - 120
Bromochloromethane	5.01	5.16		ug/L		103	64 - 156
Bromodichloromethane	5.02	4.63		ug/L		92	69 - 149
Bromoform	5.06	4.40		ug/L		87	66 - 137
Bromomethane	5.00	5.62		ug/L		112	40 - 160
Carbon disulfide	5.01	4.99		ug/L		100	69 - 160
Carbon tetrachloride	5.01	4.63		ug/L		92	56 - 160
Chlorobenzene	4.99	5.01		ug/L		100	71 - 140
Chlorodibromomethane	4.98	4.36		ug/L		88	71 - 130
Chloroethane	5.00	5.57		ug/L		111	44 - 160
Chloroform	5.00	4.53		ug/L		91	65 - 158
Chloromethane	5.00	5.19		ug/L		104	52 - 160
cis-1,2-Dichloroethene	5.01	4.87		ug/L		97	71 - 144
cis-1,3-Dichloropropene	4.96	5.39		ug/L		109	63 - 127
Dibromomethane	5.03	4.93		ug/L		98	76 - 130
Ethylbenzene	5.00	4.68		ug/L		94	79 - 132
Hexachloro-1,3-butadiene	5.00	5.09		ug/L		102	67 - 141
Iodomethane	25.1	28.8		ug/L		115	62 - 160
Isopropylbenzene	5.01	4.69		ug/L		94	64 - 127
Methylene Chloride	4.99	5.03		ug/L		101	80 - 155
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	70 - 144
Naphthalene	5.01	4.30		ug/L		86	40 - 142
n-Butylbenzene	5.00	4.63		ug/L		93	72 - 131
N-Propylbenzene	5.00	5.52		ug/L		110	76 - 131
o-Xylene	5.01	5.18		ug/L		103	72 - 137
sec-Butylbenzene	5.01	5.49		ug/L		110	72 - 145
Styrene	5.02	5.31		ug/L		106	80 - 133
tert-Butylbenzene	5.00	5.29		ug/L		106	74 - 138
Tetrachloroethene	5.01	4.93		ug/L		98	54 - 161
Toluene	5.00	4.55		ug/L		91	80 - 126
trans-1,2-Dichloroethene	5.00	5.01		ug/L		100	73 - 135

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-100796/6

Matrix: Water

Analysis Batch: 100796

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	5.10	4.91		ug/L		96	64 - 132
trans-1,4-Dichloro-2-butene	25.0	21.8		ug/L		87	67 - 160
Trichloroethene	5.01	4.52		ug/L		90	79 - 131
Trichlorofluoromethane	4.99	5.05		ug/L		101	40 - 160
Vinyl acetate	25.2	22.3		ug/L		89	30 - 200
Vinyl chloride	5.00	5.25		ug/L		105	47 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		75 - 120
Ethylbenzene-d10	101		75 - 125
Fluorobenzene (Surr)	101		70 - 130
Toluene-d8 (Surr)	103		75 - 125
Trifluorotoluene (Surr)	93		80 - 125

Lab Sample ID: 580-29897-6 MS

Matrix: Water

Analysis Batch: 100796

Client Sample ID: LMW- 6 -1111

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		5.01	4.99		ug/L		100	80 - 131
1,1,1-Trichloroethane	ND		5.00	4.75		ug/L		95	60 - 160
1,1,2,2-Tetrachloroethane	ND		5.01	4.27		ug/L		85	73 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.99	5.12		ug/L		103	80 - 120
1,1,2-Trichloroethane	ND		5.01	4.70		ug/L		94	80 - 121
1,1-Dichloroethane	ND		5.00	5.60		ug/L		112	73 - 158
1,1-Dichloroethene	ND		5.00	5.65		ug/L		113	78 - 151
1,1-Dichloropropene	ND		4.96	5.04		ug/L		102	59 - 160
1,2,3-Trichlorobenzene	ND		4.97	4.80		ug/L		97	52 - 129
1,2,3-Trichloropropane	ND		5.04	4.40		ug/L		87	70 - 137
1,2,4-Trichlorobenzene	ND		4.97	5.10		ug/L		103	47 - 135
1,2,4-Trimethylbenzene	ND		5.02	5.17		ug/L		103	80 - 137
1,2-Dibromo-3-Chloropropane	ND		5.01	3.98		ug/L		79	47 - 138
1,2-Dibromoethane	ND		5.01	4.94		ug/L		99	75 - 126
1,2-Dichlorobenzene	ND		5.00	4.83		ug/L		97	80 - 120
1,2-Dichloroethane	ND		5.00	4.88		ug/L		98	54 - 160
1,2-Dichloropropane	ND		5.09	5.18		ug/L		102	71 - 127
1,3,5-Trichlorobenzene	ND		5.00	5.22		ug/L		104	40 - 160
1,3,5-Trimethylbenzene	ND		5.00	5.27		ug/L		105	80 - 136
1,3-Dichlorobenzene	ND		5.00	5.00		ug/L		100	76 - 120
1,3-Dichloropropane	ND		5.00	4.74		ug/L		95	78 - 129
1,4-Dichlorobenzene	ND		5.00	4.66		ug/L		93	80 - 120
2,2-Dichloropropane	ND		5.00	5.50		ug/L		110	49 - 160
2-Butanone	ND		25.0	22.8		ug/L		91	10 - 220
2-Chlorotoluene	ND		5.02	5.54		ug/L		110	79 - 127
2-Hexanone	ND		25.0	23.4		ug/L		94	52 - 140
4-Chlorotoluene	ND		5.01	5.08		ug/L		101	76 - 127
4-Isopropyltoluene	ND		5.00	4.82		ug/L		96	80 - 132
4-Methyl-2-pentanone	ND		25.0	26.2		ug/L		105	54 - 134
Acetone	ND		25.0	24.9		ug/L		100	33 - 220

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-29897-6 MS

Matrix: Water

Analysis Batch: 100796

Client Sample ID: LMW- 6 -1111

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acrylonitrile	ND		25.0	22.6		ug/L		90	64 - 148
Benzene	ND		5.00	5.03		ug/L		101	75 - 142
Bromobenzene	ND		5.03	4.81		ug/L		96	80 - 120
Bromochloromethane	ND		5.01	5.01		ug/L		100	64 - 156
Bromodichloromethane	ND		5.02	5.07		ug/L		101	69 - 149
Bromoform	ND		5.06	4.81		ug/L		95	66 - 137
Bromomethane	ND		5.00	5.12		ug/L		102	40 - 160
Carbon disulfide	ND		5.01	5.67		ug/L		113	69 - 160
Carbon tetrachloride	ND		5.01	4.52		ug/L		90	56 - 160
Chlorobenzene	ND		4.99	4.93		ug/L		99	71 - 140
Chlorodibromomethane	ND		4.98	4.58		ug/L		92	71 - 130
Chloroethane	ND		5.00	5.77		ug/L		115	44 - 160
Chloroform	ND		5.00	4.57		ug/L		91	65 - 158
Chloromethane	ND		5.00	5.87		ug/L		117	52 - 160
cis-1,2-Dichloroethene	ND		5.01	5.02		ug/L		100	71 - 144
cis-1,3-Dichloropropene	ND		4.96	5.07		ug/L		102	63 - 127
Dibromomethane	ND		5.03	5.39		ug/L		107	76 - 130
Ethylbenzene	ND		5.00	4.63		ug/L		93	79 - 132
Hexachloro-1,3-butadiene	ND		5.00	5.14		ug/L		103	67 - 141
Iodomethane	ND		25.1	26.5		ug/L		105	62 - 160
Isopropylbenzene	ND		5.01	4.66		ug/L		93	64 - 127
Methylene Chloride	ND		4.99	5.36		ug/L		107	80 - 155
m-Xylene & p-Xylene	ND		10.0	10.3		ug/L		103	70 - 144
Naphthalene	ND		5.01	4.24		ug/L		85	40 - 142
n-Butylbenzene	ND		5.00	4.56		ug/L		91	72 - 131
N-Propylbenzene	ND		5.00	5.43		ug/L		109	76 - 131
o-Xylene	ND		5.01	5.20		ug/L		104	72 - 137
sec-Butylbenzene	ND		5.01	5.64		ug/L		113	72 - 145
Styrene	ND		5.02	5.25		ug/L		105	80 - 133
tert-Butylbenzene	ND		5.00	5.81		ug/L		116	74 - 138
Tetrachloroethene	ND		5.01	4.48		ug/L		90	64 - 161
Toluene	ND		5.00	5.23		ug/L		105	80 - 126
trans-1,2-Dichloroethene	ND		5.00	5.13		ug/L		103	73 - 135
trans-1,3-Dichloropropene	ND		5.10	4.98		ug/L		98	64 - 132
trans-1,4-Dichloro-2-butene	ND		25.0	21.4		ug/L		86	67 - 160
Trichloroethene	ND		5.01	4.90		ug/L		98	79 - 131
Trichlorofluoromethane	ND		4.99	5.16		ug/L		103	40 - 160
Vinyl acetate	ND		25.2	22.4		ug/L		89	60 - 220
Vinyl chloride	ND		5.00	5.50		ug/L		110	47 - 160

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		75 - 120
Ethylbenzene-d10	99		75 - 125
Fluorobenzene (Surr)	104		70 - 130
Toluene-d8 (Surr)	112		75 - 125
Trifluorotoluene (Surr)	103		80 - 125

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-29897-6 MSD

Matrix: Water

Analysis Batch: 100796

Client Sample ID: LMW- 6 -1111

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.01	5.05		ug/L		101	80 - 131	1	20
1,1,1-Trichloroethane	ND		5.00	4.98		ug/L		100	60 - 160	5	20
1,1,2,2-Tetrachloroethane	ND		5.01	4.52		ug/L		90	73 - 121	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.99	4.90		ug/L		98	80 - 120	4	20
1,1,2-Trichloroethane	ND		5.01	4.66		ug/L		93	80 - 121	1	20
1,1-Dichloroethane	ND		5.00	5.43		ug/L		109	73 - 158	3	20
1,1-Dichloroethene	ND		5.00	5.20		ug/L		104	78 - 151	8	30
1,1-Dichloropropene	ND		4.96	5.02		ug/L		101	59 - 160	0	20
1,2,3-Trichlorobenzene	ND		4.97	4.93		ug/L		99	52 - 129	3	20
1,2,3-Trichloropropane	ND		5.04	4.42		ug/L		88	70 - 137	0	20
1,2,4-Trichlorobenzene	ND		4.97	5.11		ug/L		103	47 - 135	0	20
1,2,4-Trimethylbenzene	ND		5.02	5.36		ug/L		107	80 - 137	4	20
1,2-Dibromo-3-Chloropropane	ND		5.01	4.48		ug/L		89	47 - 138	12	20
1,2-Dibromoethane	ND		5.01	4.89		ug/L		98	75 - 126	1	20
1,2-Dichlorobenzene	ND		5.00	4.89		ug/L		98	80 - 120	1	20
1,2-Dichloroethane	ND		5.00	4.88		ug/L		98	54 - 160	0	20
1,2-Dichloropropane	ND		5.09	5.24		ug/L		103	71 - 127	1	20
1,3,5-Trichlorobenzene	ND		5.00	5.29		ug/L		106	40 - 160	1	20
1,3,5-Trimethylbenzene	ND		5.00	5.34		ug/L		107	80 - 136	1	20
1,3-Dichlorobenzene	ND		5.00	5.01		ug/L		100	76 - 120	0	20
1,3-Dichloropropane	ND		5.00	4.67		ug/L		93	78 - 129	1	20
1,4-Dichlorobenzene	ND		5.00	4.73		ug/L		95	80 - 120	1	20
2,2-Dichloropropane	ND		5.00	5.14		ug/L		103	49 - 160	7	20
2-Butanone	ND		25.0	26.5		ug/L		106	10 - 220	15	20
2-Chlorotoluene	ND		5.02	5.82		ug/L		116	79 - 127	5	20
2-Hexanone	ND		25.0	24.1		ug/L		96	52 - 140	3	20
4-Chlorotoluene	ND		5.01	5.09		ug/L		102	76 - 127	0	20
4-Isopropyltoluene	ND		5.00	4.88		ug/L		98	80 - 132	1	20
4-Methyl-2-pentanone	ND		25.0	25.9		ug/L		104	54 - 134	1	20
Acetone	ND		25.0	27.0		ug/L		108	33 - 220	8	20
Acrylonitrile	ND		25.0	22.8		ug/L		91	64 - 148	1	20
Benzene	ND		5.00	4.88		ug/L		98	75 - 142	3	30
Bromobenzene	ND		5.03	4.89		ug/L		97	80 - 120	2	20
Bromochloromethane	ND		5.01	5.00		ug/L		100	64 - 156	0	20
Bromodichloromethane	ND		5.02	4.99		ug/L		100	69 - 149	2	20
Bromoform	ND		5.06	4.78		ug/L		94	66 - 137	1	20
Bromomethane	ND		5.00	5.07		ug/L		101	40 - 160	1	20
Carbon disulfide	ND		5.01	5.54		ug/L		111	69 - 160	2	20
Carbon tetrachloride	ND		5.01	4.42		ug/L		88	56 - 160	2	20
Chlorobenzene	ND		4.99	5.08		ug/L		102	71 - 140	3	30
Chlorodibromomethane	ND		4.98	4.79		ug/L		96	71 - 130	4	20
Chloroethane	ND		5.00	5.05		ug/L		101	44 - 160	13	20
Chloroform	ND		5.00	4.55		ug/L		91	65 - 158	0	20
Chloromethane	ND		5.00	5.64		ug/L		113	52 - 160	4	20
cis-1,2-Dichloroethene	ND		5.01	4.66		ug/L		93	71 - 144	7	20
cis-1,3-Dichloropropene	ND		4.96	5.30		ug/L		107	63 - 127	4	20
Dibromomethane	ND		5.03	5.13		ug/L		102	76 - 130	5	20
Ethylbenzene	ND		5.00	4.82		ug/L		96	79 - 132	4	20
Hexachloro-1,3-butadiene	ND		5.00	5.09		ug/L		102	67 - 141	1	20

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-29897-6 MSD

Matrix: Water

Analysis Batch: 100796

Client Sample ID: LMW- 6 -1111

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iodomethane	ND		25.1	25.8		ug/L		103	62 - 160	3	20
Isopropylbenzene	ND		5.01	4.74		ug/L		95	64 - 127	2	20
Methylene Chloride	ND		4.99	4.87		ug/L		98	80 - 155	10	20
m-Xylene & p-Xylene	ND		10.0	10.7		ug/L		107	70 - 144	4	20
Naphthalene	ND		5.01	4.40		ug/L		88	40 - 142	4	20
n-Butylbenzene	ND		5.00	4.78		ug/L		96	72 - 131	5	20
N-Propylbenzene	ND		5.00	5.48		ug/L		110	76 - 131	1	20
o-Xylene	ND		5.01	5.23		ug/L		104	72 - 137	1	20
sec-Butylbenzene	ND		5.01	5.54		ug/L		111	72 - 145	2	20
Styrene	ND		5.02	5.45		ug/L		109	80 - 133	4	20
tert-Butylbenzene	ND		5.00	5.50		ug/L		110	74 - 138	5	20
Tetrachloroethene	ND		5.01	4.30		ug/L		86	64 - 161	4	20
Toluene	ND		5.00	4.68		ug/L		94	80 - 126	11	30
trans-1,2-Dichloroethene	ND		5.00	5.10		ug/L		102	73 - 135	1	20
trans-1,3-Dichloropropene	ND		5.10	5.21		ug/L		102	64 - 132	5	20
trans-1,4-Dichloro-2-butene	ND		25.0	22.7		ug/L		91	67 - 160	6	20
Trichloroethene	ND		5.01	4.75		ug/L		95	79 - 131	3	30
Trichlorofluoromethane	ND		4.99	4.93		ug/L		99	40 - 160	5	20
Vinyl acetate	ND		25.2	24.7		ug/L		98	60 - 220	10	20
Vinyl chloride	ND		5.00	5.33		ug/L		107	47 - 160	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		75 - 120
Ethylbenzene-d10	105		75 - 125
Fluorobenzene (Surr)	101		70 - 130
Toluene-d8 (Surr)	100		75 - 125
Trifluorotoluene (Surr)	98		80 - 125

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-100653/1-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Bis(2-chloroethyl)ether	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Chlorophenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
1,3-Dichlorobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
1,4-Dichlorobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzyl alcohol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
1,2-Dichlorobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Methylphenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
3 & 4 Methylphenol	ND		4.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
N-Nitrosodi-n-propylamine	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Hexachloroethane	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Nitrobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Isophorone	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Nitrophenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-100653/1-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzoic acid	ND		10		ug/L		11/22/11 11:04	12/02/11 10:11	1
Bis(2-chloroethoxy)methane	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,4-Dichlorophenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Naphthalene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Chloroaniline	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Hexachlorobutadiene	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Chloro-3-methylphenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Methylnaphthalene	ND		1.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Hexachlorocyclopentadiene	ND		10		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,4,6-Trichlorophenol	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,4,5-Trichlorophenol	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Chloronaphthalene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
2-Nitroaniline	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Dimethyl phthalate	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Acenaphthylene	ND		0.40		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,6-Dinitrotoluene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
3-Nitroaniline	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Acenaphthene	ND		0.50		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,4-Dinitrophenol	ND		25		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Nitrophenol	ND		10		ug/L		11/22/11 11:04	12/02/11 10:11	1
Dibenzofuran	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,4-Dinitrotoluene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Diethyl phthalate	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Chlorophenyl phenyl ether	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Fluorene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Nitroaniline	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
4,6-Dinitro-2-methylphenol	ND		20		ug/L		11/22/11 11:04	12/02/11 10:11	1
N-Nitrosodiphenylamine	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
4-Bromophenyl phenyl ether	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Hexachlorobenzene	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Pentachlorophenol	ND		3.5		ug/L		11/22/11 11:04	12/02/11 10:11	1
Phenanthrene	ND		0.40		ug/L		11/22/11 11:04	12/02/11 10:11	1
Anthracene	ND		0.20		ug/L		11/22/11 11:04	12/02/11 10:11	1
Di-n-butyl phthalate	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Fluoranthene	ND		0.25		ug/L		11/22/11 11:04	12/02/11 10:11	1
Pyrene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
Butyl benzyl phthalate	ND		3.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
3,3'-Dichlorobenzidine	ND		10		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzo[a]anthracene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
Chrysene	ND		0.20		ug/L		11/22/11 11:04	12/02/11 10:11	1
Bis(2-ethylhexyl) phthalate	ND		15		ug/L		11/22/11 11:04	12/02/11 10:11	1
Di-n-octyl phthalate	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzo[a]pyrene	ND		0.20		ug/L		11/22/11 11:04	12/02/11 10:11	1
Indeno[1,2,3-cd]pyrene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
Dibenz(a,h)anthracene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzo[g,h,i]perylene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
Carbazole	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1
1-Methylnaphthalene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-100653/1-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.40		ug/L		11/22/11 11:04	12/02/11 10:11	1
Benzo[k]fluoranthene	ND		0.30		ug/L		11/22/11 11:04	12/02/11 10:11	1
2,2'-oxybis[1-chloropropane]	ND		2.0		ug/L		11/22/11 11:04	12/02/11 10:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	81		20 - 134	11/22/11 11:04	12/02/11 10:11	1
Phenol-d5	79		55 - 125	11/22/11 11:04	12/02/11 10:11	1
Nitrobenzene-d5	77		62 - 125	11/22/11 11:04	12/02/11 10:11	1
2-Fluorobiphenyl	76		66 - 140	11/22/11 11:04	12/02/11 10:11	1
2,4,6-Tribromophenol	63		44 - 125	11/22/11 11:04	12/02/11 10:11	1
Terphenyl-d14	76		20 - 150	11/22/11 11:04	12/02/11 10:11	1

Lab Sample ID: LCS 580-100653/2-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	9.99	9.48		ug/L		95	50 - 125
Bis(2-chloroethyl)ether	10.1	9.69		ug/L		96	45 - 125
2-Chlorophenol	10.0	9.61		ug/L		96	60 - 125
1,3-Dichlorobenzene	10.0	8.21		ug/L		82	50 - 125
1,4-Dichlorobenzene	10.0	8.64		ug/L		86	50 - 125
Benzyl alcohol	10.0	9.91		ug/L		99	50 - 135
1,2-Dichlorobenzene	10.0	8.83		ug/L		88	50 - 125
2-Methylphenol	9.99	9.41		ug/L		94	50 - 130
3 & 4 Methylphenol	9.98	9.01		ug/L		90	50 - 135
N-Nitrosodi-n-propylamine	9.98	8.94		ug/L		90	60 - 125
Hexachloroethane	10.0	6.63		ug/L		66	30 - 125
Nitrobenzene	10.0	10.3		ug/L		103	65 - 150
Isophorone	10.0	10.3		ug/L		102	60 - 130
2-Nitrophenol	9.99	9.98		ug/L		100	55 - 130
2,4-Dimethylphenol	9.98	ND		ug/L		51	20 - 125
Benzoic acid	50.2	38.5		ug/L		77	20 - 125
Bis(2-chloroethoxy)methane	10.0	9.84		ug/L		98	65 - 125
2,4-Dichlorophenol	9.98	9.28		ug/L		93	50 - 135
1,2,4-Trichlorobenzene	10.0	7.85		ug/L		79	50 - 125
Naphthalene	10.0	9.61		ug/L		96	65 - 125
4-Chloroaniline	10.0	9.33		ug/L		93	25 - 135
Hexachlorobutadiene	10.0	5.96		ug/L		60	25 - 125
4-Chloro-3-methylphenol	10.0	8.68		ug/L		87	55 - 135
2-Methylnaphthalene	10.0	9.29		ug/L		93	65 - 125
Hexachlorocyclopentadiene	9.98	ND		ug/L		22	20 - 125
2,4,6-Trichlorophenol	10.1	9.34		ug/L		93	55 - 140
2,4,5-Trichlorophenol	10.1	9.52		ug/L		95	50 - 140
2-Chloronaphthalene	10.0	9.52		ug/L		95	65 - 125
2-Nitroaniline	10.0	9.85		ug/L		99	65 - 135
Dimethyl phthalate	10.0	9.68		ug/L		97	75 - 135
Acenaphthylene	9.99	9.79		ug/L		98	70 - 125
2,6-Dinitrotoluene	10.0	11.0		ug/L		110	65 - 155

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-100653/2-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3-Nitroaniline	10.0	11.5		ug/L		115	50 - 145
Acenaphthene	10.0	9.62		ug/L		96	65 - 125
2,4-Dinitrophenol	49.9	35.3		ug/L		71	20 - 150
4-Nitrophenol	50.1	45.9		ug/L		92	35 - 150
Dibenzofuran	10.0	10.1		ug/L		101	70 - 125
2,4-Dinitrotoluene	10.0	9.92		ug/L		99	55 - 160
Diethyl phthalate	10.0	9.42		ug/L		94	75 - 125
4-Chlorophenyl phenyl ether	10.0	10.2		ug/L		102	65 - 125
Fluorene	10.0	10.2		ug/L		102	70 - 125
4-Nitroaniline	10.0	11.7		ug/L		117	50 - 150
4,6-Dinitro-2-methylphenol	50.0	55.4		ug/L		111	30 - 145
N-Nitrosodiphenylamine	9.98	8.64		ug/L		87	45 - 130
4-Bromophenyl phenyl ether	10.0	10.0		ug/L		100	70 - 125
Hexachlorobenzene	10.0	9.59		ug/L		96	65 - 125
Pentachlorophenol	9.99	8.59		ug/L		86	20 - 130
Phenanthrene	10.0	9.56		ug/L		96	70 - 125
Anthracene	10.0	9.34		ug/L		93	60 - 125
Di-n-butyl phthalate	10.0	9.55		ug/L		96	75 - 130
Fluoranthene	10.0	9.77		ug/L		98	75 - 125
Pyrene	10.0	9.60		ug/L		96	75 - 125
Butyl benzyl phthalate	10.0	9.00		ug/L		90	75 - 135
3,3'-Dichlorobenzidine	20.1	19.6		ug/L		98	20 - 160
Benzo[a]anthracene	10.0	9.14		ug/L		91	70 - 125
Chrysene	10.0	9.32		ug/L		93	75 - 125
Bis(2-ethylhexyl) phthalate	10.1	ND		ug/L		87	55 - 160
Di-n-octyl phthalate	10.0	8.89		ug/L		89	60 - 145
Benzo[a]pyrene	10.0	8.24		ug/L		82	55 - 125
Indeno[1,2,3-cd]pyrene	10.0	9.38		ug/L		94	65 - 125
Dibenz(a,h)anthracene	9.99	9.53		ug/L		95	65 - 130
Benzo[g,h,i]perylene	10.0	9.29		ug/L		93	65 - 125
Carbazole	9.99	10.8		ug/L		108	70 - 145
1-Methylnaphthalene	10.0	9.63		ug/L		96	65 - 125
Benzo[b]fluoranthene	10.0	9.61		ug/L		96	70 - 125
Benzo[k]fluoranthene	10.0	9.03		ug/L		90	70 - 125
2,2'-oxybis[1-chloropropane]	9.99	9.75		ug/L		98	60 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol	93		20 - 134
Phenol-d5	85		55 - 125
Nitrobenzene-d5	86		62 - 125
2-Fluorobiphenyl	85		66 - 140
2,4,6-Tribromophenol	91		44 - 125
Terphenyl-d14	80		20 - 150

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-100653/3-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	9.99	9.11		ug/L		91	50 - 125	4	20
Bis(2-chloroethyl)ether	10.1	8.69		ug/L		86	45 - 125	11	20
2-Chlorophenol	10.0	9.62		ug/L		96	60 - 125	0	20
1,3-Dichlorobenzene	10.0	8.26		ug/L		83	50 - 125	1	20
1,4-Dichlorobenzene	10.0	8.63		ug/L		86	50 - 125	0	20
Benzyl alcohol	10.0	9.58		ug/L		96	50 - 135	3	20
1,2-Dichlorobenzene	10.0	8.77		ug/L		88	50 - 125	1	20
2-Methylphenol	9.99	8.54		ug/L		85	50 - 130	10	20
3 & 4 Methylphenol	9.98	8.90		ug/L		89	50 - 135	1	20
N-Nitrosodi-n-propylamine	9.98	8.74		ug/L		88	60 - 125	2	20
Hexachloroethane	10.0	7.37		ug/L		74	30 - 125	11	20
Nitrobenzene	10.0	9.94		ug/L		99	65 - 150	4	20
Isophorone	10.0	10.1		ug/L		100	60 - 130	2	20
2-Nitrophenol	9.99	9.94		ug/L		99	55 - 130	0	20
2,4-Dimethylphenol	9.98	ND		ug/L		52	20 - 125	2	20
Benzoic acid	50.2	36.7		ug/L		73	20 - 125	5	20
Bis(2-chloroethoxy)methane	10.0	9.64		ug/L		96	65 - 125	2	20
2,4-Dichlorophenol	9.98	9.03		ug/L		91	50 - 135	3	20
1,2,4-Trichlorobenzene	10.0	8.07		ug/L		81	50 - 125	3	20
Naphthalene	10.0	9.26		ug/L		93	65 - 125	4	20
4-Chloroaniline	10.0	9.34		ug/L		93	25 - 135	0	20
Hexachlorobutadiene	10.0	6.80		ug/L		68	25 - 125	13	20
4-Chloro-3-methylphenol	10.0	8.46		ug/L		85	55 - 135	3	20
2-Methylnaphthalene	10.0	9.01		ug/L		90	65 - 125	3	20
Hexachlorocyclopentadiene	9.98	ND		ug/L		26	20 - 125	16	20
2,4,6-Trichlorophenol	10.1	9.66		ug/L		96	55 - 140	3	20
2,4,5-Trichlorophenol	10.1	9.95		ug/L		99	50 - 140	4	20
2-Chloronaphthalene	10.0	9.65		ug/L		96	65 - 125	1	20
2-Nitroaniline	10.0	9.98		ug/L		100	65 - 135	1	20
Dimethyl phthalate	10.0	9.78		ug/L		98	75 - 135	1	20
Acenaphthylene	9.99	9.73		ug/L		97	70 - 125	1	20
2,6-Dinitrotoluene	10.0	11.2		ug/L		112	65 - 155	1	20
3-Nitroaniline	10.0	12.4		ug/L		124	50 - 145	7	20
Acenaphthene	10.0	9.54		ug/L		95	65 - 125	1	20
2,4-Dinitrophenol	49.9	38.3		ug/L		77	20 - 150	8	20
4-Nitrophenol	50.1	47.3		ug/L		94	35 - 150	3	20
Dibenzofuran	10.0	10.1		ug/L		100	70 - 125	1	20
2,4-Dinitrotoluene	10.0	9.99		ug/L		100	55 - 160	1	20
Diethyl phthalate	10.0	9.42		ug/L		94	75 - 125	0	20
4-Chlorophenyl phenyl ether	10.0	10.1		ug/L		101	65 - 125	0	20
Fluorene	10.0	10.1		ug/L		100	70 - 125	2	20
4-Nitroaniline	10.0	11.6		ug/L		116	50 - 150	1	20
4,6-Dinitro-2-methylphenol	50.0	58.5		ug/L		117	30 - 145	5	20
N-Nitrosodiphenylamine	9.98	8.60		ug/L		86	45 - 130	0	20
4-Bromophenyl phenyl ether	10.0	10.3		ug/L		103	70 - 125	3	20
Hexachlorobenzene	10.0	9.57		ug/L		95	65 - 125	0	20
Pentachlorophenol	9.99	8.42		ug/L		84	20 - 130	2	20
Phenanthrene	10.0	9.68		ug/L		97	70 - 125	1	20
Anthracene	10.0	9.45		ug/L		95	60 - 125	1	20

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-100653/3-A

Matrix: Water

Analysis Batch: 101179

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits			
Di-n-butyl phthalate	10.0	9.87		ug/L		99	75 - 130		3	20
Fluoranthene	10.0	9.87		ug/L		98	75 - 125		1	20
Pyrene	10.0	9.74		ug/L		97	75 - 125		1	20
Butyl benzyl phthalate	10.0	8.75		ug/L		87	75 - 135		3	20
3,3'-Dichlorobenzidine	20.1	19.0		ug/L		94	20 - 160		3	20
Benzo[a]anthracene	10.0	9.06		ug/L		91	70 - 125		1	20
Chrysene	10.0	9.31		ug/L		93	75 - 125		0	20
Bis(2-ethylhexyl) phthalate	10.1	ND		ug/L		84	55 - 160		4	20
Di-n-octyl phthalate	10.0	8.97		ug/L		90	60 - 145		1	20
Benzo[a]pyrene	10.0	8.13		ug/L		81	55 - 125		1	20
Indeno[1,2,3-cd]pyrene	10.0	8.25		ug/L		83	65 - 125		13	20
Dibenz(a,h)anthracene	9.99	8.40		ug/L		84	65 - 130		13	20
Benzo[g,h,i]perylene	10.0	8.50		ug/L		85	65 - 125		9	20
Carbazole	9.99	11.1		ug/L		111	70 - 145		3	20
1-Methylnaphthalene	10.0	9.43		ug/L		94	65 - 125		2	20
Benzo[b]fluoranthene	10.0	8.91		ug/L		89	70 - 125		8	20
Benzo[k]fluoranthene	10.0	9.78		ug/L		98	70 - 125		8	20
2,2'-oxybis[1-chloropropane]	9.99	9.23		ug/L		92	60 - 130		5	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol	85		20 - 134
Phenol-d5	80		55 - 125
Nitrobenzene-d5	84		62 - 125
2-Fluorobiphenyl	82		66 - 140
2,4,6-Tribromophenol	91		44 - 125
Terphenyl-d14	80		20 - 150

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 580-100485/1-A

Matrix: Water

Analysis Batch: 101307

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100485

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aldrin	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
alpha-BHC	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
beta-BHC	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
delta-BHC	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
gamma-BHC (Lindane)	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
4,4'-DDD	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
4,4'-DDE	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
4,4'-DDT	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Dieldrin	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Endosulfan I	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Endosulfan II	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Endosulfan sulfate	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Endrin	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Heptachlor	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
Heptachlor epoxide	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 580-100485/1-A

Matrix: Water

Analysis Batch: 101307

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND	^	0.10		ug/L		11/20/11 12:57	12/05/11 15:33	1
Endrin ketone	ND		0.020		ug/L		11/20/11 12:57	12/05/11 15:33	1
Toxaphene	ND		1.0		ug/L		11/20/11 12:57	12/05/11 15:33	1
alpha-Chlordane	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1
gamma-Chlordane	ND		0.010		ug/L		11/20/11 12:57	12/05/11 15:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		18 - 181	11/20/11 12:57	12/05/11 15:33	1
DCB Decachlorobiphenyl	53		53 - 122	11/20/11 12:57	12/05/11 15:33	1

Lab Sample ID: LCS 580-100485/4-A

Matrix: Water

Analysis Batch: 101307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.200	0.169		ug/L		85	44 - 139
alpha-BHC	0.200	0.160		ug/L		80	41 - 133
beta-BHC	0.200	0.170		ug/L		85	54 - 130
delta-BHC	0.200	0.160		ug/L		80	7 - 169
gamma-BHC (Lindane)	0.200	0.169		ug/L		85	53 - 134
4,4'-DDD	0.200	0.172		ug/L		86	40 - 152
4,4'-DDE	0.200	0.171		ug/L		86	43 - 148
4,4'-DDT	0.200	0.170		ug/L		85	37 - 162
Dieldrin	0.200	0.182		ug/L		91	46 - 145
Endosulfan I	0.200	0.179		ug/L		90	49 - 132
Endosulfan II	0.200	0.190		ug/L		95	54 - 138
Endosulfan sulfate	0.200	0.180		ug/L		90	48 - 130
Endrin	0.200	0.169		ug/L		85	51 - 142
Heptachlor	0.200	0.185		ug/L		93	53 - 130
Heptachlor epoxide	0.200	0.178		ug/L		89	54 - 125
Methoxychlor	0.200	0.185	^	ug/L		93	47 - 167
Endrin ketone	0.200	0.187		ug/L		94	48 - 134
alpha-Chlordane	0.200	0.172		ug/L		86	40 - 131
gamma-Chlordane	0.200	0.182		ug/L		91	46 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	79		18 - 181
DCB Decachlorobiphenyl	55		53 - 122

Lab Sample ID: LCSD 580-100485/5-A

Matrix: Water

Analysis Batch: 101307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	0.200	0.163		ug/L		82	44 - 139	4	38
alpha-BHC	0.200	0.155		ug/L		78	41 - 133	3	41
beta-BHC	0.200	0.160		ug/L		80	54 - 130	6	34
delta-BHC	0.200	0.163		ug/L		82	7 - 169	2	49
gamma-BHC (Lindane)	0.200	0.160		ug/L		80	53 - 134	5	42

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-100485/5-A

Matrix: Water

Analysis Batch: 101307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.200	0.161		ug/L		81	40 - 152	7	47
4,4'-DDE	0.200	0.156		ug/L		78	43 - 148	9	43
4,4'-DDT	0.200	0.158		ug/L		79	37 - 162	7	49
Dieldrin	0.200	0.171		ug/L		86	46 - 145	6	39
Endosulfan I	0.200	0.168		ug/L		84	49 - 132	6	40
Endosulfan II	0.200	0.181		ug/L		91	54 - 138	5	37
Endosulfan sulfate	0.200	0.169		ug/L		85	48 - 130	6	34
Endrin	0.200	0.159		ug/L		80	51 - 142	6	41
Heptachlor	0.200	0.174		ug/L		87	53 - 130	6	39
Heptachlor epoxide	0.200	0.166		ug/L		83	54 - 125	7	35
Methoxychlor	0.200	0.170	^	ug/L		85	47 - 167	8	37
Endrin ketone	0.200	0.176		ug/L		88	48 - 134	6	37
alpha-Chlordane	0.200	0.163		ug/L		82	40 - 131	5	43
gamma-Chlordane	0.200	0.161		ug/L		81	46 - 131	12	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	79		18 - 181
DCB Decachlorobiphenyl	67		53 - 122

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 580-100485/1-A

Matrix: Water

Analysis Batch: 100490

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1221	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1232	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1242	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1248	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1254	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1
PCB-1260	ND		0.50		ug/L		11/20/11 12:57	11/21/11 08:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		60 - 150	11/20/11 12:57	11/21/11 08:15	1
DCB Decachlorobiphenyl	63		40 - 135	11/20/11 12:57	11/21/11 08:15	1

Lab Sample ID: LCS 580-100485/2-A

Matrix: Water

Analysis Batch: 100490

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.00	0.770		ug/L		77	25 - 145
PCB-1260	1.00	0.789		ug/L		79	30 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	86		60 - 150

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 580-100485/2-A

Matrix: Water

Analysis Batch: 100490

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100485

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	62		40 - 135

Lab Sample ID: LCSD 580-100485/3-A

Matrix: Water

Analysis Batch: 100490

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	1.00	0.806		ug/L		81	25 - 145	5	27
PCB-1260	1.00	0.810		ug/L		81	30 - 145	3	22

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	87		60 - 150
DCB Decachlorobiphenyl	61		40 - 135

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Lab Sample ID: MB 580-100761/1-A

Matrix: Water

Analysis Batch: 100863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100761

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		0.50		mg/L		11/23/11 11:10	11/28/11 11:59	1
Gasoline	ND		0.10		mg/L		11/23/11 11:10	11/28/11 11:59	1
#2 Diesel (>C12-C24)	ND		0.25		mg/L		11/23/11 11:10	11/28/11 11:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	91		50 - 150	11/23/11 11:10	11/28/11 11:59	1
4-Bromofluorobenzene (Surr)	76		50 - 150	11/23/11 11:10	11/28/11 11:59	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-100862/21-A

Matrix: Water

Analysis Batch: 100911

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.0		mg/L		11/28/11 10:54	11/28/11 16:00	1
Calcium	ND		1.1		mg/L		11/28/11 10:54	11/28/11 16:00	1
Iron	ND		0.20		mg/L		11/28/11 10:54	11/28/11 16:00	1
Magnesium	ND		1.1		mg/L		11/28/11 10:54	11/28/11 16:00	1
Potassium	ND		3.3		mg/L		11/28/11 10:54	11/28/11 16:00	1
Sodium	ND		2.0		mg/L		11/28/11 10:54	11/28/11 16:00	1

Lab Sample ID: LCS 580-100862/22-A

Matrix: Water

Analysis Batch: 100911

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	4.00	4.15		mg/L		104	80 - 120

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 580-100862/22-A

Matrix: Water

Analysis Batch: 100911

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Calcium	20.0	20.3		mg/L		102	80 - 120	
Iron	22.0	21.8		mg/L		99	80 - 120	
Magnesium	20.0	19.3		mg/L		96	80 - 120	
Potassium	20.0	20.6		mg/L		103	80 - 120	
Sodium	20.0	20.6		mg/L		103	80 - 120	

Lab Sample ID: LCSD 580-100862/23-A

Matrix: Water

Analysis Batch: 100911

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits			
Aluminum	4.00	4.14		mg/L		104	80 - 120	0		20
Calcium	20.0	19.9		mg/L		100	80 - 120	2		20
Iron	22.0	21.5		mg/L		98	80 - 120	2		20
Magnesium	20.0	19.0		mg/L		95	80 - 120	1		20
Potassium	20.0	19.9		mg/L		100	80 - 120	3		20
Sodium	20.0	20.0		mg/L		100	80 - 120	3		20

Lab Sample ID: 580-29897-2 MS

Matrix: Water

Analysis Batch: 100911

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Aluminum	ND		4.00	4.23		mg/L		106	80 - 120	
Calcium	54		20.0	73.2		mg/L		95	80 - 120	
Iron	2.1		22.0	23.7		mg/L		98	80 - 120	
Magnesium	27		20.0	44.7		mg/L		91	80 - 120	
Potassium	ND		20.0	21.8		mg/L		99	80 - 120	
Sodium	25		20.0	44.5		mg/L		99	80 - 120	

Lab Sample ID: 580-29897-2 MSD

Matrix: Water

Analysis Batch: 100911

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits			
Aluminum	ND		4.00	4.24		mg/L		106	80 - 120	0		20
Calcium	54		20.0	73.4		mg/L		96	80 - 120	0		20
Iron	2.1		22.0	24.0		mg/L		99	80 - 120	1		20
Magnesium	27		20.0	43.9		mg/L		87	80 - 120	2		20
Potassium	ND		20.0	22.2		mg/L		101	80 - 120	2		20
Sodium	25		20.0	44.8		mg/L		101	80 - 120	1		20

Lab Sample ID: 580-29897-2 DU

Matrix: Water

Analysis Batch: 100911

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Aluminum	ND		ND		mg/L		NC	20
Calcium	54		54.6		mg/L		0.5	20
Iron	2.1		2.13		mg/L		3	20
Magnesium	27		26.5		mg/L		0.2	20

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 580-29897-2 DU

Matrix: Water

Analysis Batch: 100911

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Potassium	ND		ND		mg/L		NC	20
Sodium	25		25.0		mg/L		1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-100862/21-A

Matrix: Water

Analysis Batch: 100913

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:05	5
Antimony	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Barium	ND		0.0060		mg/L		11/28/11 10:54	11/28/11 15:05	5
Beryllium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Cadmium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Chromium	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Cobalt	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Copper	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:05	5
Lead	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Manganese	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Nickel	ND		0.015		mg/L		11/28/11 10:54	11/28/11 15:05	5
Selenium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:05	5
Silver	ND		0.0020		mg/L		11/28/11 10:54	11/28/11 15:05	5
Thallium	ND		0.0050		mg/L		11/28/11 10:54	11/28/11 15:05	5
Vanadium	ND		0.010		mg/L		11/28/11 10:54	11/28/11 15:05	5
Zinc	ND		0.0070		mg/L		11/28/11 10:54	11/28/11 15:05	5

Lab Sample ID: LCS 580-100862/22-A

Matrix: Water

Analysis Batch: 100913

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.06		mg/L		101	80 - 120
Antimony	3.00	2.97		mg/L		99	80 - 120
Barium	4.00	4.16		mg/L		104	80 - 120
Beryllium	0.100	0.100		mg/L		100	80 - 120
Cadmium	0.100	0.0974		mg/L		97	80 - 120
Chromium	0.400	0.391		mg/L		98	80 - 120
Cobalt	1.00	0.975		mg/L		97	80 - 120
Copper	0.500	0.511		mg/L		102	80 - 120
Lead	1.00	1.04		mg/L		104	80 - 120
Manganese	1.00	1.01		mg/L		101	80 - 120
Nickel	1.00	1.00		mg/L		100	80 - 120
Selenium	4.00	4.08		mg/L		102	80 - 120
Silver	0.600	0.631		mg/L		105	80 - 120
Thallium	4.00	3.68		mg/L		92	80 - 120
Vanadium	1.00	0.978		mg/L		98	80 - 120
Zinc	1.00	0.996		mg/L		100	80 - 120

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-100862/23-A

Matrix: Water

Analysis Batch: 100913

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits			
Arsenic	4.00	4.07		mg/L		102	80 - 120		0	20
Antimony	3.00	2.95		mg/L		98	80 - 120		1	20
Barium	4.00	4.18		mg/L		104	80 - 120		0	20
Beryllium	0.100	0.105		mg/L		105	80 - 120		4	20
Cadmium	0.100	0.102		mg/L		102	80 - 120		5	20
Chromium	0.400	0.389		mg/L		97	80 - 120		1	20
Cobalt	1.00	0.969		mg/L		97	80 - 120		1	20
Copper	0.500	0.512		mg/L		102	80 - 120		0	20
Lead	1.00	1.03		mg/L		103	80 - 120		1	20
Manganese	1.00	0.995		mg/L		99	80 - 120		1	20
Nickel	1.00	0.992		mg/L		99	80 - 120		1	20
Selenium	4.00	4.09		mg/L		102	80 - 120		0	20
Silver	0.600	0.625		mg/L		104	80 - 120		1	20
Thallium	4.00	3.65		mg/L		91	80 - 120		1	20
Vanadium	1.00	0.973		mg/L		97	80 - 120		1	20
Zinc	1.00	0.994		mg/L		99	80 - 120		0	20

Lab Sample ID: 580-29897-2 MS

Matrix: Water

Analysis Batch: 100913

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Arsenic	0.010		4.00	4.30		mg/L		107	80 - 120	
Antimony	ND		3.00	3.18		mg/L		106	80 - 120	
Barium	0.30		4.00	4.70		mg/L		110	80 - 120	
Beryllium	ND		0.100	0.106		mg/L		106	80 - 120	
Cadmium	ND		0.100	0.101		mg/L		101	80 - 120	
Chromium	ND		0.400	0.401		mg/L		100	80 - 120	
Cobalt	ND		1.00	1.01		mg/L		101	80 - 120	
Copper	ND		0.500	0.540		mg/L		108	80 - 120	
Lead	ND		1.00	1.07		mg/L		107	80 - 120	
Manganese	0.13		1.00	1.16		mg/L		103	80 - 120	
Nickel	ND		1.00	1.07		mg/L		107	80 - 120	
Selenium	ND		4.00	4.32		mg/L		108	80 - 120	
Silver	ND		0.600	0.645		mg/L		108	80 - 120	
Thallium	ND		4.00	4.09		mg/L		102	80 - 120	
Vanadium	ND		1.00	0.997		mg/L		100	80 - 120	
Zinc	ND		1.00	1.05		mg/L		105	80 - 120	

Lab Sample ID: 580-29897-2 MSD

Matrix: Water

Analysis Batch: 100913

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits			
Arsenic	0.010		4.00	4.49		mg/L		112	80 - 120		4	20
Antimony	ND		3.00	3.34		mg/L		111	80 - 120		5	20
Barium	0.30		4.00	4.94		mg/L		116	80 - 120		5	20
Beryllium	ND		0.100	0.112		mg/L		112	80 - 120		5	20
Cadmium	ND		0.100	0.111		mg/L		111	80 - 120		9	20
Chromium	ND		0.400	0.433		mg/L		108	80 - 120		8	20

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-29897-2 MSD

Matrix: Water

Analysis Batch: 100913

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	ND		1.00	1.07		mg/L		107	80 - 120	6	20
Copper	ND		0.500	0.567		mg/L		113	80 - 120	5	20
Lead	ND		1.00	1.14		mg/L		114	80 - 120	7	20
Manganese	0.13		1.00	1.26		mg/L		113	80 - 120	8	20
Nickel	ND		1.00	1.12		mg/L		112	80 - 120	4	20
Selenium	ND		4.00	4.56		mg/L		114	80 - 120	5	20
Silver	ND		0.600	0.683		mg/L		114	80 - 120	6	20
Thallium	ND		4.00	4.38		mg/L		109	80 - 120	7	20
Vanadium	ND		1.00	1.07		mg/L		107	80 - 120	7	20
Zinc	ND		1.00	1.11		mg/L		111	80 - 120	6	20

Lab Sample ID: 580-29897-2 DU

Matrix: Water

Analysis Batch: 100913

Client Sample ID: LMW- 11 -1111

Prep Type: Total Recoverable

Prep Batch: 100862

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.010		0.0108		mg/L		5	20
Antimony	ND		ND		mg/L		NC	20
Barium	0.30		0.318		mg/L		4	20
Beryllium	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Cobalt	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Manganese	0.13		0.137		mg/L		3	20
Nickel	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-100939/21-A

Matrix: Water

Analysis Batch: 100965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/29/11 10:01	11/29/11 12:14	1

Lab Sample ID: LCS 580-100939/22-A

Matrix: Water

Analysis Batch: 100965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100939

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00160		mg/L		80	80 - 120

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 580-100939/23-A

Matrix: Water

Analysis Batch: 100965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100939

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00162		mg/L		81	80 - 120	1	20

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: Trip Blank

Date Collected: 11/15/11 00:00

Date Received: 11/17/11 16:10

Lab Sample ID: 580-29897-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 17:36	SK	TAL SEA

Client Sample ID: LMW- 11 -1111

Date Collected: 11/15/11 11:15

Date Received: 11/17/11 16:10

Lab Sample ID: 580-29897-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 20:36	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 11:13	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 09:06	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 12:49	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 12:58	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 16:22	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 15:18	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 13:09	FCW	TAL SEA

Client Sample ID: LMW- 9 -1111

Date Collected: 11/15/11 14:00

Date Received: 11/17/11 16:10

Lab Sample ID: 580-29897-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 21:02	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 11:34	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 09:19	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 13:13	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 13:17	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 17:08	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 15:57	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 13:11	FCW	TAL SEA

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 7 -1111

Lab Sample ID: 580-29897-4

Date Collected: 11/16/11 10:00

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 21:28	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 11:55	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 09:32	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 13:38	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 13:37	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 17:19	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:02	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:40	FCW	TAL SEA

Client Sample ID: LMW- 7 -1111-D

Lab Sample ID: 580-29897-5

Date Collected: 11/16/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 21:54	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 12:16	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 09:45	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 14:02	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 13:56	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 17:31	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:06	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:43	FCW	TAL SEA

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 22:19	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 12:37	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 09:58	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 6 -1111

Lab Sample ID: 580-29897-6

Date Collected: 11/16/11 12:15

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 14:26	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 14:15	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 17:42	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:10	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:45	FCW	TAL SEA

Client Sample ID: LMW- 10 -1111

Lab Sample ID: 580-29897-7

Date Collected: 11/17/11 12:40

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 22:45	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 12:58	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 10:11	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 14:52	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 14:35	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 17:53	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:15	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:47	FCW	TAL SEA

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 23:10	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 13:19	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 10:50	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 15:16	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 15:52	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 18:18	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:19	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 2 -1111

Lab Sample ID: 580-29897-8

Date Collected: 11/16/11 14:15

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	100965	11/29/11 12:49	FCW	TAL SEA

Client Sample ID: LMW- 4 -1111

Lab Sample ID: 580-29897-9

Date Collected: 11/16/11 15:05

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 23:36	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 13:40	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 11:02	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 15:41	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 16:11	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 18:30	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:23	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:51	FCW	TAL SEA

Client Sample ID: LMW- 5 -1111

Lab Sample ID: 580-29897-10

Date Collected: 11/17/11 09:05

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/26/11 00:01	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 14:01	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 11:15	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 16:05	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 16:31	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 18:41	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:28	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 12:54	FCW	TAL SEA

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/26/11 00:27	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 14:22	AP	TAL SEA
Total/NA	Prep	3520C	RADL		100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C	RADL	2	101298	12/05/11 12:15	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 11:28	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 16:30	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 16:50	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 19:06	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:32	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 13:13	FCW	TAL SEA

Client Sample ID: LMW- 8 -1111

Lab Sample ID: 580-29897-12

Date Collected: 11/17/11 11:10

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/26/11 00:52	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 14:43	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA
Total/NA	Analysis	8082		1	100490	11/21/11 11:41	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 16:55	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 17:09	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 19:17	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 16:36	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 13:02	FCW	TAL SEA

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100796	11/25/11 18:02	SK	TAL SEA
Total/NA	Prep	3520C			100653	11/22/11 11:04	GH	TAL SEA
Total/NA	Analysis	8270C		1	101179	12/02/11 15:04	AP	TAL SEA
Total/NA	Prep	3510C			100485	11/20/11 12:57	RS	TAL SEA

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Client Sample ID: LMW- EB -1111

Lab Sample ID: 580-29897-13

Date Collected: 11/17/11 09:50

Matrix: Water

Date Received: 11/17/11 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	100490	11/21/11 11:54	ES	TAL SEA
Total/NA	Prep	3520C			100761	11/23/11 11:10	RD	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	100863	11/28/11 17:19	KKW	TAL SEA
Total/NA	Analysis	8081A		1	101307	12/05/11 17:29	EK	TAL SEA
Total Recoverable	Prep	3005A			100862	11/28/11 10:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	100911	11/28/11 19:28	SP	TAL SEA
Total Recoverable	Analysis	6020		5	100913	11/28/11 15:09	FCW	TAL SEA
Total/NA	Prep	7470A			100939	11/29/11 10:01	PAB	TAL SEA
Total/NA	Analysis	7470A		1	100965	11/29/11 13:05	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	Alaska	TA-Port Heiden Mobile Lab	10	UST-093
TestAmerica Seattle	California	NELAC	9	1115CA
TestAmerica Seattle	Florida	NELAC	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP		L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025		L2236
TestAmerica Seattle	Louisiana	NELAC	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	N/A
TestAmerica Seattle	Oregon	NELAC	10	WA100007
TestAmerica Seattle	USDA	USDA		P330-11-00222
TestAmerica Seattle	Washington	State Program	10	C553

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-29897-1	Trip Blank	Water	11/15/11 00:00	11/17/11 16:10
580-29897-2	LMW- 11 -1111	Water	11/15/11 11:15	11/17/11 16:10
580-29897-3	LMW- 9 -1111	Water	11/15/11 14:00	11/17/11 16:10
580-29897-4	LMW- 7 -1111	Water	11/16/11 10:00	11/17/11 16:10
580-29897-5	LMW- 7 -1111-D	Water	11/16/11 10:10	11/17/11 16:10
580-29897-6	LMW- 6 -1111	Water	11/16/11 12:15	11/17/11 16:10
580-29897-7	LMW- 10 -1111	Water	11/17/11 12:40	11/17/11 16:10
580-29897-8	LMW- 2 -1111	Water	11/16/11 14:15	11/17/11 16:10
580-29897-9	LMW- 4 -1111	Water	11/16/11 15:05	11/17/11 16:10
580-29897-10	LMW- 5 -1111	Water	11/17/11 09:05	11/17/11 16:10
580-29897-11	LMW- 3 -1111	Water	11/17/11 10:10	11/17/11 16:10
580-29897-12	LMW- 8 -1111	Water	11/17/11 11:10	11/17/11 16:10
580-29897-13	LMW- EB -1111	Water	11/17/11 09:50	11/17/11 16:10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

**Chain of
Custody Record**

Client

Goldier Associates

Client Contact

Douglas McNeil

Date

11/15/2011

Chain of Custody Number

11747

Address

18300 NE Union Hill Rd. Suite 200

Telephone Number (Area Code)/Fax Number

425 883 0772

Lap Number

29897

Page

1 of 2

City

Redmond

State

WA

Zip Code

98052

Sampler

J. Lamberts

Lap Contact

T. Torres

Billing Contact

Analysis (Attach list if more space is needed)

Special Instructions/
Conditions of Receipt

*HOLD all field filtered,
unpres. samples
pending analytical
results (pres. upon receipt)

Project Name and Location (State)

Landsbury Mine, Maple Valley, WA

Contract/Purchase Order/Quote No.

983-1000-002. K273

Sample I.D. and Location/Description
(Containers for each sample may be combined on one line)

Date

Time

Air

Aqueous

Sed.

Soil

Unpres.

H2SO4

HNO3

HCl

NaOH

ZnAc/
NaOH

Containers &
Preservatives

VOCs - client list

TPH-HCID

PCBs/Pest.

TAML - Total
metals

TAML - Diss
metals

SVOCs 8270

1 Top Blank

2 LMW-11-1111

3 LMW-9-1111

4 LMW-7-1111

5 LMW-7-1111-D

6 LMW-6-1111

7 LMW-14-1111

8 LMW-2-1111

9 LMW-4-1111

10 LMW-5-1111

11 LMW-3-1111

12 LMW-8-1111

Cooler

Yes ☐ No ☐ Cooler Temp: _____

Possible Hazard Identification

Non-Hazard ☒ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days)

24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other standard

1. Relinquished By Sign/Print

2. Relinquished By Sign/Print

3. Relinquished By Sign/Print

1. Received By Sign/Print

2. Received By Sign/Print

3. Received By Sign/Print

Date

Time

Date

Time

Date

Time

Date

Time

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

TAL-8274-580 (0210)

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1/007)

Client

Golder Associates

Project Manager

Douglas Merrill

Date

11/17/11

Chain of Custody Number

143883

Address

18300 NE Union Hill Road, Suite 200

Telephone Number (Area Code)/Fax Number

425 888 6747

Lab Number

29897

Page

2 of 2

City

Redmond

State

WA

Zip Code

98052

Site Contact

J Lambert

Lab Contact

T Torres

Project Name and Location (State)

Landsbury Mine, Maple Valley, WA

Carrier/Vehicle Number

1117/11

Contract/Purchase Order/Quote No.

923-1006-002.R273

Sample I.D. No. and Description

(Containers for each sample may be combined on one line)

13 LMW-EB-1111

Date

11/17/11

Time

0950

Air

Aqueous

Sed.

Soil

Unpres.

H2SO4

HNO3

HCl

NaOH

ZnAc/NaOH

VOCs-client list

TPH-HCID

PCB-Test

TAML-Total Metals

TAML-Diss Metals

SVOCs 8270

* HOLD Field Filtered

unpres. samples pending analytical results (pres. upon receipt)

Special Instructions/Conditions of Receipt

Analysis (Attach list if more space is needed)

Disposal By Lab

Archive For

Months

(A fee may be assessed if samples are retained longer than 1 month)

Received By

Date

Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 580-29897-1

Login Number: 29897

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	adjusted pH of metals polys of several. Preserved filtered metals polys.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX B
SAMPLE INTEGRITY DATA SHEETS (SIDS)

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002

Site Location Ravensdale, WA Sample ID LMW-2-1111

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/16/11 Time 1415

Media Water Station LMW-2

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 8.31 ft below TOC (monument at elev. X) (bottom at 38.1 ft bgs, 4-in casing)

Screen Interval - 27.9-38.1 ft bgs Monument: 2.94 ags

Sand Pack Interval - 24.8-38.1 ft bgs (8-in hole) (~7.8 gal/sand pack vol)

Packer Depth - NA (^{21.4}~22.3 gal/casing vol) (^{29.2}~30.1 gal/total well vol) ~87.5 gal (3 well vols)

Sample Description clear, sulfur odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
3 - 1 Liter	PCBs/Pest	Glass Amber	none
4 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) Jill Lambert Date 11/16/11

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-2

Date 11/16/11

Time Begin Purge 1300

Time Collect Sample 1415

(alternativ)

[illegible]

Comments:

Brundfos set @ 80 Hz, Sulfurous odor

$$\frac{5 \text{ gal}}{4 \text{ min}} = 1.25 \text{ gpm} \quad \frac{29.2}{1.25} = 24 \text{ min/well vol}$$

$PID = 0.0$ ppm cH steadily dropping

Sampler's Initials JSL

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002

Site Location Ravensdale, WA Sample ID LMW-3-1111

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/17/2011 Time 1010

Media Water Station LMW-3

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 13.30 ft below TOC (monument at elev. X) (bottom at 64.8 ft bgs, 4-in casing)

Screen Interval - 49.8-64.8 ft bgs Monument: 3.08 ags

Sand Pack Interval - 47.1-64.8 ft bgs (8-in hole) (~10.4 gal/sand pack)

Packer Depth - 39.33 ft bgs (^{35.6}~36.1 gal/casing vol) (~16.6 gal/packer casing volume)

(~27.0 gal/total well vol below packer) ~ 81.1 ^{gal} (3 well vols)

Sample Description clear, no odor.

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
3 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/17/2011

Supervisor (signature) [Signature] Date 11/21/2011

$$\begin{array}{r} 1 \\ 915 \\ 17 \\ \hline 932 \\ 17 \\ \hline 949 \end{array}$$
Time Collect Sample 1010

(pH meter)

Comments:
$$\frac{5 \text{ gal}}{5 \text{ min}} = 1 \text{ gpm} \rightarrow 17 \text{ min / well vol}$$

Sampler's Initials jsl

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-4-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/16/11 Time 1505

Media Water Station LMW-4

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 9.86 ft below TOC (monument at elev. X) (bottom at 209.7 ft bgs, 4-in casing)

Screen Interval - 195-209.7 ft bgs Monument: 2.76 ags

Sand Pack Interval - 189-209.7 ft bgs (8-in hole) (~12.3 gal/sand pack)

Packer Depth - 187.3 ft bgs (~^{132.3}133.3 gal/casing vol) (~14.6 gal/packer casing volume)

(~26.9 gal/total well vol below packer)

** Depths corrected for 70° inclination (80.7 gal - 3 well vols)

Sample Description sulfur odor, clear

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
3 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/16/11

Supervisor (signature) [Signature] Date 11/21/2011

$$\begin{array}{r} 1418 \\ 17 \\ \hline 125. \\ 17 \\ \hline 42 \\ 17 \\ \hline 59 \end{array}$$

Time Collect Sample 1505

[illegible]

Grundfos controller set @ 118 Hz
Sulphurous odor.

$$\frac{5 \text{ gal}}{3 \text{ min}} = 1.7 \text{ gpm}$$

$$\frac{27}{0.6} = 16.2 \text{ min/well vol.}$$

Sampler's Initials SL

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-5-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/17/11 Time 0905

Media Water Station LMW-5

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 14.72 ft below TOC (monument at elev. X) (bottom at 241.8 ft bgs, 4-in casing)

Screen Interval - 231.8-241.8 ft bgs Monument: 3.24 ags

Sand Pack Interval - 231.8-241.8 ft bgs (8-in hole) (~5.9 gal/sand pack)

Packer Depth - 222.11 ft bgs (^{150.3}~150.8 gal/casing vol) (~12.9 gal/packer casing volume)

(~18.7 gal/total well vol below packer)

Sample Description (~56.2 gal / 3 well vols)

clear, sulfur odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
2 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/17/2011

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-5
Date 11/17/11
Time Begin Purge 0814
Time Collect Sample 905

$$\begin{array}{r} 514 \\ 12 \\ \hline 26 \\ 12 \\ \hline 48 \end{array}$$

(pHmeter)

[illegible]

Comments:

Grundfos @ 160Hz

Packer inflated to 140 psi

$$\frac{5 \text{ gal}}{3 \text{ min}} = 1.67 \text{ gpm} \quad \frac{19}{1.67} = 11.4 \text{ min/well vol}$$

Sampler's Initials JS

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-6-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/16/11 Time 1215

Media Water Station LMW-6

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL -40.69 ft below TOC (monument at elev. X) (bottom at 105.9 ft bgs, 4-in casing)

Screen Interval - 90.9-105.9 ft bgs Monument: 3.05 ags

Sand Pack Interval - 82.5-105.9 ft bgs (8-in hole) (~13.7 gal/sand pack)

Packer Depth - 81.22 ft bgs (~53 gal/casing vol) (~16.1 gal/packer casing volume)

(~29.9 gal/total well vol below packer)

Sample Description (~89.6 gal/3 well vols)

clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
2 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/16/11

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-6
Date 11/16/11
Time Begin Purge 1042
Time Collect Sample 1215

CpH meter)

$$\begin{array}{r} 1142 \\ \times 10 \\ \hline 11420 \end{array}$$
[illegible]

Comments:

Grundfos set @ 170 Hz, inflated packer to 110 psi

Turbid @ start of purge

$$\frac{5 \text{ gal}}{5 \text{ min}} = 1 \text{ gpm}$$
$$\frac{30 \text{ gal}}{1 \text{ gpm}} = 30 \text{ min / well vol below packer}$$

$P(0) = 0.0001$

Sampler's Initials SL

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-7-1111, LMW-7-1111-D
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 11/16/11 Time 1000, 1010 (dup)

Media Water Station LMW-7

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 213.51 ft below TOC (monument at elev. X) (bottom at 253.7 ft bgs, 4-in casing)

Screen Interval - 239.6-253.7 ft bgs Monument: 2.72 ags

Sand Pack Interval - NA

Packer Depth - NA (~28.9 gal/casing vol) ** Depths corrected for 70° inclination
 (~84.1 gal/3 well vol)

Sample Description clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
3 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/16/11

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-7

Date 11/16/11

Time Begin Purge 0820

Time Collect Sample 1000, 1010 (dup) (from pH)

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0851	~ 25 gal	7.23	501	12.0	1.85	1.90	257.6
	0900		7.18	526	12.2	0.13	1.12	149.6
	0910		7.17	542	12.2	0.09	1.55	149.5
	0920		7.19	547	12.2	0.08	0.91	134.8
	0930		7.14	551	12.2	0.07	1.23	130.2
	0940		7.15	546	12.2	0.06	0.85	130.1
	0950		7.15	560	12.2	0.06	0.85	124.2

Comments:

Grand fos set @ 325H z

Turbid @ start of purge

$$\frac{5 \text{ gal}}{5 \text{ min}} = 1 \text{ gpm} \quad \frac{28 \text{ gal/well vol}}{1 \text{ gpm}} = 28 \text{ min/well vol}$$

PID = 0.0 ppm

Sampler's Initials jsl

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-8-1111 , LMW-EB-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Tubing and Peristaltic Pump , Bailer for VOC + HCID

Date 11/17/2011 Time 1110 , EB @ 950

Media Water Station LMW-8

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 4.32 ft below TOC (PVC at black notch) (bottom at 13 ft bgs, 2-in casing)

Screen Interval - 8-13 ft bgs PVC stickup: 1.72 ags

Sand Pack Interval - 6-13 ft bgs (8-in hole) (~5.1 gal/sand pack)

Packer Depth - NA (~^{1.7}~~1.7~~ gal/casing vol) (~^{6.8}~~7.0~~ gal/total well vol)

Sample Description clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
2 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) Jill Lamb Date 11/17/11

Supervisor (signature) DJL Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-8
 Date 11/17/11
 Time Begin Purge 1020
 Time Collect Sample 1110

(pHmeter)

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1025		6.95	478	10.1	4.16	17.1	190.8
	1030		6.92	572	10.3	2.42	8.47	163.2
	1035		6.90	647	10.6	1.10	4.15	143.1
	1040		6.90	676	10.7	0.62	2.18	142.7
	1045		6.91	691	10.7	0.29	1.33	142.7
	1050		6.91	695	10.8	0.19	1.43	123.4
	1055		6.91	696	10.8	0.15	2.56	123.4
	1100		6.92	694	10.9	0.14	1.48	117.2
	1100 1105		6.92	694	11.0	0.14	1.49	117.2
	1110							
	1115							

Comments:

0950 collect field blank prior to purge. Thru tubing (+ filter)
 for diss. metals) LMW-EB-1111

Flowrate: 240 mL/min

Collected VOC & HClD vials using a bailer.

Sampler's Initials jsl

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002

Site Location Ravensdale, WA Sample ID LMW-9-1111

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Pump Grundfos and Dedicated Tubing

Date 11/15/2011 Time 1400

Media Water Station LMW-9

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 99.82 ft below TOC (PVC at black notch) (bottom at 159 ft bgs, 2-in casing)

Screen Interval - 149-159 ft bgs PVC stickup: 2.86 ags

Sand Pack Interval - 143.5-159 ft bgs (8-in hole) (~11.4 gal/sand pack)

Packer Depth - NA (~10.2 gal/casing vol) (~21.6 gal/total well vol) (~64.5 gal/3 well vol)

Sample Description clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
2 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/15/2011

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-9
 Date 11/15/2011
 Time Begin Purge 1250
 Time Collect Sample 1400

(pHmeter)

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1312		7.06	731	12.0	0.29	0.61	147.4
	1322		7.08	732	12.1	0.07	0.70	130.6
	1332		7.07	730	12.1	0.05	0.49	122.2
	1342		7.08	732	12.0	0.03	0.63	122.2
	1352		7.07	730	12.0	0.05	0.61	112.2

Comments:

Grundfos set @ 230 Hz.

Purge rate = $\sim 1 \frac{\text{gal}}{\text{min}}$

$21.6 \text{ gal} / 1 \text{ gpm} = 21.6 \text{ min/well vol.} \rightarrow 64.5 \text{ min purge}$

Sampler's Initials jsl

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-10-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler QED Bladder

Date 11/17/11 Time 1240

Media Water Station LMW-10

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL – 0.00 ft below TOC (PVC) (bottom at 289 ft bgs, 4-in casing)

Screen Interval – 267-289 ft bgs PVC stickup: 3.12 ags

Sand Pack Interval – 258-289 ft bgs (9-in hole) (~18.2 gal/sand pack)

Packer Depth – NA (~191 gal/casing vol) (~209 gal/total well vol)

Sample Description clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 – 40 mL	VOA	VOA Vial	HCl
1 – 250 ml	Total Metals	HDPE	HNO3 (non)
1 – 250 ml	Dissolved Metals	HDPE	None (filter)
2 – 1 Liter, 3 – 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
2 – 1 Liter	PCBs/Pest	Glass Amber	none
2 – 1 Liter	SVOCs	Glass Amber	none

Sampler (signature) [Signature] Date 11/17/11

Supervisor (signature) [Signature] Date 11/22/2011

FIELD PARAMETERS SHEET

Well ID LMW-10
Date 11/17/11
Time Begin Purge 1200
Time Collect Sample 1240

(pH meter)

[illegible]

Comments:

60 psi on controllers
110 psi on tank
~~4 cpm, ID = 108~~ 2 cpm, ID = 50
Purge rate: 350 mls/min
PID = 0.0 ppm

Sampler's Initials JS

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
 Site Location Ravensdale, WA Sample ID LMW-11-1111
 Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Pump Grundfos and QED Bladder

Date 11/15/2011 Time 1115

Media Water Station LMW-11

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 157.62 ft below TOC (PVC) (bottom at 707 ft bgs, 4-in casing)

Screen Interval - 696-707 ft bgs PVC stickup: 2.70 ags

Sand Pack Interval - 688-707 ft bgs (8-in hole) (~11.2 gal/sand pack)

Packer Depth - NA (~360.4 gal/casing vol) (~371.6 gal/total well vol)

Sample Description Clear, no odor.

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 - 40 mL	VOA	VOA Vial	HCl
1 - 250 ml	Total Metals	HDPE	HNO3 (non)
1 - 250 ml	Dissolved Metals	HDPE	None (filter)
2 - 1 Liter, 3 - 40 ml	TPH-HCID	Glass Amber, VOA Vial	HCl
3 - 1 Liter	PCBs/Pest	Glass Amber	none
2 - 1 Liter	SVOCs	Glass Amber	non

Sampler (signature) [Signature] Date 11/15/11

Supervisor (signature) [Signature] Date 11/21/2011

FIELD PARAMETERS SHEET

Well ID LMW-11
Date 11/15/2011
Time Begin Purge 0833 (Ground for)
Time Collect Sample 1115

(pHmeter)

[illegible]

Comments:

0833 Began Grundfos to initialize flow inside well. Pump set at ~170 ft below TOC, pump controller @ 330 Hz. Purge rate ~ 2.5 gpm

$$\frac{372 \frac{\text{gal}}{\text{well vol}}}{2.5 \frac{\text{gpm}}{\text{min}}} = 148.8 \frac{\text{min}}{\text{well vol.}} = \sim 2.48 \text{ hrs}$$

1025 Started bladder pump @ 300 gal purged. Pump @ 110 psi, 2cpm
Purge rate of Grundfos - 2.5 gpm Tank @ 110 psi
Purge rate of bladder - ~~150 mil/min~~ 280 mil/min Cycle ID = 54 (16 of 149)

Tank @ 110 psi
Cycle ID = ~~54 (16s/14s)~~ 52 (18/12)
~~58 (12/13s)~~ ~~55 (15s/15s)~~

Sampler's Initials jsl

Notes: • Bladder Pump kept losing pressure, poor flow rate. Noticed gas was low on tank, so switched it out + it worked better. Had to adjust Cycle 10 to get $\sim 280 \text{ mL/min}$.

Golder Associates

Field_parameters_blank.xlsLandsburg

- Do meter steadily dropping throughout range

$$\begin{array}{r} 25 \\ 2 \\ \hline 56 \end{array} \quad \begin{array}{r} 120 \\ 2.5 \\ \hline \end{array}$$

SAMPLE INTEGRITY DATA SHEET

Plant/Site Landsburg Mine Site Project No. 923-1000-002
Site Location Ravensdale, WA Sample ID LMW-3-1211
Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

Technical Procedure Reference(s) TP-1.4-6A, TP-1.2-20, TP-1.2-23

Type of Sampler Dedicated Pump Grundfos

Date 12/30/2011 Time 1030

Media Water Station LMW-3

Sample Type: grab time composite space composite

Sample Acquisition Measurements (depth, volume of static well water and purged water, etc.)

SWL - 12.67 ft below TOC (monument at elev. X) (bottom at 64.8 ft bgs, 4-in casing)

Screen Interval - 49.8-64.8 ft bgs Monument: 3.08 ags

Sand Pack Interval - 47.1-64.8 ft bgs (8-in hole) (~10.4 gal/sand pack)

Packer Depth - 39.33 ft bgs (~36.1 gal/casing vol) (~16.6 gal/packer casing volume)
(~27.0 gal/total well vol below packer)

Sample Description clear, no odor

Field Measurements on Sample (pH, conductivity, etc.)

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
<u>2 - 1 Liter</u>	<u>SVOCs - bis(2-ethylhexyl)phthalate</u>	<u>Glass Amber</u>	<u>none - TestAmerica</u>
<u>2 - 500mL</u>	<u>SVOCs - bis(2-ethylhexyl)phthalate</u>	<u>Glass Amber</u>	<u>none - ARI</u>

Sampler (signature) [Signature] Date 12/30/2011

Supervisor (signature) [Signature] Date 01/04/2012

FIELD PARAMETERS SHEET

Well ID LMW-3

Date 12/30/2011

Time Begin Purge 0911

Time Collect Sample 1030

pH meter

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0936		7.45	306	11.1	5.12	1.45	488.1
	0941		7.81	309	10.7	0.19	1.06	269.1
	0946		7.81	311	10.7	0.16	0.83	205.1
	0951		7.81	311	10.7	0.08	1.02	202.5
	0956		7.80	312	10.7	0.05	1.25	185.8
	1001		7.80	313	10.7	0.05	0.89	177.9
	1006		7.81	316	10.7	0.04	0.79	171.6
	1011		7.81	316	10.7	0.04	1.22	164.9
	1016		7.80	317	10.7	0.05	1.12	162.2
	1021		7.81	316	10.6	0.05	0.88	167.4
	1026		7.80	317	10.7	0.05	0.83	160.9
*	1035		7.79	318	10.7	0.04	1.26	157.6

Comments:

Grundfos @ 110 Hz

Inflate packer to 110 psi

$\frac{5 \text{ gal}}{5 \text{ min}} = 1 \text{ gpm} \rightarrow 17 \text{ min / well vol below packer}$

* Post sample reading

PID = 0.0 ppm

Sampler's Initials jsl

911
17
928

APPENDIX C
TEST AMERICA LABORATORY ANALYTICAL DATA
FOR THE REANALYSIS OF WELL LMW-3

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424

Tel: (253)922-2310

TestAmerica Job ID: 580-29897-2

Client Project/Site: Landsburg Mine

For:

Golder Associates Inc.

18300 NE Union Hill Road

Suite 200

Redmond, Washington 98052-3333

Attn: Douglas Morell



Authorized for release by:

12/27/2011 10:53:48 AM

Pam Johnson

Project Manager I

pamr.johnson@testamericainc.com

Designee for

Terri Torres

Project Manager II

terri.torres@testamericainc.com

LINKS

Review your project
results through

TotalAccess

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Job ID: 580-29897-2

Laboratory: TestAmerica Seattle

Narrative

GC/MS Semi VOA - Method 8270C

The CCV failed CCC criteria for di-n-octyl phthalate. The associated sample is analyzed for bis-2-ethylhexyl phthalate only. This analyte passes CCC and SPCC criteria, so the failing CCV does not affect the sample.

No other analytical or quality issues were noted.

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Definitions/Glossary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Client Sample ID: LMW- 3 -1111

Lab Sample ID: 580-29897-11

Date Collected: 11/17/11 10:10

Matrix: Water

Date Received: 11/17/11 16:10

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	14		ug/L		12/21/11 11:58	12/23/11 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	99		62 - 125				12/21/11 11:58	12/23/11 13:31	1
2-Fluorobiphenyl	88		66 - 140				12/21/11 11:58	12/23/11 13:31	1
Terphenyl-d14	90		20 - 150				12/21/11 11:58	12/23/11 13:31	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-102501/1-A

Matrix: Water

Analysis Batch: 102630

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 102501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		15		ug/L		12/21/11 11:58	12/23/11 12:23	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	104		62 - 125				12/21/11 11:58	12/23/11 12:23	1
2-Fluorobiphenyl	95		66 - 140				12/21/11 11:58	12/23/11 12:23	1
Terphenyl-d14	98		20 - 150				12/21/11 11:58	12/23/11 12:23	1

Lab Sample ID: LCS 580-102501/2-A

Matrix: Water

Analysis Batch: 102630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 102501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	10.1	ND		ug/L		142	55 - 160
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Nitrobenzene-d5	108		62 - 125				
2-Fluorobiphenyl	103		66 - 140				
Terphenyl-d14	85		20 - 150				

Lab Sample ID: LCSD 580-102501/3-A

Matrix: Water

Analysis Batch: 102630

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 102501

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	10.1	ND		ug/L		125	55 - 160	13	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Nitrobenzene-d5	104		62 - 125						
2-Fluorobiphenyl	100		66 - 140						
Terphenyl-d14	98		20 - 150						

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Client Sample ID: LMW- 3 -1111
Date Collected: 11/17/11 10:10
Date Received: 11/17/11 16:10

Lab Sample ID: 580-29897-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			102501	12/21/11 11:58	RD	TAL SEA
Total/NA	Analysis	8270C		1	102630	12/23/11 13:31	AP	TAL SEA

Laboratory References:
TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	Alaska	TA-Port Heiden Mobile Lab	10	UST-093
TestAmerica Seattle	California	NELAC	9	1115CA
TestAmerica Seattle	Florida	NELAC	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP		L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025		L2236
TestAmerica Seattle	Louisiana	NELAC	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	N/A
TestAmerica Seattle	Oregon	NELAC	10	WA100007
TestAmerica Seattle	USDA	USDA		P330-11-00222
TestAmerica Seattle	Washington	State Program	10	C553

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-29897-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-29897-11	LMW- 3 -1111	Water	11/17/11 10:10	11/17/11 16:10

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

**Chain of
Custody Record**

Client: **Goldier Associates** Client Contact: **Douglas Morell** Date: **11/15/2011** Chain of Custody Number: **11747**

Address: **18300 NE Union Hill Rd. Suite 200** Telephone Number (Area Code)/Fax Number: **425 883 0772** Lab Number: **29897** Page **1** of **2**

City: **Redmond** State: **WA** Zip Code: **98052** Sampler: **J. Lamberts** Lab Contact: **T. Torres**

Project Name and Location (State): **Landsbury Mine, Maple Valley, WA** Billing Contact: **J. Lamberts**

Contract/Purchase Order/Quote No.: **983-1000-002, K273**

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives						Analysis (Attach list if more space is needed)				Special Instructions/ Conditions of Receipt * Hold all field filtered, unpres. samples pending analytical results (pres. upon receipt)
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH					
1. Top Blank	11/15/11	-	✓										✓	✓	✓	✓	
2. LMW-11-1111	11/15/11	1115	✓				6	1	8				✓	✓	✓	✓	
3. LMW-9-1111	11/15/11	1400	✓				6	1	8				✓	✓	✓	✓	
4. LMW-7-1111	11/16/11	1000	✓				6	1	8				✓	✓	✓	✓	
5. LMW-7-1111-D	11/16/11	1010	✓				6	1	8				✓	✓	✓	✓	
6. LMW-6-1111	11/16/11	1215	✓				6	1	8				✓	✓	✓	✓	
7. LMW-14-1111	11/17/11	1240	✓				6	1	8				✓	✓	✓	✓	
8. LMW-2-1111	11/16/11	1415	✓				6	1	8				✓	✓	✓	✓	
9. LMW-4-1111	11/16/11	1505	✓				6	1	8				✓	✓	✓	✓	
10. LMW-5-1111	11/17/11	0705	✓				6	1	8				✓	✓	✓	✓	
11. LMW-3-1111	11/17/11	1010	✓				6	1	8				✓	✓	✓	✓	
12. LMW-8-1111	11/17/11	1110	✓				6	1	8				✓	✓	✓	✓	

Cooler: ☐ Yes ☐ No Cooler Temp: _____ Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other: **standard**

QC Requirements (Specify):

1. Relinquished By Sign/Print: *[Signature]* Date: **11/17/2011** Time: **1610** Received By Sign/Print: *[Signature]* Date: **11/17/2011** Time: **1610**

2. Relinquished By Sign/Print: _____ Date: _____ Time: _____ Received By Sign/Print: *[Signature]* Date: **11/17/2011** Time: **1610**

3. Relinquished By Sign/Print: _____ Date: _____ Time: _____ Received By Sign/Print: _____ Date: _____ Time: _____

Comments: **Pls cc klongley@golder.com, jlambearts@golder.com**

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 580-29897-2

Login Number: 29897

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	adjusted pH of metals polys of several. Preserved filtered metals polys.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D
TEST AMERICA AND ANALYTICAL RESOURCES INC. LABORATORY ANALYTICAL
DATA FOR THE RESAMPLING OF WELL LMW-3

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-30543-1

Client Project/Site: Landsburg Mine

For:

Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, Washington 98052-3333

Attn: Douglas Morell



Authorized for release by:

1/6/2012 4:23:36 PM

Melissa Armstrong

Project Manager I

melissa.armstrong@testamericainc.com

Designee for

Terri Torres

Project Manager II

terri.torres@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Job ID: 580-30543-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Client Sample ID: LMW-3-1211

Date Collected: 12/30/11 10:30

Date Received: 12/30/11 13:35

Lab Sample ID: 580-30543-1

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		1.4		ug/L		01/03/12 08:52	01/06/12 14:32	0.1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	89		62 - 125				01/03/12 08:52	01/04/12 16:02	1
2-Fluorobiphenyl	87		66 - 140				01/03/12 08:52	01/04/12 16:02	1
Terphenyl-d14	80		20 - 150				01/03/12 08:52	01/04/12 16:02	1

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-103004/1-A

Matrix: Water

Analysis Batch: 103038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103004

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Nitrobenzene-d5	92		62 - 125	01/03/12 08:52	01/04/12 14:54	1			
2-Fluorobiphenyl	83		66 - 140	01/03/12 08:52	01/04/12 14:54	1			
Terphenyl-d14	81		20 - 150	01/03/12 08:52	01/04/12 14:54	1			

Lab Sample ID: MB 580-103004/1-A

Matrix: Water

Analysis Batch: 103225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103004

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		1.5		ug/L		01/03/12 08:52	01/06/12 13:15	0.1

Lab Sample ID: LCS 580-103004/2-A

Matrix: Water

Analysis Batch: 103038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103004

			Spike	LCS	LCS				
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec.
Bis(2-ethylhexyl) phthalate			10.1	ND		ug/L		106	55 - 160

	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	86		62 - 125						
2-Fluorobiphenyl	82		66 - 140						
Terphenyl-d14	79		20 - 150						

Lab Sample ID: LCSD 580-103004/3-A

Matrix: Water

Analysis Batch: 103038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103004

			Spike	LCSD	LCSD						
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Bis(2-ethylhexyl) phthalate			10.1	ND		ug/L		99	55 - 160	7	20

	LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits						
Nitrobenzene-d5	83		62 - 125						
2-Fluorobiphenyl	78		66 - 140						
Terphenyl-d14	76		20 - 150						

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Client Sample ID: LMW-3-1211

Date Collected: 12/30/11 10:30

Date Received: 12/30/11 13:35

Lab Sample ID: 580-30543-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			103004	01/03/12 08:52	RD	TAL SEA
Total/NA	Analysis	8270C		1	103038	01/04/12 16:02	CM	TAL SEA
Total/NA	Analysis	8270C		0.1	103225	01/06/12 14:32	CM	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	Alaska	TA-Port Heiden Mobile Lab	10	UST-093
TestAmerica Seattle	California	NELAC	9	1115CA
TestAmerica Seattle	Florida	NELAC	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP		L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025		L2236
TestAmerica Seattle	Louisiana	NELAC	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	N/A
TestAmerica Seattle	Oregon	NELAC	10	WA100007
TestAmerica Seattle	USDA	USDA		P330-11-00222
TestAmerica Seattle	Washington	State Program	10	C553

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: Golder Associates Inc.
Project/Site: Landsburg Mine

TestAmerica Job ID: 580-30543-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-30543-1	LMW-3-1211	Water	12/30/11 10:30	12/30/11 13:35

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Short Hold

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 580-30543-1

Login Number: 30543

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

January 4, 2012

Douglas Morell
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052

Re: Project: Landsburg Mine
ARI Job No: UC99

Dear Douglas:

Please find enclosed the chain of custody (COC), sample receipt documentation, and final results for the project referenced above. Analytical Resources, Inc. (ARI) accepted one water sample on December 30, 2011. There were no discrepancies between the COC and the sample containers' labels.

The sample was analyzed for SVOCs, as referenced on the chain of custody. Quality control analyses are included for your review.

No analytical complications were noted for this analysis.

A copy of these reports and all associated raw data will remain electronically on file at ARI. Please feel free to contact me if you have any questions or require any additional information.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com

Enclosures

cc: file UC99

Page: 1 of 1	
Date: 12/30/2011	Ice Present? ☒
No. of Coolers: 1	Cooler Temps: 3.6°

ARI Assigned Number:	1009	Turn-around Requested:	5 days
ARI Client Company:	Golder Associates		
Client Contact:	Phone: 425-883-5777		
Doreen's Moore 11			

Page: 1 of 1	
Date: 12/30/2011	Ice Present? ☒
No. of Coolers: 1	Cooler Temps: 3.6°

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

[illegible]

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



Cooler Receipt Form

ARI Client: GOLDER

COC No(s) _____ (NA)

Assigned ARI Job No. UC99

Project Name: Landsburg Mine
LANDSBURG MINE JM 12/30/11

Delivered by Fed-Ex UPS Courier (Hand Delivered) Other: _____

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES ☒ NO ☐

Were custody papers included with the cooler? YES ☒ NO ☐

Were custody papers properly filled out (ink, signed, etc) YES ☒ NO ☐

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.1°

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID# 90877952

Cooler Accepted by: BG Grogan Date 12/30/11 Time 1250

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES ☐ NO ☒

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA YES ☒ NO ☐

Were all bottles sealed in individual plastic bags? YES ☒ NO ☐

Did all bottles arrive in good condition (unbroken)? YES ☒ NO ☐

Were all bottle labels complete and legible? YES ☒ NO ☐

Did the number of containers listed on COC match with the number of containers received? YES ☒ NO ☐

Did all bottle labels and tags agree with custody papers? YES ☒ NO ☐

Were all bottles used correct for the requested analyses? YES ☒ NO ☐

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) NA YES ☐ NO ☒

Were all VOC vials free of air bubbles? NA YES ☐ NO ☒

Was sufficient amount of sample sent in each bottle? YES ☒ NO ☐

Date VOC Trip Blank was made at ARI: NA

Was Sample Split by ARI: NA YES ☐ Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 12/30/11 Time: 1301

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By _____ Date _____

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm	Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

Sample ID Cross Reference Report



ARI Job No: UC99
Client: Golder Associates
Project Event: 923-1000-002.R273
Project Name: Landsburg Mine

Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1. LMW-3-1211	UC99A	11-29623	Water	12/30/11 10:30	12/30/11 12:50

Printed 12/30/11

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1



Sample ID: LMW-3-1211
SAMPLE

Lab Sample ID: UC99A
LIMS ID: 11-29623
Matrix: Water
Data Release Authorized: *AB*
Reported: 01/04/12

QC Report No: UC99-Golder Associates
Project: Landsburg Mine
923-1000-002.R273
Date Sampled: 12/30/11
Date Received: 12/30/11

Date Extracted: 01/03/12
Date Analyzed: 01/04/12 15:44
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	70.0%
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MB-010312
METHOD BLANK

Lab Sample ID: MB-010312

QC Report No: UC99-Golder Associates

LIMS ID: 11-29623

Project: Landsburg Mine

Matrix: Water

923-1000-002.R273

Data Release Authorized: *AA*

Date Sampled: NA

Reported: 01/04/12

Date Received: NA

Date Extracted: 01/03/12

Sample Amount: 500 mL

Date Analyzed: 01/04/12 14:06

Final Extract Volume: 0.50 mL

Instrument/Analyst: NT6/JZ

Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	69.2%
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SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UC99-Golder Associates
Project: Landsburg Mine
923-1000-002.R273

<u>Client ID</u>	<u>TPH TOT OUT</u>	
MB-010312	69.2%	0
LCS-010312	70.0%	0
LCSD-010312	74.8%	0
LMW-3-1211	70.0%	0

	<u>LCS/MB LIMITS</u>	<u>QC LIMITS</u>
(TPH) = d14-p-Terphenyl	(53-119)	(26-114)

Prep Method: SW3520C
Log Number Range: 11-29623 to 11-29623

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1Sample ID: LCS-010312
LCS/LCSDLab Sample ID: LCS-010312
LIMS ID: 11-29623
Matrix: Water
Data Release Authorized: 
Reported: 01/04/12QC Report No: UC99-Golder Associates
Project: Landsburg Mine
923-1000-002.R273
Date Sampled: 12/30/11
Date Received: 12/30/11

Date Extracted LCS/LCSD: 01/03/12

Sample Amount LCS: 500 mL

LCSD: 500 mL

Date Analyzed LCS: 01/04/12 14:39

Final Extract Volume LCS: 0.50 mL

LCSD: 01/04/12 15:11

LCSD: 0.50 mL

Instrument/Analyst LCS: NT6/JZ

Dilution Factor LCS: 1.00

LCSD: NT6/JZ

LCSD: 1.00

GPC Cleanup: NO

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
bis(2-Ethylhexyl)phthalate	24.5	25.0	98.0%	23.7	25.0	94.8%	3.3%

Semivolatile Surrogate Recovery

	LCS	LCSD
d14-p-Terphenyl	70.0%	74.8%

Results reported in µg/L

RPD calculated using sample concentrations per SW846.