Golder Associates Inc.

18300 NE Union Hill Road, Suite 200
Redmond, WA USA 98052-3333
Telephone (425) 883-0777
Fax (425) 882-5498
www.golder.com

Golder Associates

February 18, 2008

Our ref: 923-1000-002.R273

Palmer Coking Coal Company
31407 Highway 169
P.O. Box 10
Black Diamond, Washington 98010

Attention: Mr. Bill Kombol

RE: LANDSBURG MINE SITE INTERIM GROUNDWATER MONITORING RESULTS – NOVEMBER, 2007

Dear Mr. Kombol:

Golder Associates Inc. (Golder) completed an interim groundwater monitoring event at the Landsburg Mine Site during November, 2007. 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. 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. Samples were also collected of the groundwater from Well LMW-9 and the new 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; metals samples were not field filtered,
- Analyses of groundwater for volatile organic compounds (EPA Method 8260B), priority pollutant metals (EPA Method 6000/7000 Series), and a petroleum hydrocarbon identification scan

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.

Following sample collection, all bottles were sealed, labeled and placed in a cooler maintained at approximately 4° C until delivery to the laboratory. All groundwater samples from monitoring wells were transported under chain-of-custody procedures to Test America Corporation for analyses, located in Bothell, Washington. 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. Although no detections of VOCs occurred in the November groundwater samples, laboratory analyses on groundwater samples from wells LMW-6, LMW-7, LMW-8, LMW-9, and LMW-10 exceeded the VOC Method 8260B holding times before samples were analyzed. November groundwater samples from wells LMW-2, LMW-5, LMW-6, LMW-8, and LMW-11 had miscellaneous detections of various petroleum hydrocarbons, but were suspect upon laboratory analytical validation and review of the petroleum hydrocarbon detections. Test America agreed with our assessment and groundwater samples having Method 8260 B holding time exceedances and having detections of petroleum hydrocarbons were re-sampled in January 2008 and re-analyzed.

The analytical results indicate no significant changes in groundwater conditions from those observed during the remedial investigation (RI) and on-going interim groundwater monitoring. The analytical results did not detect any volatile organic compound (VOC) or semi-volatile organic compounds in any of the groundwater samples. The method reporting limits (MRLs) and method detection limits (MDLs) for all compounds were at or below acceptable concentrations under the Model Toxics Control Act (MTCA). Due to a laboratory delay that resulted in several VOC samples being analyzed out of mandated hold time for Method 8260B, the associated wells were re-sampled and re-analyzed for VOCs. The re-analysis indicated similar results, and no VOCs were detected in any of the samples. The primary parameters detected in groundwater samples were metals that are naturally occurring, which are summarized in Table 2.

Petroleum hydrocarbon identification (HCID) analyses indicated detection of various petroleum hydrocarbons in several wells that were considered anomalous when compared against analytical results from previous sampling rounds. Subsequent re-sampling and re-analysis of these wells indicated no HCID detections. The results of these confirmation analyses determined that the previous results were, in fact, anomalous, and that no petroleum hydrocarbons were present in any of the groundwater samples. The anomalous HCID detections have been attributed to laboratory error with the initial November groundwater samples.

Several groundwater samples from several 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 The concentrations of iron and manganese detected during the December, 2006 sampling event are similar to concentrations detected during the RI (Golder, 1996)[1] and the Interim Groundwater Sampling events previously conducted at the site. Iron and manganese are naturally occurring metals that are associated with groundwater from coal mines. Fuste and Mayer (1987) report that consistently higher concentrations

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

of iron and manganese are present in streams receiving coal mine drainage water. Organic materials (i.e., coal) are identified by Hem (1985) as a common source of iron in groundwater and Fuste and Mayer (1987) suggest a dependence on oxidation potential (Eh) and dissolved oxygen for elevated dissolved iron and manganese levels in mine water.

The groundwater sample from the deep well (LMW-11) contained total (unfiltered) arsenic at a concentration of 8.97 µg/L, which is below the Washington State primary drinking water MCL of 10 ug/L, but higher than the MTCA groundwater cleanup level of 5 µg/L. Arsenic is also a naturally occurring metal commonly detectable in most groundwater in the State of Washington. The MTCA groundwater cleanup level is based on groundwater background levels in the State. Because of the geochemical conditions (low REDOX and neutral pH) at the bottom of the Rogers Coal Mine (700 feet deep), arsenic is slightly over the MTCA groundwater cleanup level, which is based on typical shallow groundwater concentrations in the State of Washington. The detected levels of arsenic in LMW-11 do not occur from disposed waste in the north trenches because no other potential and more-mobile waste constituent is detected at LMW-11.

Several volatile organic compounds associated with drilling activity had previously been detected from newly installed monitoring wells during previous groundwater monitoring events, but were not detected in this most recent sampling period, or in the June 2007 or December 2006 sampling periods. Groundwater monitoring results of LMW-10, after its installation, detected trace concentrations (<1 ug/L) of benzene and toluene (April/May, 2004 data; August, 2004 data; and May 2005 data). Several groundwater samples, obtained from LMW-11 after installation, also contained benzene, toluene, and xylenes at trace concentrations and below drinking water and MTCA levels. The concentrations of the observed compounds showed a definitive decreasing trend in groundwater samples from wells LMW-10 and LMW-11 with time and were not detectable in the latest four sampling periods obtained in February 2006, December 2006, June 2007, and November 2007. The conclusion is that the drilling locally affected groundwater quality in deeper wells at the site because the compressor air of the air-rotary drill rig used to blow cuttings from the borehole probably had some entrained volatile organics that dissolved within the borehole groundwater. This phenomenon has been observed elsewhere in deep bedrock wells after installation. Since the concentrations of these volatile organics had steadily declined after well installation and became undetectable for the last four sampling periods, the source could not be from the waste materials disposed at the Landsburg Mine site.

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

Sincerely,

GOLDER ASSOCIATES INC.

Ian Young,
Project Hydrogeologist

Douglas J. Morell, Ph.D.; L.Hy.
Principal

cc: Landsburg PLP Group

DJM/IY/sb

TABLES

TABLE 1

Groundwater Elevation Date Collected November 12, 2007 Landsburg Mine Site

	UNITS	LMW-1	LMW-1a	LMW-2	LMW-3	LMW-4*	LMW-5	LMW-6	LMW-7*	LMW-8	LMW-9	LMW-10	LMW-11	P-2	Water Drainage	Frazier Seam Tunnel
Water Depths																
Time of data collection	ft bgs	11:13 AM	1:05 PM	1:40 PM	12:40 PM	1:45 PM	12:25 PM	1:20 PM	1:55 PM	12:35 PM	12:10 PM	1:35 PM	12:20 PM	12:30 PM	NA	NA
Measured to Top of PVC	ft bgs	141.10	148.32	8.03	12.68	10.17	14.24	41.00	229.47	3.05	100.15	0.11	158.04	7.28	NA	NA
Measured to Top of Monument	ft bgs	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NA	NA
Surveyed Elevation																
Top of PVC	ft asl	765.16	759.51	617.73	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	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	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	**624.06**	**611.19**	**609.70**	**644.07**	**609.09**	**644.03**	**591.33**	**542.04**	**643.92**	**643.84**	**618.76**	**643.83**	**644.09**	NA	NA
Using Monument elevation	ft asl	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
* = Data corrected to accomodate well inclination of 20° from vertical
NA = Not applicable.
NC = Data not collected.

TABLE 2

November 2007 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2 11/14/2007	LMW-2 Resample 1/16/2008	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-5 Resample 1/18/2008	LMW-5 Resample Duplicate 1/18/2008	LMW-6 11/15/2007	LMW-6 Resample 1/16/2008	LMW-7 11/15/2007	LMW-7 Resample 1/16/2008	LMW-8 11/13/2007	LMW-8 Duplicate 11/13/2007	LMW-9 11/15/2007	LMW-9 Resample 1/18/2008	LMW-10 11/15/2007	LMW-10 Resample 1/17/2008	LMW-11 11/16/2007	LMW-11 Resample 1/17/2008
Field Parameter																				
pH	stnd	6.94	6.93	7.88	6.95	6.98	6.67	NA	6.93	6.86	7.15	7.02	6.99	NA	7.01	6.93	8.85	8.70	7.32	7.34
Conductivity	uS/cm	126.4	771	93.7	115.5	100.5	607	NA	80.5	203.0	126.6	556	90.7	NA	110.3	573	172.5	358	100.7	501
Dissolved Oxygen	mg/L	0.22	0.08	0.35	0.27	0.21	0.12	NA	0.50	0.20	0.39	0.12	0.41	NA	0.25	0.64	0.18	0.11	0.49	0.31
Temperature	°C	11.3	10.8	12.5	11.3	11.2	11.0	NA	11.5	10.0	13.4	12.3	11.6	NA	12.5	12.6	10.3	9.7	10.5	10.1
E_h	Rel mV	642.5	277.1	804.5	517.8	589.5	364.7	NA	520.5	372.1	604.4	359.8	670.4	NA	299.7	382.0	886.9	294.3	-183.2	354.2
Turbidity	NTU	0.50	0.35	0.58	0.31	0.97	0.53	NA	0.92	0.42	0.55	0.37	0.96	NA	0.58	1.08	0.46	0.29	0.86	0.21
Metals (Total)																				
Aluminum	mg/L	0.20 U	--	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--	0.20 U	--	0.20 U	0.20 U	0.20 U	--	0.20 U	--	0.20 U	--
Antimony	mg/L	0.003 U	--	0.003 U	0.003 U	0.003 U	--	--	0.003 U	--	0.003 U	--	0.003 U	0.003 U	0.003 U	--	0.003 U	--	0.003 U	--
Arsenic	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	**0.00164**	--	**0.00108**	0.001 U	0.001 U	--	0.001 U	--	**0.00897**	--
Arsenic (Filtered Sample)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	mg/L	**0.360**	--	**0.0788**	**0.368**	**0.282**	--	--	**0.117**	--	**0.539**	--	**0.0585**	**0.0576**	**0.326**	--	**0.0360**	--	**0.256**	--
Beryllium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Cadmium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Calcium	mg/L	**127**	--	**37.4**	**125**	**91.0**	--	--	**28.7**	--	**56.7**	--	**90.4**	**92.2**	**85.3**	--	**6.61**	--	**59.5**	--
Chromium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Cobalt	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Copper	mg/L	**0.00119**	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Iron	mg/L	0.15 U	--	0.15 U	**0.252**	**0.251**	--	--	**1.55**	--	**0.907**	--	**10.4**	**10.8**	**0.890**	--	0.15 U	--	**2.22**	--
Lead	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	**0.00239**	--
Magnesium	mg/L	**80.5**	--	**15.9**	**77.6**	**52.9**	--	--	**15.0**	--	**26.9**	--	**53.2**	**54.3**	**49.2**	--	**2.80**	--	**30.5**	--
Manganese	mg/L	**0.252**	--	**0.0629**	**0.187**	**0.239**	--	--	**0.0334**	--	**0.155**	--	**0.449**	**0.444**	**0.184**	--	0.01 U	--	**0.158**	--
Mercury	mg/L	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U	--	--	0.0002 U	--	0.0002 U	--	**0.000285**	0.0002 U	0.0002 U	--	0.0002 U	--	0.0002 U	--
Nickel	mg/L	**0.00220**	--	**0.00157**	**0.00201**	**0.00161**	--	--	0.001 U	--	**0.00132**	--	**0.00157**	**0.00319**	**0.00161**	--	0.001 U	--	**0.00186**	--
Potassium	mg/L	**3.92**	--	2.0 U	**4.13**	3.0 U	--	--	3.0 U	--	**3.30**	--	2.69	3.0 U	3.0 U	--	2.0 U	--	2.0 U	--
Selenium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Silver	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Sodium	mg/L	**24.5**	--	**10.0**	**32.6**	**18.8**	--	--	**8.44**	--	**52.5**	--	**17.5**	**17.9**	**18.8**	--	**77.7**	--	**34.6**	--
Thallium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Vanadium	mg/L	0.001 U	--	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U	0.001 U	--	0.001 U	--	0.001 U	--
Zinc	mg/L	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	--	0.01 U	--
Volatile Organic Compounds																				
Acetone	µg/L	10 U	--	10 U	10 U	10 U	--	--	--	10 U	--	10 U	10 U	10 U	--	10 U	--	10 U	10 U	--
Benzene	µg/L	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	--
Bromobenzene	µg/L	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	--
Bromochloromethane	µg/L	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	--
Bromodichloromethane	µg/L	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	--
Bromoform	µg/L	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	--
Bromomethane	µg/L	2 U	--	2 U	2 U	2 U	--	--	--	2 U	--	2 U	2 U	2 U	--	2 U	--	2 U	2 U	--
2-Butanone	µg/L	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	0.2 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	--

TABLE 2

November 2007 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2 11/14/2007	LMW-2 Resample 1/16/2008	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-5 Resample 1/18/2008	LMW-5 Resample Duplicate 1/18/2008	LMW-6 11/15/2007	LMW-6 Resample 1/16/2008	LMW-7 11/15/2007	LMW-7 Resample 1/16/2008	LMW-8 11/13/2007	LMW-8 Duplicate 11/13/2007	LMW-9 11/15/2007	LMW-9 Resample 1/18/2008	LMW-10 11/15/2007	LMW-10 Resample 1/17/2008	LMW-11 11/16/2007	LMW-11 Resample 1/17/2008
sec-Butylbenzene	µg/L	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	--
tert-Butylbenzene	µg/L	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	--
Carbon disulfide	µg/L	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	--
Carbon tetrachloride	µg/L	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	--
Chlorobenzene	µg/L	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	--
Chloroethane	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
Chloroform	µg/L	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	--
Chloromethane	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
2-Chlorotoluene	µg/L	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-Chlorotoluene	µg/L	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	--
Dibromochloromethane	µg/L	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-Dibromo-3-chloropropane	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
1,2-Dibromoethane	µg/L	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	--
Dibromomethane	µg/L	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-Dichlorobenzene	µg/L	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	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	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	--
Dichlorodifluoromethane	µg/L	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	--
1,1-Dichloroethane	µg/L	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-Dichloroethane	µg/L	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-Dichloroethene	µg/L	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	--
cis-1,2-Dichloroethene	µg/L	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-1,2-Dichloroethene	µg/L	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-Dichloropropane	µg/L	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-Dichloropropane	µg/L	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	--
2,2-Dichloropropane	µg/L	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	--
1,1-Dichloropropene	µg/L	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	--
cis-1,3-Dichloropropene	µg/L	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-1,3-Dichloropropene	µg/L	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	--
Ethylbenzene	µg/L	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	--
Hexachlorobutadiene	µg/L	2.5 U	--	2.5 U	2.5 U	2.5 U	--	--	--	2.5 U	--	2.5 U	2.5 U	2.5 U	--	2.5 U	--	2.5 U	2.5 U	--
Methyl tert-butyl ether	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
n-Hexanone	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
2-Hexanone	µg/L	2 U	--	2 U	2 U	2 U	--	--	--	2 U	--	2 U	2 U	2 U	--	2 U	--	2 U	2 U	--
Isopropylbenzene	µg/L	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	--
p-Isopropyltoluene	µg/L	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	--
4-Methyl-2-pentanone	µg/L	2 U	--	2 U	2 U	2 U	--	--	--	2 U	--	2 U	2 U	2 U	--	2 U	--	2 U	2 U	--
Methylene chloride	µg/L	2 U	--	2 U	2 U	2 U	--	--	--	2 U	--	2 U	2 U	2 U	--	2 U	--	2 U	2 U	--
Naphthalene	µg/L	2.5 U	--	2.5 U	2.5 U	2.5 U	--	--	--	2.5 U	--	2.5 U	2.5 U	2.5 U	--	2.5 U	--	2.5 U	2.5 U	--
n-Propylbenzene	µg/L	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	--
Styrene	µg/L	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	--

TABLE 2

November 2007 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2 11/14/2007	LMW-2 Resample 1/16/2008	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-5 Resample 1/18/2008	LMW-5 Resample Duplicate 1/18/2008	LMW-6 11/15/2007	LMW-6 Resample 1/16/2008	LMW-7 11/15/2007	LMW-7 Resample 1/16/2008	LMW-8 11/13/2007	LMW-8 Duplicate 11/13/2007	LMW-9 11/15/2007	LMW-9 Resample 1/18/2008	LMW-10 11/15/2007	LMW-10 Resample 1/17/2008	LMW-11 11/16/2007	LMW-11 Resample 1/17/2008
1,2,3-Trichlorobenzene	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
1,2,4-Trichlorobenzene	µg/L	1 U	--	1 U	1 U	1 U	--	--	--	1 U	--	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
1,1,1,2-Tetrachloroethane	µg/L	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	--
1,1,2,2-Tetrachloroethane	µg/L	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	--
Tetrachloroethene	µg/L	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	--
Toluene	µg/L	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-Trichloroethane	µg/L	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	--
1,1,2-Trichloroethane	µg/L	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	--
Trichloroethene	µg/L	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	--
Trichlorofluoromethane	µg/L	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	--
1,2,3-Trichloropropane	µg/L	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	--
1,2,4-Trimethylbenzene	µg/L	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-Trimethylbenzene	µg/L	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	0.2 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	0.25 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	--
m,p-Xylene	µg/L	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	--
Total Xylenes	µg/L	0.75 U	--	0.75 U	0.75 U	0.75 U	--	--	--	0.75 U	--	0.75 U	0.75 U	0.75 U	--	0.75 U	--	0.75 U	0.75 U	--
Hydrocarbon Identification																				
Diesel Range	mg/L	--	0.594 U	0.6 U	0.6 U	--	0.594 U	0.594 U	--	0.594 U	0.6 U	--	0.6 U	0.6 U	0.6 U		--	--	--	0.594 U
Gas Range	mg/L	--	0.236 U	0.24 U	0.24 U	--	0.236 U	0.236 U	--	0.236 U	0.238 U	--	0.24 U	0.24 U	0.238 U		--	--	--	0.236 U
Heavy Fuel Oil	mg/L	--	0.594 U	0.6 U	0.6 U	--	0.594 U	0.594 U	--	0.594 U	0.6 U	--	0.6 U	0.6 U	0.6 U		--	--	--	0.594 U
Insulating Oil	mg/L	--	0.594 U	0.6 U	0.6 U	--	0.594 U	0.594 U	--	0.594 U	0.6 U	--	0.6 U	0.6 U	0.6 U		--	--	--	0.594 U
Kerosene Range	mg/L	--	0.594 U	0.6 U	0.6 U	--	0.594 U	0.594 U	--	0.594 U	0.6 U	--	0.6 U	0.6 U	0.6 U		--	--	--	0.594 U
Lube Oil Range	mg/L	--	0.594 U	0.6 U	0.6 U	--	0.594 U	0.594 U	--	0.594 U	0.6 U	--	0.6 U	0.6 U	0.6 U		--	--	--	0.594 U

FIGURE

E 1713000
N 140000

E 1716000
N 140000

E 1711000
N 137000

PIPELINE
CEDAR
RIVER
ROAD
SE SUMMIT LANDSBURG RD
KENT-KANGLEY RD.
Power Lines
Fenced Area

LMW-1
LMW-2
LMW-3
LMW-4
LMW-5
LMW-6
LMW-7
LMW-8
LMW-9
LMW-10
LMW-11
P-2
Portal 2
Portal 3

N

0 400 800
FEET

Legend

- P-2 — Landsburg Piezometer
- LMW-5 — Landsburg Monitoring Well
- Portal 3 — Portal Seepage Locations
- Fence
- Trail
- Unpaved Road
- Building

NOTES:

1) Interim groundwater monitoring locations are underlined.

FIGURE 1
GROUNDWATER MONITORING LOCATIONS
PALMER/LANDSBURG MINE/WA

K:\CAD\Projects\1992\9231000\x002\R273\9231000002R273F01.dwg 01/26/2007, 13:50 Layout: Layout1

Golder Associates

APPENDIX A

LABORATORY ANALTYICAL REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

December 17, 2007

Douglas Morell
Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

RE: Landsburg Mine

Enclosed are the results of analyses for samples received by the laboratory on 11/15/07 16:10. The following list is a summary of the Work Orders contained in this report, generated on 12/17/07 14:42.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BQK0213	Landsburg Mine	923-1000-002-R273

TestAmerica Seattle

Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-6-1107	BQK0213-01	Water	11/15/07 10:10	11/15/07 16:10
LMW-7-1107	BQK0213-02	Water	11/15/07 13:10	11/15/07 16:10
LMW-9-1107	BQK0213-03	Water	11/15/07 14:40	11/15/07 16:10
LMW-10-1107	BQK0213-04	Water	11/15/07 11:20	11/15/07 16:10
Trip blank	BQK0213-05	Water	11/15/07 16:10	11/15/07 16:10

TestAmerica Seattle

Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-01 (LMW-6-1107)		**Water**			**Sampled: 11/15/07 10:10**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.238	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 22:57	
Kerosene Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	**DET**	-----	0.600	"	"	"	"	"	
Surrogate(s): 2-FBP			*86.3%*		*50 - 150 %*	"			"	
Octacosane			*99.8%*		*50 - 150 %*	"			"	
BQK0213-02 (LMW-7-1107)		**Water**			**Sampled: 11/15/07 13:10**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.238	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 23:22	
Kerosene Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Surrogate(s): 2-FBP			*81.6%*		*50 - 150 %*	"			"	
Octacosane			*103%*		*50 - 150 %*	"			"	
BQK0213-03 (LMW-9-1107)		**Water**			**Sampled: 11/15/07 14:40**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.238	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 23:48	
Kerosene Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Surrogate(s): 2-FBP			*82.3%*		*50 - 150 %*	"			"	
Octacosane			*98.2%*		*50 - 150 %*	"			"	
BQK0213-04 (LMW-10-1107)		**Water**			**Sampled: 11/15/07 11:20**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.238	mg/l	1x	7K15026	11/19/07 10:55	11/24/07 00:14	
Kerosene Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Surrogate(s): 2-FBP			*89.8%*		*50 - 150 %*	"			"	
Octacosane			*101%*		*50 - 150 %*	"			"	

TestAmerica Seattle

Blake T. Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-01 (LMW-6-1107)		**Water**			**Sampled: 11/15/07 10:10**					
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:33	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	R4
Barium	"	**0.117**	-----	0 0100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	R4
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	R4
Calcium	EPA 6010B	**28.7**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:33	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	R4
Copper	"	ND	-----	0 00100	"	"	"	"	"	R4
Iron	EPA 6010B	**1.55**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:33	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Magnesium	EPA 6010B	**15.0**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:33	
Manganese	EPA 6020	**0.0334**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:48	
Nickel	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Potassium	EPA 6010B	ND	-----	3 00	"	"	7K26030	11/26/07 11 56	11/28/07 15:33	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Silver	"	ND	-----	0 00100	"	"	"	"	"	R4
Sodium	EPA 6010B	**8.44**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:33	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:46	R4
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	R4
Zinc	"	ND	-----	0 0100	"	"	"	"	"	R4
BQK0213-02 (LMW-7-1107)		**Water**			**Sampled: 11/15/07 13:10**					
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:47	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Arsenic	"	**0.00164**	-----	0 00100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**56.7**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:47	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	**0.907**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:47	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Magnesium	EPA 6010B	**26.9**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:47	
Manganese	EPA 6020	**0.155**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:56	
Nickel	EPA 6020	**0.00132**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Potassium	EPA 6010B	**3.30**	-----	3 00	"	"	7K26030	11/26/07 11:56	11/28/07 15:47	

TestAmerica Seattle

Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-02 (LMW-7-1107)		**Water**					**Sampled: 11/15/07 13:10**			
Selenium	EPA 6020	ND	-----	0 00100	mg/l	1x	7K19045	11/19/07 13:35	11/20/07 12:52	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**52.5**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:47	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:52	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	
BQK0213-02RE1 (LMW-7-1107)		**Water**					**Sampled: 11/15/07 13:10**			
Barium	EPA 6020	**0.539**	-----	0 0200	mg/l	2x	7K19045	11/19/07 13:35	11/20/07 13:40	
BQK0213-03 (LMW-9-1107)		**Water**					**Sampled: 11/15/07 14:40**			
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:50	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	
Barium	"	**0.326**	-----	0 0100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**85.3**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:50	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	**0.890**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:50	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Magnesium	EPA 6010B	**49.2**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:50	
Manganese	EPA 6020	**0.184**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:59	
Nickel	EPA 6020	**0.00161**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Potassium	EPA 6010B	ND	-----	3 00	"	"	7K26030	11/26/07 11 56	11/28/07 15:50	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**18.8**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:50	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:58	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	

TestAmerica Seattle

Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-01 (LMW-6-1107)		**Water**			**Sampled: 11/15/07 10:10**					H
Isopropylbenzene	EPA 8260B	ND	-----	0.500	ug/l	1x	7L07005	12/07/07 09:45	12/07/07 16:13	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0.200	"	"	"	"	"	
o-Xylene	"	ND	-----	0.250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0.750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*97.7%*			*76 - 138 %*	"			"	
Toluene-d8		*100%*			*80 - 120 %*	"			"	
4-BFB		*101%*			*80 - 120 %*	"			"	
BQK0213-02 (LMW-7-1107)		**Water**			**Sampled: 11/15/07 13:10**					H
Acetone	EPA 8260B	ND	-----	10.0	ug/l	1x	7L07005	12/07/07 08:00	12/07/07 16:40	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0.500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0.250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0.200	"	"	"	"	"	
Bromoform	"	ND	-----	0.250	"	"	"	"	"	
Bromomethane	"	ND	-----	2.00	"	"	"	"	"	
2-Butanone	"	ND	-----	2.00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0.500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0.200	"	"	"	"	"	

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Blake T. Meinert, Project Manager

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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-02 (LMW-7-1107)		**Water**			**Sampled: 11/15/07 13:10**					H
Chlorobenzene	EPA 8260B	ND	-----	0.200	ug/l	1x	7L07005	12/07/07 08:00	12/07/07 16:40	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	1.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0.200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2.50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
n-Hexane	"	ND	-----	1.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0.500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	

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Blake T. Meinert, Project Manager

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18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-03 (LMW-9-1107)		**Water**			**Sampled: 11/15/07 14:40**					**H**
Dichlorodifluoromethane	EPA 8260B	ND	-----	0.500	ug/l	1x	7L07005	12/07/07 09:45	12/07/07 17:07	
1,1-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2.50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
n-Hexane	"	ND	-----	1.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0.500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0.200	"	"	"	"	"	
o-Xylene	"	ND	-----	0.250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0.750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*100%*		*76 - 138 %*	"			"	

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Blake T. Meinert, Project Manager

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18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-03 (LMW-9-1107)		**Water**			**Sampled: 11/15/07 14:40**					H
Toluene-d8		*103%*			*80 - 120 %*	*1x*			*12/07/07 17:07*	
4-BFB		*98.2%*			*80 - 120 %*	"			"	
BQK0213-04 (LMW-10-1107)		**Water**			**Sampled: 11/15/07 11:20**					H
Acetone	EPA 8260B	ND	-----	10.0	ug/l	1x	7L07005	12/07/07 09:45	12/07/07 17:35	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0.500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0.250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0.200	"	"	"	"	"	
Bromoform	"	ND	-----	0.250	"	"	"	"	"	
Bromomethane	"	ND	-----	2.00	"	"	"	"	"	
2-Butanone	"	ND	-----	2.00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0.500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	1.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0.200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	

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Blake T. Meinert, Project Manager

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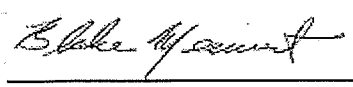
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-04 (LMW-10-1107)		**Water**			**Sampled: 11/15/07 11:20**					H
Ethylbenzene	EPA 8260B	ND	-----	0.200	ug/l	1x	7L07005	12/07/07 09:45	12/07/07 17:35	
Hexachlorobutadiene	"	ND	-----	2.50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
n-Hexane	"	ND	-----	1.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0.500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0.200	"	"	"	"	"	
o-Xylene	"	ND	-----	0.250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0.750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*99.5%*		*76 - 138 %*	"			"	
Toluene-d8			*101%*		*80 - 120 %*	"			"	
4-BFB			*98.1%*		*80 - 120 %*	"			"	

TestAmerica Seattle



Blake T. Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-05 (Trip blank)		**Water**			**Sampled: 11/15/07 16:10**					
Acetone	EPA 8260B	ND	-----	10.0	ug/l	1x	7K27048	11/27/07 12:20	11/28/07 00:22	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0.500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0.250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0.200	"	"	"	"	"	
Bromoform	"	ND	-----	0.250	"	"	"	"	"	
Bromomethane	"	ND	-----	2.00	"	"	"	"	"	
2-Butanone	"	ND	-----	2.00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0.500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	1.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0.500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0.200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0.200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0.200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0.200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2.50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
n-Hexane	"	ND	-----	1.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2.00	"	"	"	"	"	

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Blake T. Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0213-05 (Trip blank)		**Water**				**Sampled: 11/15/07 16:10**				
Isopropylbenzene	EPA 8260B	ND	-----	0.500	ug/l	1x	7K27048	11/27/07 12:20	11/28/07 00:22	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0.200	"	"	"	"	"	
o-Xylene	"	ND	-----	0.250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0.750	"	"	"	"	"	
Surrogate(s): *1,2-DCA-d4*			*93.6%*		*76 - 138 %*	"			"	
Toluene-d8			*98.2%*		*80 - 120 %*	"			"	
4-BFB			*100%*		*80 - 120 %*	"			"	

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Blake T. Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K15026 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K15026-BLK1)								Extracted: 11/19/07 10:55						
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	11/23/07 17:22	
Kerosene Range Hydrocarbons	"	ND	---	0.630	"	"	--	--	--	--	--	--	"	
Diesel Range Hydrocarbons	"	ND	---	0.630	"	"	--	--	--	--	--	--	"	
Insulating Oil Range Hydrocarbons	"	ND	---	0.630	"	"	--	--	--	--	--	--	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	---	0.630	"	"	--	--	--	--	--	--	"	
Lube Oil Range Hydrocarbons	"	ND	---	0.630	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 79.9%*			*Limits: 50-150%*	"							*11/23/07 17:22*	
Octacosane		*98.7%*			*50-150%*	"							"	
LCS (7K15026-BS1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	79.7%	(58-125)	--	--	11/23/07 17:48	
Surrogate(s): 2-FBP		*Recovery: 89.9%*			*Limits: 50-150%*	"							*11/23/07 17:48*	
Octacosane		*99.2%*			*50-150%*	"							"	
LCS Dup (7K15026-BSD1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	83.1%	(58-125)	4.14%	(40)	11/23/07 18:14	
Surrogate(s): 2-FBP		*Recovery: 99.6%*			*Limits: 50-150%*	"							*11/23/07 18:14*	
Octacosane		*103%*			*50-150%*	"							"	

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Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19045-BLK1)									Extracted: 11/19/07 13:35					
Cadmium	EPA 6020	ND	---	0 00100	mg/l	1x	--	--	--	--	--	--	11/20/07 11:34	
Copper	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Antimony	"	ND	---	0 00300	"	"	--	--	--	--	--	--	"	
Barium	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Beryllium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
LCS (7K19045-BS1)									Extracted: 11/19/07 13:35					
Barium	EPA 6020	0 0873	---	0 0100	mg/l	1x	--	0 0800	109%	(80-120)	--	--	11/20/07 11:40	
Chromium	"	0 0853	---	0 00100	"	"	--	"	107%	"	--	--	"	
Copper	"	0 0829	---	0 00100	"	"	--	"	104%	"	--	--	"	
Antimony	"	0 0645	---	0 00300	"	"	--	0 0600	107%	"	--	--	"	
Vanadium	"	0 0868	---	0 00100	"	"	--	0 0800	108%	"	--	--	"	
Zinc	"	0 0741	---	0 0100	"	"	--	"	92 7%	"	--	--	"	
Silver	"	0 0802	---	0 00100	"	"	--	"	100%	"	--	--	"	
Arsenic	"	0 0759	---	0 00100	"	"	--	"	94 9%	"	--	--	"	
Cadmium	"	0 0763	---	0 00100	"	"	--	"	95 4%	"	--	--	"	
Cobalt	"	0 0848	---	0 00100	"	"	--	"	106%	"	--	--	"	
Manganese	"	0 0855	---	0 0100	"	"	--	"	107%	"	--	--	"	
Nickel	"	0 0833	---	0 00100	"	"	--	"	104%	"	--	--	"	
Selenium	"	0 0681	---	0 00100	"	"	--	"	85 1%	"	--	--	"	
Thallium	"	0 0829	---	0 00100	"	"	--	"	104%	"	--	--	"	
Lead	"	0 0854	---	0 00100	"	"	--	"	107%	"	--	--	"	
Beryllium	"	0 0758	---	0 00100	"	"	--	"	94 8%	"	--	--	"	

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Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7K19045-DUP1)					QC Source: BQK0213-01				Extracted: 11/19/07 13:35					
Thallium	EPA 6020	ND	---	0 00100	mg/l	1x	ND	--	--	--	NR	(20)	11/20/07 11 58	
Silver	"	ND	---	0 00100	"	"	ND	--	--	--	NR	(50)	"	
Arsenic	"	ND	---	0 00100	"	"	ND	--	--	--		(20)	"	
Barium	"	0 114	---	0 0100	"	"	0 117	--	--	--	2 42%	"	"	
Beryllium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Cadmium	"	ND	---	0 00100	"	"	ND	--	--	--		"	"	
Cobalt	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0 0100	"	"	ND	--	--	--	NR	"	"	
Selenium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0 00100	"	"	ND	--	--	--	38 6%	"	"	R4
Copper	"	ND	---	0 00100	"	"	ND	--	--	--		"	"	
Manganese	"	0 0331	---	0 0100	"	"	0 0334	--	--	--	0 812%	"	"	
Nickel	"	ND	---	0 00100	"	"	ND	--	--	--	9 09%	"	"	
Antimony	"	ND	---	0 00300	"	"	ND	--	--	--	103%	"	"	R4
Vanadium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Lead	"	ND	---	0 00100	"	"	ND	--	--	--	43 9%	"	"	R4
Matrix Spike (7K19045-MS1)					QC Source: BQK0213-01				Extracted: 11/19/07 13:35					
Selenium	EPA 6020	0 0684	---	0 00100	mg/l	1x	ND	0 0800	85 5%	(58-120)	--	--	11/20/07 11 52	
Vanadium	"	0 0869	---	0 00100	"	"	ND	"	109%	(83-120)	--	--	"	
Lead	"	0 0865	---	0 00100	"	"	0 000160	"	108%	(80-120)	--	--	"	
Zinc	"	0 0738	---	0 0100	"	"	ND	"	92 2%	(53-125)	--	--	"	
Cobalt	"	0 0831	---	0 00100	"	"	ND	"	104%	(71-131)	--	--	"	
Antimony	"	0 0653	---	0 00300	"	"	0 000440	0 0600	108%	(74-133)	--	--	"	
Cadmium	"	0 0784	---	0 00100	"	"	ND	0 0800	98 1%	(75-125)	--	--	"	
Beryllium	"	0 0775	---	0 00100	"	"	ND	"	96 8%	"	--	--	"	
Barium	"	0 204	---	0 0100	"	"	0 117	"	109%	"	--	--	"	
Thallium	"	0 0845	---	0 00100	"	"	ND	"	106%	(80-120)	--	--	"	
Arsenic	"	0 0769	---	0 00100	"	"	ND	"	96 1%	(75-125)	--	--	"	
Silver	"	0 0637	---	0 00100	"	"	ND	"	79 6%	(19-153)	--	--	"	
Nickel	"	0 0817	---	0 00100	"	"	0 000630	"	101%	(78-120)	--	--	"	
Manganese	"	0 118	---	0 0100	"	"	0 0334	"	106%	(65-145)	--	--	"	
Copper	"	0 0816	---	0 00100	"	"	ND	"	102%	(75-125)	--	--	"	
Chromium	"	0 0844	---	0 00100	"	"	0 000230	"	105%	(80-120)	--	--	"	

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Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (7K19045-PS1)					QC Source: BQK0213-01				Extracted: 11/19/07 13:35					
Copper	EPA 6020	0 0989	---		ug/ml	1x	0 000220	0 100	98 2%	(75-125)	--	--	11/20/07 11:46	
Manganese	"	0 135	---		"	"	0 0334	"	101%	"	--	--	"	
Silver	"	0 0960	---		"	"	-0 0000300	"	96 1%	"	--	--	"	
Thallium	"	0 101	---		"	"	-0 0000300	"	100%	"	--	--	"	
Cadmium	"	0 0910	---		"	"	0 0000700	"	90 9%	"	--	--	"	
Arsenic	"	0 0937	---		"	"	-0 0000500	0 0995	94 2%	"	--	--	"	
Barium	"	0 221	---		"	"	0 117	0 100	104%	"	--	--	"	
Antimony	"	0 0518	---		"	"	0 000440	0 0510	101%	"	--	--	"	
Nickel	"	0 0966	---		"	"	0 000630	0 0995	96 4%	"	--	--	"	
Vanadium	"	0 104	---		"	"	0 0000300	0 100	104%	"	--	--	"	
Chromium	"	0 102	---		"	"	0 000230	"	101%	"	--	--	"	
Selenium	"	0 0799	---		"	"	-0 0000800	"	80 0%	"	--	--	"	
Cobalt	"	0 0989	---		"	"	0 0000300	"	98 8%	"	--	--	"	
Zinc	"	0 0876	---		"	"	0 00147	"	85 7%	"	--	--	"	
Lead	"	0 101	---		"	"	0 000160	"	101%	"	--	--	"	
Beryllium	"	0 0917	---		"	"	-0 0000300	0 0995	92 2%	"	--	--	"	

QC Batch: 7K19060 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19060-BLK1)									Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	--	--	--	--	--	--	11/19/07 18:18	
Blank (7K19060-BLK2)									Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	--	--	--	--	--	--	11/19/07 18:26	P7
LCS (7K19060-BS1)									Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	0 00497	---	0 000200	mg/l	1x	--	0 00500	99 5%	(80-120)	--	--	11/19/07 18:28	
LCS Dup (7K19060-BSD1)									Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	0 00516	---	0 000200	mg/l	1x	--	0 00500	103%	(80-120)	3 62%	(20)	11/19/07 18:31	
Duplicate (7K19060-DUP1)					QC Source: BQK0197-01				Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	ND	--	--	--		(20)	11/19/07 18:36	

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Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K19060 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (7K19060-MS1)					QC Source: BQK0197-01				Extracted: 11/19/07 17:20					
Mercury	EPA 7470A	0 00547	---	0 000200	mg/l	1x	ND	0 00500	109%	(75-125)	--	--	11/19/07 18:33	

QC Batch: 7K26030 **Water Preparation Method: EPA 200 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K26030-BLK1)									Extracted: 11/26/07 11:56					
Aluminum	EPA 6010B	ND	---	0 200	mg/l	1x	--	--	--	--	--	--	11/28/07 15 02	
Calcium	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0 150	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3 00	"	"	--	--	--	--	--	--	"	
Sodium	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Magnesium	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
LCS (7K26030-BS1)									Extracted: 11/26/07 11:56					
Aluminum	EPA 6010B	5 64	---	0 250	mg/l	1x	--	5 00	113%	(80-120)	--	--	11/28/07 15 06	
Magnesium	"	5 92	---	0 500	"	"	--	"	118%	"	--	--	"	
Calcium	"	5 72	---	0 750	"	"	--	"	114%	"	--	--	"	
Potassium	"	11 3	---	3 00	"	"	--	10 0	113%	"	--	--	"	
Sodium	"	5 86	---	0 250	"	"	--	5 00	117%	"	--	--	"	
Iron	"	5 79	---	0 150	"	"	--	"	116%	"	--	--	11/29/07 11:38	
Duplicate (7K26030-DUP1)					QC Source: BQK0197-01				Extracted: 11/26/07 11:56					
Potassium	EPA 6010B	3 92	---	3 00	mg/l	1x	3 92	--	--	--	0 0765%	(30)	11/28/07 15:16	
Magnesium	"	80 8	---	0 500	"	"	80 5	--	--	--	0 298%	"	"	
Calcium	"	128	---	0 750	"	"	127	--	--	--	0 862%	(25)	"	
Sodium	"	24 6	---	0 250	"	"	24 5	--	--	--	0 447%	(30)	"	
Iron	"	ND	---	0 150	"	"	ND	--	--	--	NR	"	"	
Aluminum	"	ND	---	0 250	"	"	ND	--	--	--	NR	(25)	"	
Matrix Spike (7K26030-MS1)					QC Source: BQK0197-01				Extracted: 11/26/07 11:56					
Sodium	EPA 6010B	29 7	---	0 250	mg/l	1x	24 5	5 00	103%	(74-144)	--	--	11/28/07 15 09	
Iron	"	5 76	---	0 150	"	"	ND	"	115%	(78-130)	--	--	"	
Aluminum	"	5 52	---	0 250	"	"	ND	"	110%	(74-142)	--	--	"	
Calcium	"	128	---	0 750	"	"	127	"	20 0%	(70-137)	--	--	"	MHA
Potassium	"	15 0	---	3 00	"	"	3 92	10 0	111%	(63-155)	--	--	"	
Magnesium	"	84 1	---	0 500	"	"	80 5	5 00	71 8%	(76-129)	--	--	"	MHA

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K26030 **Water Preparation Method: EPA 200 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (7K26030-PS1)					QC Source: BQK0197-01				Extracted: 11/26/07 11:56					
Magnesium	EPA 6010B	82 6	---	0 500	mg/l	1x	80 5	5 00	42 4%	(75-125)	--	--	11/28/07 15:13	S3
Sodium	"	29 0	---	0 250	"	"	24 5	"	89 8%	"	--	--	"	
Aluminum	"	5 17	---	0 250	"	"	ND	"	103%	"	--	--	"	
Calcium	"	126	---	0 750	"	"	127	"	-28 0%	"	--	--	"	S3
Iron	"	5 40	---	0 150	"	"	ND	"	108%	"	--	--	"	
Potassium	"	14 5	---	3 00	"	"	3 92	10 0	106%	"	--	--	"	

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K27048 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27048-BLK1)							Extracted: 11/27/07 12:20							
Acetone	EPA 8260B	ND	---	10 0	ug/l	1x	--	--	--	--	--	--	11/27/07 23 55	
Benzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	B
sec-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K27048 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27048-BLK1)							Extracted: 11/27/07 12:20							
Hexachlorobutadiene	EPA 8260B	ND	---	2 50	ug/l	1x	--	--	--	--	--	--	11/27/07 23 55	
Methyl tert-butyl ether	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	B
1,2,4-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.6%*			*Limits: 76-138%*	"							*11/27/07 23:55*	
Toluene-d8		*99.4%*			*80-120%*	"							"	
4-BFB		*98.4%*			*80-120%*	"							"	

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Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K27048 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7K27048-BS1)							Extracted: 11/27/07 12:20							
Benzene	EPA 8260B	20 9	---	0 200	ug/l	1x	--	20 0	105%	(80-120)	--	--	11/27/07 21 57	
Chlorobenzene	"	19 4	---	0 200	"	"	--	"	96 8%	"	--	--	"	
1,1-Dichloroethene	"	21 0	---	0 200	"	"	--	"	105%	"	--	--	"	
Methyl tert-butyl ether	"	21 5	---	1 00	"	"	--	"	108%	"	--	--	"	
Toluene	"	19 7	---	0 200	"	"	--	"	98 5%	(75-125)	--	--	"	
Trichloroethene	"	20 3	---	0 200	"	"	--	"	102%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 97.2%*			*Limits: 76-138%*	"							*11/27/07 21:57*	
Toluene-d8		*95.4%*			*80-120%*	"							"	
4-BFB		*97.9%*			*80-120%*	"							"	
LCS Dup (7K27048-BSD1)							Extracted: 11/27/07 12:20							
Benzene	EPA 8260B	20 5	---	0 200	ug/l	1x	--	20 0	102%	(80-120)	2 13%	(20)	11/27/07 22:24	
Chlorobenzene	"	19 1	---	0 200	"	"	--	"	95 6%	"	1 20%	"	"	
1,1-Dichloroethene	"	20 6	---	0 200	"	"	--	"	103%	"	2 07%	"	"	
Methyl tert-butyl ether	"	21 4	---	1 00	"	"	--	"	107%	"	0 466%	"	"	
Toluene	"	19 5	---	0 200	"	"	--	"	97 7%	(75-125)	0 815%	"	"	
Trichloroethene	"	20 0	---	0 200	"	"	--	"	100%	(80-120)	1 64%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 95.0%*			*Limits: 76-138%*	"							*11/27/07 22:24*	
Toluene-d8		*97.8%*			*80-120%*	"							"	
4-BFB		*99.2%*			*80-120%*	"							"	
Matrix Spike (7K27048-MS1)					QC Source: BQK0254-20		Extracted: 11/27/07 12:20							
Benzene	EPA 8260B	22 5	---	0 200	ug/l	1x	ND	20 0	113%	(75-125)	--	--	11/27/07 22 51	
Chlorobenzene	"	20 8	---	0 200	"	"	ND	"	104%	"	--	--	"	
1,1-Dichloroethene	"	24 0	---	0 200	"	"	0 580	"	117%	(61-120)	--	--	"	
Methyl tert-butyl ether	"	22 6	---	1 00	"	"	ND	"	113%	(75-125)	--	--	"	
Toluene	"	22 0	---	0 200	"	"	ND	"	110%	(68-125)	--	--	"	
Trichloroethene	"	22 6	---	0 200	"	"	0 550	"	110%	(75-125)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 93.8%*			*Limits: 76-138%*	"							*11/27/07 22:51*	
Toluene-d8		*98.0%*			*80-120%*	"							"	
4-BFB		*97.5%*			*80-120%*	"							"	

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7K27048 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (7K27048-MSD1)					QC Source: BQK0254-20				Extracted: 11/27/07 12:20					
Benzene	EPA 8260B	22 9	---	0 200	ug/l	1x	ND	20 0	115%	(75-125)	1 76%	(20)	11/27/07 23:18	
Chlorobenzene	"	20 4	---	0 200	"	"	ND	"	102%	"	2 04%	"	"	
1,1-Dichloroethene	"	24 1	---	0 200	"	"	0 580	"	118%	(61-120)	0 166%	(30)	"	
Methyl tert-butyl ether	"	22 3	---	1 00	"	"	ND	"	112%	(75-125)	0 936%	"	"	
Toluene	"	21 4	---	0 200	"	"	ND	"	107%	(68-125)	2 72%	(20)	"	
Trichloroethene	"	23 0	---	0 200	"	"	0 550	"	112%	(75-125)	2 11%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.1%*			*Limits: 76-138%*	"							*11/27/07 23:18*	
Toluene-d8		*95.4%*			*80-120%*	"							"	
4-BFB		*98.4%*			*80-120%*	"							"	

QC Batch: 7L07005 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7L07005-BLK1)									Extracted: 12/07/07 08:00					
Acetone	EPA 8260B	ND	---	10 0	ug/l	1x	--	--	--	--	--	--	12/07/07 13 55	
Benzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	B
sec-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	B
tert-Butylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	

TestAmerica Seattle

Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7L07005 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7L07005-BLK1)								**Extracted: 12/07/07 08:00**						
1,3-Dichlorobenzene	EPA 8260B	ND	---	0 200	ug/l	1x	--	--	--	--	--	--	12/07/07 13 55	
1,4-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Hexachlorobutadiene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	B
4-Methyl-2-pentanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	B
1,2,4-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	

TestAmerica Seattle

Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 7L07005 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7L07005-BLK1)								Extracted: 12/07/07 08:00						
Vinyl chloride	EPA 8260B	ND	---	0 200	ug/l	1x	--	--	--	--	--	--	12/07/07 13 55	
o-Xylene	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 96.8%*			*Limits: 76-138%*	"							*12/07/07 13:55*	
Toluene-d8		*101%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	
LCS (7L07005-BS1)								Extracted: 12/07/07 08:00						
Benzene	EPA 8260B	18 8	---	0 200	ug/l	1x	--	20 0	94 2%	(80-120)	--	--	12/07/07 10:11	
Chlorobenzene	"	18 4	---	0 200	"	"	--	"	91 9%	"	--	--	"	
1,1-Dichloroethene	"	19 0	---	0 200	"	"	--	"	94 8%	"	--	--	"	
Methyl tert-butyl ether	"	18 0	---	1 00	"	"	--	"	89 9%	"	--	--	"	
Toluene	"	18 0	---	0 200	"	"	--	"	89 9%	(75-125)	--	--	"	
Trichloroethene	"	17 9	---	0 200	"	"	--	"	89 6%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 97.8%*			*Limits: 76-138%*	"							*12/07/07 10:11*	
Toluene-d8		*98.8%*			*80-120%*	"							"	
4-BFB		*102%*			*80-120%*	"							"	
LCS Dup (7L07005-BSD1)								Extracted: 12/07/07 08:00						
Benzene	EPA 8260B	19 0	---	0 200	ug/l	1x	--	20 0	94 9%	(80-120)	0 740%	(20)	12/07/07 10:38	
Chlorobenzene	"	19 0	---	0 200	"	"	--	"	95 0%	"	3 32%	"	"	
1,1-Dichloroethene	"	19 6	---	0 200	"	"	--	"	97 9%	"	3 16%	"	"	
Methyl tert-butyl ether	"	18 8	---	1 00	"	"	--	"	94 0%	"	4 41%	"	"	
Toluene	"	18 6	---	0 200	"	"	--	"	92 8%	(75-125)	3 12%	"	"	
Trichloroethene	"	18 6	---	0 200	"	"	--	"	92 8%	(80-120)	3 56%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 96.6%*			*Limits: 76-138%*	"							*12/07/07 10:38*	
Toluene-d8		*100%*			*80-120%*	"							"	
4-BFB		*102%*			*80-120%*	"							"	

TestAmerica Seattle

Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	12/17/07 14:42

Notes and Definitions

Report Specific Notes:

B	-	Analyte was detected in the associated Method Blank.
H	-	Sample analysis performed past method-specified holding time.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
P7	-	Sample filtered in lab.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
S3	-	Post digestion spike is out of acceptance limits for this analyte

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Seattle

Blake T Meinert, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: BQK0213

CLIENT: Golder Associates

REPORT TO: Douglas Morell
ADDRESS: 18300 NE Union Hill Rd, Suite 200
Redmond WA 98052
PHONE: 425-883-0777 FAX: 425-882-5498

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Landsburg Mine
PROJECT NUMBER: 923-1000-002-R273
SAMPLED BY: Ian Young

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: VOCs	TPH HCID	TAML total	TAML dissolved	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	LMW-6-1107	11/15/07 @ 1010		X	X	X		W	7		-01
2	LMW-7-1107	@ 1310		↓	↓	↓		↓	↓		-02
3	LMW-9-1107	@ 1440		↓	↓	↓		↓	↓		-03
4	LMW-10-1107	@ 1120		↓	↓	↓		↓	↓		-04
5	Trip blank	11.15.07 @ 1610									-05
6											
7											
8											
9											
10											

Hold Filtered Sample

CW 11/16/07

RELEASED BY: [signature] DATE: 11/15/07
PRINT NAME: Ian Young FIRM: GAI TIME: 1610

RECEIVED BY: Colette Weaver DATE: 11.15.07
PRINT NAME: Colette Weaver FIRM: TAL-Seattle TIME: 1610

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 11.1°C W/O

COC REV 09/2004

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

November 30, 2007

Douglas Morell
Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

RE: Landsburg Mine

Enclosed are the results of analyses for samples received by the laboratory on 11/16/07 15:05. The following list is a summary of the Work Orders contained in this report, generated on 11/30/07 16:49.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BQK0250	Landsburg Mine	923-1000-002-R273

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-11-1107	BQK0250-01	Water	11/16/07 11:35	11/16/07 15:05

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
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18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0250-01 (LMW-11-1107)		**Water**			**Sampled: 11/16/07 11:35**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.240	mg/l	1x	7K15026	11/19/07 10:55	11/24/07 00:39	
Kerosene Range Hydrocarbons	"	ND	-----	0.606	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.606	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	**DET**	-----	0.606	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.606	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.606	"	"	"	"	"	
Surrogate(s): 2-FBP			*84.0%*		*50 - 150 %*	"			"	
Octacosane			*104%*		*50 - 150 %*	"			"	

TestAmerica - Seattle, WA

Kate Haney For Blake T. Meinert, Project Manager

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Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0250-01 (LMW-11-1107)		**Water**			**Sampled: 11/16/07 11:35**					
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:57	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Arsenic	"	**0.00897**	-----	0 00100	"	"	"	"	11/23/07 16:59	
Barium	"	**0.256**	-----	0 0100	"	"	"	"	11/23/07 12:04	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**59.5**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:57	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	**2.22**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:57	
Lead	EPA 6020	**0.00239**	-----	0 00100	"	"	7K20037	11/20/07 16:25	11/23/07 16:59	
Magnesium	EPA 6010B	**30.5**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:57	
Manganese	EPA 6020	**0.158**	-----	0 0100	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K20041	11/20/07 16:30	11/21/07 10:45	
Nickel	EPA 6020	**0.00186**	-----	0 00100	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Potassium	EPA 6010B	ND	-----	3 00	"	"	7K26030	11/26/07 11 56	11/28/07 15:57	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**34.6**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:57	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K20037	11/20/07 16:25	11/23/07 12:04	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0250-01 (LMW-11-1107)		**Water**			**Sampled: 11/16/07 11:35**					
Acetone	EPA 8260B	ND	-----	10 0	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 13:40	
Benzene	"	ND	-----	0 200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0 500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0 250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0 200	"	"	"	"	"	
Bromoform	"	ND	-----	0 250	"	"	"	"	"	
Bromomethane	"	ND	-----	2 00	"	"	"	"	"	
2-Butanone	"	ND	-----	2 00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0 500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0 200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0250-01 (LMW-11-1107)		**Water**			**Sampled: 11/16/07 11:35**					
Isopropylbenzene	EPA 8260B	ND	-----	0 500	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 13:40	
p-Isopropyltoluene	"	ND	-----	0 200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2 00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2 00	"	"	"	"	"	
Naphthalene	"	ND	-----	2 50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Styrene	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0 500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0 200	"	"	"	"	"	
Toluene	"	ND	-----	0 200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0 200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0 200	"	"	"	"	"	
o-Xylene	"	ND	-----	0 250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0 500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0 750	"	"	"	"	"	
Surrogate(s): *1,2-DCA-d4*		*94.6%*		*76 - 138 %*	"				"	
Toluene-d8		*97.8%*		*80 - 120 %*	"				"	
4-BFB		*98.6%*		*80 - 120 %*	"				"	

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Kate Haney For Blake T Meinert, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K15026 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K15026-BLK1)								Extracted: 11/19/07 10:55						
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0 250	mg/l	1x	--	--	--	--	--	--	11/23/07 17:22	
Kerosene Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Diesel Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Insulating Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Lube Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 79.9%*			*Limits: 50-150%*	"							*11/23/07 17:22*	
Octacosane		*98.7%*			*50-150%*	"							"	
LCS (7K15026-BS1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0 630	mg/l	1x	--	2 00	79 7%	(58-125)	--	--	11/23/07 17:48	
Surrogate(s): 2-FBP		*Recovery: 89.9%*			*Limits: 50-150%*	"							*11/23/07 17:48*	
Octacosane		*99.2%*			*50-150%*	"							"	
LCS Dup (7K15026-BSD1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0 630	mg/l	1x	--	2 00	83 1%	(58-125)	4 14%	(40)	11/23/07 18:14	
Surrogate(s): 2-FBP		*Recovery: 99.6%*			*Limits: 50-150%*	"							*11/23/07 18:14*	
Octacosane		*103%*			*50-150%*	"							"	

Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K20037 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K20037-BLK1)									Extracted: 11/20/07 16:25					
Antimony	EPA 6020	ND	---	0 00300	mg/l	1x	--	--	--	--	--	--	11/23/07 10 50	
Barium	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Beryllium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
LCS (7K20037-BS1)									Extracted: 11/20/07 16:25					
Nickel	EPA 6020	0 0866	---	0 00100	mg/l	1x	--	0 0800	108%	(80-120)	--	--	11/23/07 10 56	
Arsenic	"	0 0786	---	0 00100	"	"	--	"	98 3%	"	--	--	"	
Silver	"	0 0866	---	0 00100	"	"	--	"	108%	"	--	--	"	
Barium	"	0 0898	---	0 0100	"	"	--	"	112%	"	--	--	"	
Beryllium	"	0 0783	---	0 00100	"	"	--	"	97 9%	"	--	--	"	
Cobalt	"	0 0878	---	0 00100	"	"	--	"	110%	"	--	--	"	
Cadmium	"	0 0800	---	0 00100	"	"	--	"	100%	"	--	--	"	
Copper	"	0 0865	---	0 00100	"	"	--	"	108%	"	--	--	"	
Manganese	"	0 0888	---	0 0100	"	"	--	"	111%	"	--	--	"	
Lead	"	0 0903	---	0 00100	"	"	--	"	113%	"	--	--	"	
Antimony	"	0 0698	---	0 00300	"	"	--	0 0600	116%	"	--	--	"	
Chromium	"	0 0876	---	0 00100	"	"	--	0 0800	110%	"	--	--	"	
Selenium	"	0 0706	---	0 00100	"	"	--	"	88 3%	"	--	--	"	
Thallium	"	0 0873	---	0 00100	"	"	--	"	109%	"	--	--	"	
Vanadium	"	0 0898	---	0 00100	"	"	--	"	112%	"	--	--	"	
Zinc	"	0 0761	---	0 0100	"	"	--	"	95 1%	"	--	--	"	

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Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K20037 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7K20037-DUP1)				QC Source: BQK0250-01				Extracted: 11/20/07 16:25						
Cobalt	EPA 6020	ND	---	0 00100	mg/l	1x	ND	--	--	--	9 90%	(20)	11/23/07 11 52	
Beryllium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0 0100	"	"	ND	--	--	--	15 1%	"	"	
Vanadium	"	ND	---	0 00100	"	"	ND	--	--	--	10 0%	"	"	
Chromium	"	ND	---	0 00100	"	"	ND	--	--	--	3 51%	"	"	
Cadmium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Nickel	"	0 00186	---	0 00100	"	"	0 00186	--	--	--	0 00%	"	"	
Lead	"	ND	---	0 00100	"	"	0 00239	--	--	--	134%	"	11/23/07 16 53	R
Silver	"	ND	---	0 00100	"	"	ND	--	--	--	NR	(50)	11/23/07 11 52	
Antimony	"	ND	---	0 00300	"	"	ND	--	--	--		(20)	"	
Thallium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Arsenic	"	0 00872	---	0 00100	"	"	0 00897	--	--	--	2 83%	"	"	
Barium	"	0 248	---	0 0100	"	"	0 256	--	--	--	3 14%	"	"	
Manganese	"	0 157	---	0 0100	"	"	0 158	--	--	--	1 08%	"	"	
Selenium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Copper	"	ND	---	0 00100	"	"	ND	--	--	--	6 32%	"	"	
Matrix Spike (7K20037-MS1)				QC Source: BQK0250-01				Extracted: 11/20/07 16:25						
Selenium	EPA 6020	0 0703	---	0 00100	mg/l	1x	ND	0 0800	87 9%	(58-120)	--	--	11/23/07 11:46	
Nickel	"	0 0848	---	0 00100	"	"	0 00186	"	104%	(78-120)	--	--	"	
Beryllium	"	0 0806	---	0 00100	"	"	ND	"	101%	(75-125)	--	--	"	
Vanadium	"	0 0905	---	0 00100	"	"	0 000380	"	113%	(83-120)	--	--	"	
Barium	"	0 341	---	0 0100	"	"	0 256	"	106%	(75-125)	--	--	"	
Antimony	"	0 0724	---	0 00300	"	"	ND	0 0600	121%	(74-133)	--	--	"	
Silver	"	0 0823	---	0 00100	"	"	ND	0 0800	103%	(19-153)	--	--	"	
Arsenic	"	0 0880	---	0 00100	"	"	0 00897	"	98 8%	(75-125)	--	--	"	
Thallium	"	0 0865	---	0 00100	"	"	ND	"	108%	(80-120)	--	--	"	
Zinc	"	0 0782	---	0 0100	"	"	0 00393	"	92 8%	(53-125)	--	--	"	
Copper	"	0 0832	---	0 00100	"	"	0 000490	"	103%	(75-125)	--	--	"	
Chromium	"	0 0863	---	0 00100	"	"	0 000290	"	108%	(80-120)	--	--	"	
Manganese	"	0 248	---	0 0100	"	"	0 158	"	112%	(65-145)	--	--	"	
Cobalt	"	0 0856	---	0 00100	"	"	0 000480	"	106%	(71-131)	--	--	"	
Cadmium	"	0 0792	---	0 00100	"	"	ND	"	99 0%	(75-125)	--	--	"	
Lead	"	0 0875	---	0 00100	"	"	0 00239	"	106%	(80-120)	--	--	11/23/07 16:47	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

Project Name: **Landsburg Mine**
Project Number: 923-1000-002-R273
Project Manager: Douglas Morell

Report Created: 11/30/07 16:49

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K20037 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (7K20037-PS1)					QC Source: BQK0250-01				Extracted: 11/20/07 16:25					
Silver	EPA 6020	0 0969	---		ug/ml	1x	ND	0 100	96 9%	(75-125)	--	--	11/23/07 11:39	
Selenium	"	0 0824	---		"	"	0 000150	"	82 2%	"	--	--	"	
Lead	"	0 101	---		"	"	0 00239	"	97 9%	"	--	--	11/23/07 16:40	
Nickel	"	0 100	---		"	"	0 00186	0 0995	98 9%	"	--	--	11/23/07 11:39	
Zinc	"	0 0918	---		"	"	0 00393	0 100	87 5%	"	--	--	"	
Antimony	"	0 0542	---		"	"	0 0000900	0 0510	106%	"	--	--	"	
Manganese	"	0 267	---		"	"	0 158	0 100	108%	"	--	--	"	
Copper	"	0 0998	---		"	"	0 000490	"	98 8%	"	--	--	"	
Barium	"	0 356	---		"	"	0 256	"	99 8%	"	--	--	"	
Thallium	"	0 103	---		"	"	-0 0000500	"	103%	"	--	--	"	
Cobalt	"	0 102	---		"	"	0 000480	"	101%	"	--	--	"	
Chromium	"	0 104	---		"	"	0 000290	"	103%	"	--	--	"	
Beryllium	"	0 0929	---		"	"	-0 0000400	0 0995	93 4%	"	--	--	"	
Cadmium	"	0 0954	---		"	"	0 0000900	0 100	95 3%	"	--	--	"	
Arsenic	"	0 104	---		"	"	0 00897	0 0995	95 7%	"	--	--	"	
Vanadium	"	0 108	---		"	"	0 000380	0 100	107%	"	--	--	"	

QC Batch: 7K20041 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K20041-BLK1)									Extracted: 11/20/07 16:30					
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	--	--	--	--	--	--	11/21/07 10:32	
LCS (7K20041-BS1)									Extracted: 11/20/07 16:30					
Mercury	EPA 7470A	0 00470	---	0 000200	mg/l	1x	--	0 00500	94 0%	(80-120)	--	--	11/21/07 10:35	
LCS Dup (7K20041-BSD1)									Extracted: 11/20/07 16:30					
Mercury	EPA 7470A	0 00467	---	0 000200	mg/l	1x	--	0 00500	93 5%	(80-120)	0 572%	(20)	11/21/07 10:37	
Duplicate (7K20041-DUP1)					QC Source: BQK0250-01				Extracted: 11/20/07 16:30					
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	ND	--	--	--	NR	(20)	11/21/07 10:42	
Matrix Spike (7K20041-MS1)					QC Source: BQK0250-01				Extracted: 11/20/07 16:30					
Mercury	EPA 7470A	0 00486	---	0 000200	mg/l	1x	ND	0 00500	97 1%	(75-125)	--	--	11/21/07 10:40	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K26030 **Water Preparation Method: EPA 200 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K26030-BLK1)								**Extracted: 11/26/07 11:56**						
Calcium	EPA 6010B	ND	---	0 750	mg/l	1x	--	--	--	--	--	--	11/28/07 15 02	
Aluminum	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0 150	"	"	--	--	--	--	--	--	"	
Sodium	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3 00	"	"	--	--	--	--	--	--	"	
Magnesium	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
LCS (7K26030-BS1)								**Extracted: 11/26/07 11:56**						
Calcium	EPA 6010B	5 72	---	0 750	mg/l	1x	--	5 00	114%	(80-120)	--	--	11/28/07 15 06	
Sodium	"	5 86	---	0 250	"	"	--	"	117%	"	--	--	"	
Potassium	"	11 3	---	3 00	"	"	--	10 0	113%	"	--	--	"	
Iron	"	5 79	---	0 150	"	"	--	5 00	116%	"	--	--	11/29/07 11:38	
Aluminum	"	5 64	---	0 250	"	"	--	"	113%	"	--	--	11/28/07 15 06	
Magnesium	"	5 92	---	0 500	"	"	--	"	118%	"	--	--	"	
Duplicate (7K26030-DUP1)							**QC Source: BQK0197-01**			**Extracted: 11/26/07 11:56**				
Aluminum	EPA 6010B	ND	---	0 250	mg/l	1x	ND	--	--	--	NR	(25)	11/28/07 15:16	
Potassium	"	3 92	---	3 00	"	"	3 92	--	--	--	0 0765%	(30)	"	
Calcium	"	128	---	0 750	"	"	127	--	--	--	0 862%	(25)	"	
Iron	"	ND	---	0 150	"	"	ND	--	--	--	NR	(30)	"	
Magnesium	"	80 8	---	0 500	"	"	80 5	--	--	--	0 298%	"	"	
Sodium	"	24 6	---	0 250	"	"	24 5	--	--	--	0 447%	"	"	
Matrix Spike (7K26030-MS1)							**QC Source: BQK0197-01**			**Extracted: 11/26/07 11:56**				
Aluminum	EPA 6010B	5 52	---	0 250	mg/l	1x	ND	5 00	110%	(74-142)	--	--	11/28/07 15 09	
Calcium	"	128	---	0 750	"	"	127	"	20 0%	(70-137)	--	--	"	MH
Potassium	"	15 0	---	3 00	"	"	3 92	10 0	111%	(63-155)	--	--	"	
Sodium	"	29 7	---	0 250	"	"	24 5	5 00	103%	(74-144)	--	--	"	
Magnesium	"	84 1	---	0 500	"	"	80 5	"	71 8%	(76-129)	--	--	"	MH
Iron	"	5 76	---	0 150	"	"	ND	"	115%	(78-130)	--	--	"	
Post Spike (7K26030-PS1)							**QC Source: BQK0197-01**			**Extracted: 11/26/07 11:56**				
Calcium	EPA 6010B	126	---	0 750	mg/l	1x	127	5 00	-28 0%	(75-125)	--	--	11/28/07 15:13	
Potassium	"	14 5	---	3 00	"	"	3 92	10 0	106%	"	--	--	"	
Magnesium	"	82 6	---	0 500	"	"	80 5	5 00	42 4%	"	--	--	"	
Aluminum	"	5 17	---	0 250	"	"	ND	"	103%	"	--	--	"	
Sodium	"	29 0	---	0 250	"	"	24 5	"	89 8%	"	--	--	"	
Iron	"	5 40	---	0 150	"	"	ND	"	108%	"	--	--	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27015-BLK1)							Extracted: 11/27/07 09:30							
Acetone	EPA 8260B	ND	---	10 0	ug/l	1x	--	--	--	--	--	--	11/27/07 11:13	
Benzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27015-BLK1)								**Extracted: 11/27/07 09:30**						
Hexachlorobutadiene	EPA 8260B	ND	---	2 50	ug/l	1x	--	--	--	--	--	--	11/27/07 11:13	
Methyl tert-butyl ether	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	E
1,2,4-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*1,2-DCA-d4*	*Recovery:*	*93.2%*	*Limits:*	*76-138%*	"							*11/27/07 11:13*	
	Toluene-d8		*99.6%*		*80-120%*	"							"	
	4-BFB		*100%*		*80-120%*	"							"	

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Kate Haney For Blake T Meinert, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7K27015-BS1)								Extracted: 11/27/07 09:30						
Benzene	EPA 8260B	19 9	---	0 200	ug/l	1x	--	20 0	99 4%	(80-120)	--	--	11/27/07 09 59	
Chlorobenzene	"	18 8	---	0 200	"	"	--	"	94 2%	"	--	--	"	
1,1-Dichloroethene	"	20 0	---	0 200	"	"	--	"	100%	"	--	--	"	
Methyl tert-butyl ether	"	19 8	---	1 00	"	"	--	"	99 2%	"	--	--	"	
Toluene	"	19 3	---	0 200	"	"	--	"	96 6%	(75-125)	--	--	"	
Trichloroethene	"	19 5	---	0 200	"	"	--	"	97 6%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.2%*			*Limits: 76-138%*	"							*11/27/07 09:59*	
Toluene-d8		*97.8%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	
LCS Dup (7K27015-BSD1)								Extracted: 11/27/07 09:30						
Benzene	EPA 8260B	20 3	---	0 200	ug/l	1x	--	20 0	101%	(80-120)	2 09%	(20)	11/27/07 10:35	
Chlorobenzene	"	20 0	---	0 200	"	"	--	"	100%	"	5 98%	"	"	
1,1-Dichloroethene	"	20 9	---	0 200	"	"	--	"	104%	"	4 25%	"	"	
Methyl tert-butyl ether	"	20 5	---	1 00	"	"	--	"	103%	"	3 52%	"	"	
Toluene	"	20 6	---	0 200	"	"	--	"	103%	(75-125)	6 46%	"	"	
Trichloroethene	"	19 9	---	0 200	"	"	--	"	99 6%	(80-120)	2 08%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.4%*			*Limits: 76-138%*	"							*11/27/07 10:35*	
Toluene-d8		*101%*			*80-120%*	"							"	
4-BFB		*98.6%*			*80-120%*	"							"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:49

Notes and Definitions

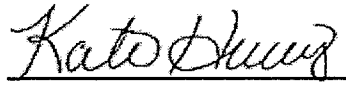
Report Specific Notes:

B4	-	Target analyte detected in blank at/above method acceptance criteria.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
S3	-	Post digestion spike is out of acceptance limits for this analyte

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica - Seattle, WA



Kate Haney For Blake T Meinert, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: 60HR50

CLIENT: Golder Associates

REPORT TO: Douglas Morell
ADDRESS: 18300 NE Union Hill Rd, Suite 200
Redmond WA 98052
PHONE: 425-883-0777 FAX: 425-882-5498

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: Landsburg Mine
PROJECT NUMBER: 923-1000-002-R273
SAMPLED BY: Ian Young

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: [10] STD. [7] [5] [4] [3] [2] [1] [<1]
Petroleum Hydrocarbon Analyses: [5] STD. [4] [3] [2] [1] [<1]
[OTHER] Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: VOC	TPH NCID	TAML total	TAML dissolved		MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	LMW-11-1107	11/6/07 @ 1135		X	X	X	○	Hold filtered sample	W	7		01
2												
3												
4												
5												
6												
7												
8												
9												
10												

RELEASED BY: [signature] DATE: 11/6/07
PRINT NAME: Ian Young FIRM: GAI TIME: 1505

RECEIVED BY: Cathy Gamble DATE: 11/6/07
PRINT NAME: Cathy Gamble FIRM: TAT-Sea TIME: 15:05

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 6.0 w/o

COC REV 09/2004

PAGE OF

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

November 30, 2007

Douglas Morell
Golder Associates Inc.
18300 NE Union Hill Rd, Suite 200
Redmond, WA/USA 98052-3333

RE: Landsburg Mine

Enclosed are the results of analyses for samples received by the laboratory on 11/14/07 15:10. The following list is a summary of the Work Orders contained in this report, generated on 11/30/07 16:35.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BQK0197	Landsburg Mine	923-1000-002-R273

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-2-1107	BQK0197-01	Water	11/14/07 13:45	11/14/07 15:10
LMW-3-1107	BQK0197-02	Water	11/14/07 12:45	11/14/07 15:10
LMW-4-1107	BQK0197-03	Water	11/14/07 09:55	11/14/07 15:10
LMW-5-1107	BQK0197-04	Water	11/14/07 11:00	11/14/07 15:10
Trip blank	BQK0197-05	Water	11/14/07 15:10	11/14/07 15:10

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-01 (LMW-2-1107)		**Water**			**Sampled: 11/14/07 13:45**					
Gx Range Hydrocarbons	NWTPH-HCID	**DET**	-----	0.236	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 19:57	
Kerosene Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Surrogate(s): 2-FBP			*86.0%*		*50 - 150 %*	"			"	
Octacosane			*99.8%*		*50 - 150 %*	"			"	
BQK0197-02 (LMW-3-1107)		**Water**			**Sampled: 11/14/07 12:45**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.236	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 20:22	
Kerosene Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Surrogate(s): 2-FBP			*85.6%*		*50 - 150 %*	"			"	
Octacosane			*98.3%*		*50 - 150 %*	"			"	
BQK0197-03 (LMW-4-1107)		**Water**			**Sampled: 11/14/07 09:55**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	-----	0.236	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 20:48	
Kerosene Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.594	"	"	"	"	"	
Surrogate(s): 2-FBP			*87.2%*		*50 - 150 %*	"			"	
Octacosane			*103%*		*50 - 150 %*	"			"	
BQK0197-04 (LMW-5-1107)		**Water**			**Sampled: 11/14/07 11:00**					
Gx Range Hydrocarbons	NWTPH-HCID	**DET**	-----	0.238	mg/l	1x	7K15026	11/19/07 10:55	11/23/07 21:14	
Kerosene Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Diesel Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Insulating Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Lube Oil Range Hydrocarbons	"	ND	-----	0.600	"	"	"	"	"	
Surrogate(s): 2-FBP			*88.8%*		*50 - 150 %*	"			"	
Octacosane			*102%*		*50 - 150 %*	"			"	

TestAmerica - Seattle, WA

Kate Haney For Blake T. Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-01 (LMW-2-1107)		**Water**			**Sampled: 11/14/07 13:45**					
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:19	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	
Barium	"	**0.360**	-----	0 0100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**127**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:19	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	**0.00119**	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	ND	-----	0 150	"	"	7K26030	11/26/07 11 56	11/28/07 15:19	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Magnesium	EPA 6010B	**80.5**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:19	
Manganese	EPA 6020	**0.252**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:38	
Nickel	EPA 6020	**0.00220**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Potassium	EPA 6010B	**3.92**	-----	3 00	"	"	7K26030	11/26/07 11:56	11/28/07 15:19	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**24.5**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:19	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:10	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	
BQK0197-02 (LMW-3-1107)		**Water**			**Sampled: 11/14/07 12:45**					
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:23	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	
Barium	"	**0.0788**	-----	0 0100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**37.4**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:23	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	ND	-----	0 150	"	"	7K26030	11/26/07 11 56	11/28/07 15:23	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Magnesium	EPA 6010B	**15.9**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:23	
Manganese	EPA 6020	**0.0629**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:41	
Nickel	EPA 6020	**0.00157**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-02 (LMW-3-1107)		**Water**				**Sampled: 11/14/07 12:45**				
Potassium	EPA 6010B	ND	-----	3 00	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:23	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**10.0**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:23	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:16	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	
BQK0197-03 (LMW-4-1107)		**Water**				**Sampled: 11/14/07 09:55**				
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:26	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**125**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:26	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	**0.252**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:26	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Magnesium	EPA 6010B	**77.6**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:26	
Manganese	EPA 6020	**0.187**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:43	
Nickel	EPA 6020	**0.00201**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Potassium	EPA 6010B	**4.13**	-----	3 00	"	"	7K26030	11/26/07 11:56	11/28/07 15:26	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**32.6**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:26	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:22	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-03RE1 (LMW-4-1107)		**Water**				**Sampled: 11/14/07 09:55**				
Barium	EPA 6020	**0.368**	-----	0 0200	mg/l	2x	7K19045	11/19/07 13:35	11/20/07 13:34	
BQK0197-04 (LMW-5-1107)		**Water**				**Sampled: 11/14/07 11:00**				
Aluminum	EPA 6010B	ND	-----	0 200	mg/l	1x	7K26030	11/26/07 11 56	11/28/07 15:30	
Antimony	EPA 6020	ND	-----	0 00300	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Arsenic	"	ND	-----	0 00100	"	"	"	"	"	
Barium	"	**0.282**	-----	0 0100	"	"	"	"	"	
Beryllium	"	ND	-----	0 00100	"	"	"	"	"	
Cadmium	"	ND	-----	0 00100	"	"	"	"	"	
Calcium	EPA 6010B	**91.0**	-----	0 750	"	"	7K26030	11/26/07 11:56	11/28/07 15:30	
Chromium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Cobalt	"	ND	-----	0 00100	"	"	"	"	"	
Copper	"	ND	-----	0 00100	"	"	"	"	"	
Iron	EPA 6010B	**0.251**	-----	0 150	"	"	7K26030	11/26/07 11:56	11/28/07 15:30	
Lead	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Magnesium	EPA 6010B	**52.9**	-----	0 500	"	"	7K26030	11/26/07 11:56	11/28/07 15:30	
Manganese	EPA 6020	**0.239**	-----	0 0100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Mercury	EPA 7470A	ND	-----	0 000200	"	"	7K19060	11/19/07 17:20	11/19/07 18:46	
Nickel	EPA 6020	**0.00161**	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Potassium	EPA 6010B	ND	-----	3 00	"	"	7K26030	11/26/07 11 56	11/28/07 15:30	
Selenium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Silver	"	ND	-----	0 00100	"	"	"	"	"	
Sodium	EPA 6010B	**18.8**	-----	0 250	"	"	7K26030	11/26/07 11:56	11/28/07 15:30	
Thallium	EPA 6020	ND	-----	0 00100	"	"	7K19045	11/19/07 13:35	11/20/07 12:28	
Vanadium	"	ND	-----	0 00100	"	"	"	"	"	
Zinc	"	ND	-----	0 0100	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-01 (LMW-2-1107)		**Water**			**Sampled: 11/14/07 13:45**					
Acetone	EPA 8260B	ND	-----	10 0	ug/l	1x	7K19036	11/19/07 08:14	11/19/07 21:51	
Benzene	"	ND	-----	0 200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0 500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0 250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0 200	"	"	"	"	"	
Bromoform	"	ND	-----	0 250	"	"	"	"	"	
Bromomethane	"	ND	-----	2 00	"	"	"	"	"	
2-Butanone	"	ND	-----	2 00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0 500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0 200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-01 (LMW-2-1107)		**Water**			**Sampled: 11/14/07 13:45**					
Isopropylbenzene	EPA 8260B	ND	-----	0.500	ug/l	1x	7K19036	11/19/07 08:14	11/19/07 21:51	
p-Isopropyltoluene	"	ND	-----	0.200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Styrene	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0.500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0.500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0.500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0.200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0.200	"	"	"	"	"	
o-Xylene	"	ND	-----	0.250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0.500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0.750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*106%*			*76 - 138 %*	"			"	
Toluene-d8		*106%*			*80 - 120 %*	"			"	
4-BFB		*98.0%*			*80 - 120 %*	"			"	
BQK0197-02 (LMW-3-1107)		**Water**			**Sampled: 11/14/07 12:45**					
Acetone	EPA 8260B	ND	-----	10.0	ug/l	1x	7K19036	11/19/07 08:14	11/19/07 22:17	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0.500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0.250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0.200	"	"	"	"	"	
Bromoform	"	ND	-----	0.250	"	"	"	"	"	
Bromomethane	"	ND	-----	2.00	"	"	"	"	"	
2-Butanone	"	ND	-----	2.00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0.200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0.500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0.200	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-02 (LMW-3-1107)		**Water**			**Sampled: 11/14/07 12:45**					
Chlorobenzene	EPA 8260B	ND	-----	0 200	ug/l	1x	7K19036	11/19/07 08:14	11/19/07 22:17	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0 500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0 200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2 00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2 00	"	"	"	"	"	
Naphthalene	"	ND	-----	2 50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Styrene	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0 500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0 200	"	"	"	"	"	
Toluene	"	ND	-----	0 200	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-02 (LMW-3-1107)		**Water**			**Sampled: 11/14/07 12:45**					
1,1,1-Trichloroethane	EPA 8260B	ND	-----	0 200	ug/l	1x	7K19036	11/19/07 08:14	11/19/07 22:17	
1,1,2-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0 200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0 200	"	"	"	"	"	
o-Xylene	"	ND	-----	0 250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0 500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0 750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4			*105%*		*76 - 138 %*	"			"	
Toluene-d8			*106%*		*80 - 120 %*	"			"	
4-BFB			*99.8%*		*80 - 120 %*	"			"	
BQK0197-03 (LMW-4-1107)		**Water**			**Sampled: 11/14/07 09:55**					
Acetone	EPA 8260B	ND	-----	10 0	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 18:39	
Benzene	"	ND	-----	0 200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0 500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0 250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0 200	"	"	"	"	"	
Bromoform	"	ND	-----	0 250	"	"	"	"	"	
Bromomethane	"	ND	-----	2 00	"	"	"	"	"	
2-Butanone	"	ND	-----	2 00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0 500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0 200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-03 (LMW-4-1107)		**Water**			**Sampled: 11/14/07 09:55**					
Dichlorodifluoromethane	EPA 8260B	ND	-----	0 500	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 18:39	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0 500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0 200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2 00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2 00	"	"	"	"	"	
Naphthalene	"	ND	-----	2 50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Styrene	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0 500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0 200	"	"	"	"	"	
Toluene	"	ND	-----	0 200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0 200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0 200	"	"	"	"	"	
o-Xylene	"	ND	-----	0 250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0 500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0 750	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		*94.2%*			*76 - 138 %*	"			"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-03 (LMW-4-1107)		**Water**			**Sampled: 11/14/07 09:55**					
Toluene-d8		*100%*			*80 - 120 %*	*1x*			*11/27/07 18:39*	
4-BFB		*96.0%*			*80 - 120 %*	"			"	
BQK0197-04 (LMW-5-1107)		**Water**			**Sampled: 11/14/07 11:00**					
Acetone	EPA 8260B	ND	-----	10 0	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 19:07	
Benzene	"	ND	-----	0 200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0 500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0 250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0 200	"	"	"	"	"	
Bromoform	"	ND	-----	0 250	"	"	"	"	"	
Bromomethane	"	ND	-----	2 00	"	"	"	"	"	
2-Butanone	"	ND	-----	2 00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0 500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0 200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-04 (LMW-5-1107)		**Water**			**Sampled: 11/14/07 11:00**					
Ethylbenzene	EPA 8260B	ND	-----	0 200	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 19:07	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	0 500	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	0 200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2 00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2 00	"	"	"	"	"	
Naphthalene	"	ND	-----	2 50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Styrene	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0 500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0 200	"	"	"	"	"	
Toluene	"	ND	-----	0 200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0 200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0 200	"	"	"	"	"	
o-Xylene	"	ND	-----	0 250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0 500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0 750	"	"	"	"	"	
Surrogate(s): *1,2-DCA-d4*		*96.3%*		*76 - 138 %*	"				"	
Toluene-d8		*99.2%*		*80 - 120 %*	"				"	
4-BFB		*98.6%*		*80 - 120 %*	"				"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-05 (Trip blank)		**Water**			**Sampled: 11/14/07 15:10**					
Acetone	EPA 8260B	ND	-----	10 0	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 15:39	
Benzene	"	ND	-----	0 200	"	"	"	"	"	
Bromobenzene	"	ND	-----	0 500	"	"	"	"	"	
Bromochloromethane	"	ND	-----	0 250	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	0 200	"	"	"	"	"	
Bromoform	"	ND	-----	0 250	"	"	"	"	"	
Bromomethane	"	ND	-----	2 00	"	"	"	"	"	
2-Butanone	"	ND	-----	2 00	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	0 200	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Carbon disulfide	"	ND	-----	0 500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	0 200	"	"	"	"	"	
Chlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Chloroethane	"	ND	-----	1 00	"	"	"	"	"	
Chloroform	"	ND	-----	0 200	"	"	"	"	"	
Chloromethane	"	ND	-----	1 00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	0 500	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	1 00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	0 200	"	"	"	"	"	
Dibromomethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	0 200	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	0 200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	0 200	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	0 200	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	2 50	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1 00	"	"	"	"	"	
n-Hexane	"	ND	-----	1 00	"	"	"	"	"	
2-Hexanone	"	ND	-----	2 00	"	"	"	"	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BQK0197-05 (Trip blank)		**Water**			**Sampled: 11/14/07 15:10**					
Isopropylbenzene	EPA 8260B	ND	-----	0 500	ug/l	1x	7K27015	11/27/07 09:30	11/27/07 15:39	
p-Isopropyltoluene	"	ND	-----	0 200	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	2 00	"	"	"	"	"	
Methylene chloride	"	ND	-----	2 00	"	"	"	"	"	
Naphthalene	"	ND	-----	2 50	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Styrene	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1 00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	0 500	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	0 200	"	"	"	"	"	
Toluene	"	ND	-----	0 200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	0 200	"	"	"	"	"	
Trichloroethene	"	ND	-----	0 200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	0 500	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	0 500	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	0 200	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	0 500	"	"	"	"	"	
Vinyl chloride	"	ND	-----	0 200	"	"	"	"	"	
o-Xylene	"	ND	-----	0 250	"	"	"	"	"	
m,p-Xylene	"	ND	-----	0 500	"	"	"	"	"	
Total Xylenes	"	ND	-----	0 750	"	"	"	"	"	
Surrogate(s): *1,2-DCA-d4*			*101%*		*76 - 138 %*	"			"	
Toluene-d8			*98.8%*		*80 - 120 %*	"			"	
4-BFB			*98.4%*		*80 - 120 %*	"			"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K15026 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K15026-BLK1)								Extracted: 11/19/07 10:55						
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0 250	mg/l	1x	--	--	--	--	--	--	11/23/07 17:22	
Kerosene Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Diesel Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Insulating Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Heavy Fuel Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Lube Oil Range Hydrocarbons	"	ND	---	0 630	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 79.9%*			*Limits: 50-150%*	"							*11/23/07 17:22*	
Octacosane		*98.7%*			*50-150%*	"							"	
LCS (7K15026-BS1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0 630	mg/l	1x	--	2 00	79 7%	(58-125)	--	--	11/23/07 17:48	
Surrogate(s): 2-FBP		*Recovery: 89.9%*			*Limits: 50-150%*	"							*11/23/07 17:48*	
Octacosane		*99.2%*			*50-150%*	"							"	
LCS Dup (7K15026-BSD1)								Extracted: 11/19/07 10:55						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0 630	mg/l	1x	--	2 00	83 1%	(58-125)	4 14%	(40)	11/23/07 18:14	
Surrogate(s): 2-FBP		*Recovery: 99.6%*			*Limits: 50-150%*	"							*11/23/07 18:14*	
Octacosane		*103%*			*50-150%*	"							"	

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Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19045-BLK1)									Extracted: 11/19/07 13:35					
Cadmium	EPA 6020	ND	---	0 00100	mg/l	1x	--	--	--	--	--	--	11/20/07 11:34	
Cobalt	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Beryllium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Barium	"	ND	---	0 0100	"	"	--	--	--	--	--	--	"	
Antimony	"	ND	---	0 00300	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0 00100	"	"	--	--	--	--	--	--	"	
LCS (7K19045-BS1)									Extracted: 11/19/07 13:35					
Silver	EPA 6020	0 0802	---	0 00100	mg/l	1x	--	0 0800	100%	(80-120)	--	--	11/20/07 11:40	
Nickel	"	0 0833	---	0 00100	"	"	--	"	104%	"	--	--	"	
Vanadium	"	0 0868	---	0 00100	"	"	--	"	108%	"	--	--	"	
Chromium	"	0 0853	---	0 00100	"	"	--	"	107%	"	--	--	"	
Thallium	"	0 0829	---	0 00100	"	"	--	"	104%	"	--	--	"	
Selenium	"	0 0681	---	0 00100	"	"	--	"	85 1%	"	--	--	"	
Arsenic	"	0 0759	---	0 00100	"	"	--	"	94 9%	"	--	--	"	
Barium	"	0 0873	---	0 0100	"	"	--	"	109%	"	--	--	"	
Cadmium	"	0 0763	---	0 00100	"	"	--	"	95 4%	"	--	--	"	
Zinc	"	0 0741	---	0 0100	"	"	--	"	92 7%	"	--	--	"	
Copper	"	0 0829	---	0 00100	"	"	--	"	104%	"	--	--	"	
Antimony	"	0 0645	---	0 00300	"	"	--	0 0600	107%	"	--	--	"	
Lead	"	0 0854	---	0 00100	"	"	--	0 0800	107%	"	--	--	"	
Cobalt	"	0 0848	---	0 00100	"	"	--	"	106%	"	--	--	"	
Beryllium	"	0 0758	---	0 00100	"	"	--	"	94 8%	"	--	--	"	
Manganese	"	0 0855	---	0 0100	"	"	--	"	107%	"	--	--	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7K19045-DUP1)				QC Source: BQK0213-01			Extracted: 11/19/07 13:35							
Thallium	EPA 6020	ND	---	0 00100	mg/l	1x	ND	--	--	--	NR	(20)	11/20/07 11 58	
Beryllium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Barium	"	0 114	---	0 0100	"	"	0 117	--	--	--	2 42%	"	"	
Selenium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Cadmium	"	ND	---	0 00100	"	"	ND	--	--	--		"	"	
Vanadium	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0 00100	"	"	ND	--	--	--	NR	(50)	"	
Antimony	"	ND	---	0 00300	"	"	ND	--	--	--	103%	(20)	"	F
Zinc	"	ND	---	0 0100	"	"	ND	--	--	--	NR	"	"	
Lead	"	ND	---	0 00100	"	"	ND	--	--	--	43 9%	"	"	F
Copper	"	ND	---	0 00100	"	"	ND	--	--	--		"	"	
Cobalt	"	ND	---	0 00100	"	"	ND	--	--	--	NR	"	"	
Arsenic	"	ND	---	0 00100	"	"	ND	--	--	--		"	"	
Chromium	"	ND	---	0 00100	"	"	ND	--	--	--	38 6%	"	"	F
Manganese	"	0 0331	---	0 0100	"	"	0 0334	--	--	--	0 812%	"	"	
Nickel	"	ND	---	0 00100	"	"	ND	--	--	--	9 09%	"	"	
Matrix Spike (7K19045-MS1)				QC Source: BQK0213-01			Extracted: 11/19/07 13:35							
Cobalt	EPA 6020	0 0831	---	0 00100	mg/l	1x	ND	0 0800	104%	(71-131)	--	--	11/20/07 11 52	
Chromium	"	0 0844	---	0 00100	"	"	0 000230	"	105%	(80-120)	--	--	"	
Manganese	"	0 118	---	0 0100	"	"	0 0334	"	106%	(65-145)	--	--	"	
Selenium	"	0 0684	---	0 00100	"	"	ND	"	85 5%	(58-120)	--	--	"	
Arsenic	"	0 0769	---	0 00100	"	"	ND	"	96 1%	(75-125)	--	--	"	
Nickel	"	0 0817	---	0 00100	"	"	0 000630	"	101%	(78-120)	--	--	"	
Silver	"	0 0637	---	0 00100	"	"	ND	"	79 6%	(19-153)	--	--	"	
Thallium	"	0 0845	---	0 00100	"	"	ND	"	106%	(80-120)	--	--	"	
Cadmium	"	0 0784	---	0 00100	"	"	ND	"	98 1%	(75-125)	--	--	"	
Zinc	"	0 0738	---	0 0100	"	"	ND	"	92 2%	(53-125)	--	--	"	
Barium	"	0 204	---	0 0100	"	"	0 117	"	109%	(75-125)	--	--	"	
Vanadium	"	0 0869	---	0 00100	"	"	ND	"	109%	(83-120)	--	--	"	
Antimony	"	0 0653	---	0 00300	"	"	0 000440	0 0600	108%	(74-133)	--	--	"	
Beryllium	"	0 0775	---	0 00100	"	"	ND	0 0800	96 8%	(75-125)	--	--	"	
Lead	"	0 0865	---	0 00100	"	"	0 000160	"	108%	(80-120)	--	--	"	
Copper	"	0 0816	---	0 00100	"	"	ND	"	102%	(75-125)	--	--	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19045 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (7K19045-PS1)				QC Source: BQK0213-01				Extracted: 11/19/07 13:35						
Arsenic	EPA 6020	0 0937	---		ug/ml	1x	-0 0000500	0 0995	94 2%	(75-125)	--	--	11/20/07 11:46	
Selenium	"	0 0799	---		"	"	-0 0000800	0 100	80 0%	"	--	--	"	
Barium	"	0 221	---		"	"	0 117	"	104%	"	--	--	"	
Beryllium	"	0 0917	---		"	"	-0 0000300	0 0995	92 2%	"	--	--	"	
Copper	"	0 0989	---		"	"	0 000220	0 100	98 2%	"	--	--	"	
Manganese	"	0 135	---		"	"	0 0334	"	101%	"	--	--	"	
Chromium	"	0 102	---		"	"	0 000230	"	101%	"	--	--	"	
Thallium	"	0 101	---		"	"	-0 0000300	"	100%	"	--	--	"	
Cadmium	"	0 0910	---		"	"	0 0000700	"	90 9%	"	--	--	"	
Lead	"	0 101	---		"	"	0 000160	"	101%	"	--	--	"	
Antimony	"	0 0518	---		"	"	0 000440	0 0510	101%	"	--	--	"	
Vanadium	"	0 104	---		"	"	0 0000300	0 100	104%	"	--	--	"	
Zinc	"	0 0876	---		"	"	0 00147	"	85 7%	"	--	--	"	
Silver	"	0 0960	---		"	"	-0 0000300	"	96 1%	"	--	--	"	
Cobalt	"	0 0989	---		"	"	0 0000300	"	98 8%	"	--	--	"	
Nickel	"	0 0966	---		"	"	0 000630	0 0995	96 4%	"	--	--	"	

QC Batch: 7K19060 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19060-BLK1)								Extracted: 11/19/07 17:20						
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	--	--	--	--	--	--	11/19/07 18:18	
LCS (7K19060-BS1)								Extracted: 11/19/07 17:20						
Mercury	EPA 7470A	0 00497	---	0 000200	mg/l	1x	--	0 00500	99 5%	(80-120)	--	--	11/19/07 18:28	
LCS Dup (7K19060-BSD1)								Extracted: 11/19/07 17:20						
Mercury	EPA 7470A	0 00516	---	0 000200	mg/l	1x	--	0 00500	103%	(80-120)	3 62%	(20)	11/19/07 18:31	
Duplicate (7K19060-DUP1)				QC Source: BQK0197-01				Extracted: 11/19/07 17:20						
Mercury	EPA 7470A	ND	---	0 000200	mg/l	1x	ND	--	--	--		(20)	11/19/07 18:36	
Matrix Spike (7K19060-MS1)				QC Source: BQK0197-01				Extracted: 11/19/07 17:20						
Mercury	EPA 7470A	0 00547	---	0 000200	mg/l	1x	ND	0 00500	109%	(75-125)	--	--	11/19/07 18:33	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K26030 **Water Preparation Method: EPA 200 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K26030-BLK1)								Extracted: 11/26/07 11:56						
Sodium	EPA 6010B	ND	---	0 250	mg/l	1x	--	--	--	--	--	--	11/28/07 15 02	
Aluminum	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Magnesium	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3 00	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0 150	"	"	--	--	--	--	--	--	"	
Calcium	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
LCS (7K26030-BS1)								Extracted: 11/26/07 11:56						
Aluminum	EPA 6010B	5 64	---	0 250	mg/l	1x	--	5 00	113%	(80-120)	--	--	11/28/07 15 06	
Magnesium	"	5 92	---	0 500	"	"	--	"	118%	"	--	--	"	
Potassium	"	11 3	---	3 00	"	"	--	10 0	113%	"	--	--	"	
Iron	"	5 79	---	0 150	"	"	--	5 00	116%	"	--	--	11/29/07 11:38	
Sodium	"	5 86	---	0 250	"	"	--	"	117%	"	--	--	11/28/07 15 06	
Calcium	"	5 72	---	0 750	"	"	--	"	114%	"	--	--	"	
Duplicate (7K26030-DUP1)					QC Source: BQK0197-01			Extracted: 11/26/07 11:56						
Aluminum	EPA 6010B	ND	---	0 250	mg/l	1x	ND	--	--	--	NR	(25)	11/28/07 15:16	
Calcium	"	128	---	0 750	"	"	127	--	--	--	0 862%	"	"	
Iron	"	ND	---	0 150	"	"	ND	--	--	--	NR	(30)	"	
Sodium	"	24 6	---	0 250	"	"	24 5	--	--	--	0 447%	"	"	
Potassium	"	3 92	---	3 00	"	"	3 92	--	--	--	0 0765%	"	"	
Magnesium	"	80 8	---	0 500	"	"	80 5	--	--	--	0 298%	"	"	
Matrix Spike (7K26030-MS1)					QC Source: BQK0197-01			Extracted: 11/26/07 11:56						
Potassium	EPA 6010B	15 0	---	3 00	mg/l	1x	3 92	10 0	111%	(63-155)	--	--	11/28/07 15 09	
Iron	"	5 76	---	0 150	"	"	ND	5 00	115%	(78-130)	--	--	"	
Magnesium	"	84 1	---	0 500	"	"	80 5	"	71 8%	(76-129)	--	--	"	MH
Sodium	"	29 7	---	0 250	"	"	24 5	"	103%	(74-144)	--	--	"	
Aluminum	"	5 52	---	0 250	"	"	ND	"	110%	(74-142)	--	--	"	
Calcium	"	128	---	0 750	"	"	127	"	20 0%	(70-137)	--	--	"	MH
Post Spike (7K26030-PS1)					QC Source: BQK0197-01			Extracted: 11/26/07 11:56						
Potassium	EPA 6010B	14 5	---	3 00	mg/l	1x	3 92	10 0	106%	(75-125)	--	--	11/28/07 15:13	
Sodium	"	29 0	---	0 250	"	"	24 5	5 00	89 8%	"	--	--	"	
Magnesium	"	82 6	---	0 500	"	"	80 5	"	42 4%	"	--	--	"	
Aluminum	"	5 17	---	0 250	"	"	ND	"	103%	"	--	--	"	
Iron	"	5 40	---	0 150	"	"	ND	"	108%	"	--	--	"	
Calcium	"	126	---	0 750	"	"	127	"	-28 0%	"	--	--	"	

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Kate Haney For Blake T Meinert, Project Manager

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19036 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19036-BLK1)								Extracted: 11/19/07 12:03						
Acetone	EPA 8260B	ND	---	10 0	ug/l	1x	--	--	--	--	--	--	11/19/07 14:12	
Benzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	

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Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19036 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K19036-BLK1)							Extracted: 11/19/07 12:03							
Hexachlorobutadiene	EPA 8260B	ND	---	2 50	ug/l	1x	--	--	--	--	--	--	11/19/07 14:12	
Methyl tert-butyl ether	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5 00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 104%*			*Limits: 76-138%*	"							*11/19/07 14:12*	
Toluene-d8		*106%*			*80-120%*	"							"	
4-BFB		*102%*			*80-120%*	"							"	

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Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K19036 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7K19036-BS1)								Extracted: 11/19/07 12:03						
Benzene	EPA 8260B	18 4	---	0 200	ug/l	1x	--	20 0	91 9%	(80-120)	--	--	11/19/07 12:43	
Chlorobenzene	"	19 1	---	0 200	"	"	--	"	95 3%	"	--	--	"	
1,1-Dichloroethene	"	18 0	---	0 200	"	"	--	"	89 8%	"	--	--	"	
Methyl tert-butyl ether	"	16 9	---	1 00	"	"	--	"	84 6%	"	--	--	"	
Toluene	"	18 6	---	0 200	"	"	--	"	92 8%	(75-125)	--	--	"	
Trichloroethene	"	18 5	---	0 200	"	"	--	"	92 3%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 102%*			*Limits: 76-138%*	"							*11/19/07 12:43*	
Toluene-d8		*106%*			*80-120%*	"							"	
4-BFB		*97.4%*			*80-120%*	"							"	
Matrix Spike (7K19036-MS1)							QC Source: BQK0193-02		Extracted: 11/19/07 12:03					
Benzene	EPA 8260B	19 3	---	0 200	ug/l	1x	ND	20 0	96 4%	(75-125)	--	--	11/19/07 13 09	
Chlorobenzene	"	19 4	---	0 200	"	"	ND	"	97 2%	"	--	--	"	
1,1-Dichloroethene	"	18 5	---	0 200	"	"	ND	"	92 6%	(61-120)	--	--	"	
Methyl tert-butyl ether	"	16 2	---	1 00	"	"	0 110	"	80 4%	(75-125)	--	--	"	
Toluene	"	19 1	---	0 200	"	"	ND	"	95 4%	(68-125)	--	--	"	
Trichloroethene	"	19 1	---	0 200	"	"	0 460	"	93 3%	(75-125)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 102%*			*Limits: 76-138%*	"							*11/19/07 13:09*	
Toluene-d8		*105%*			*80-120%*	"							"	
4-BFB		*98.2%*			*80-120%*	"							"	
Matrix Spike Dup (7K19036-MSD1)							QC Source: BQK0193-02		Extracted: 11/19/07 12:03					
Benzene	EPA 8260B	18 2	---	0 200	ug/l	1x	ND	20 0	90 9%	(75-125)	5 82%	(20)	11/19/07 13:35	
Chlorobenzene	"	19 4	---	0 200	"	"	ND	"	97 0%	"	0 155%	"	"	
1,1-Dichloroethene	"	17 5	---	0 200	"	"	ND	"	87 4%	(61-120)	5 78%	(30)	"	
Methyl tert-butyl ether	"	16 7	---	1 00	"	"	0 110	"	83 0%	(75-125)	3 16%	"	"	
Toluene	"	18 7	---	0 200	"	"	ND	"	93 4%	(68-125)	2 22%	(20)	"	
Trichloroethene	"	18 5	---	0 200	"	"	0 460	"	90 2%	(75-125)	3 30%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 101%*			*Limits: 76-138%*	"							*11/19/07 13:35*	
Toluene-d8		*106%*			*80-120%*	"							"	
4-BFB		*100%*			*80-120%*	"							"	

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Kate Haney For Blake T Meinert, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
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PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27015-BLK1)							Extracted: 11/27/07 09:30							
Acetone	EPA 8260B	ND	---	10 0	ug/l	1x	--	--	--	--	--	--	11/27/07 11:13	
Benzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

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Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7K27015-BLK1)								**Extracted: 11/27/07 09:30**						
Hexachlorobutadiene	EPA 8260B	ND	---	2 50	ug/l	1x	--	--	--	--	--	--	11/27/07 11:13	
Methyl tert-butyl ether	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	2 00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2 50	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	I
1,2,4-Trichlorobenzene	"	ND	---	1 00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0 200	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0 250	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0 500	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0 750	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 93.2%*			*Limits: 76-138%*	"							*11/27/07 11:13*	
Toluene-d8		*99.6%*			*80-120%*	"							"	
4-BFB		*100%*			*80-120%*	"							"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 7K27015 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7K27015-BS1)								**Extracted: 11/27/07 09:30**						
Benzene	EPA 8260B	19 9	---	0 200	ug/l	1x	--	20 0	99 4%	(80-120)	--	--	11/27/07 09 59	
Chlorobenzene	"	18 8	---	0 200	"	"	--	"	94 2%	"	--	--	"	
1,1-Dichloroethene	"	20 0	---	0 200	"	"	--	"	100%	"	--	--	"	
Methyl tert-butyl ether	"	19 8	---	1 00	"	"	--	"	99 2%	"	--	--	"	
Toluene	"	19 3	---	0 200	"	"	--	"	96 6%	(75-125)	--	--	"	
Trichloroethene	"	19 5	---	0 200	"	"	--	"	97 6%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.2%*			*Limits: 76-138%*	"							*11/27/07 09:59*	
Toluene-d8		*97.8%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	
LCS Dup (7K27015-BSD1)								**Extracted: 11/27/07 09:30**						
Benzene	EPA 8260B	20 3	---	0 200	ug/l	1x	--	20 0	101%	(80-120)	2 09%	(20)	11/27/07 10:35	
Chlorobenzene	"	20 0	---	0 200	"	"	--	"	100%	"	5 98%	"	"	
1,1-Dichloroethene	"	20 9	---	0 200	"	"	--	"	104%	"	4 25%	"	"	
Methyl tert-butyl ether	"	20 5	---	1 00	"	"	--	"	103%	"	3 52%	"	"	
Toluene	"	20 6	---	0 200	"	"	--	"	103%	(75-125)	6 46%	"	"	
Trichloroethene	"	19 9	---	0 200	"	"	--	"	99 6%	(80-120)	2 08%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 94.4%*			*Limits: 76-138%*	"							*11/27/07 10:35*	
Toluene-d8		*101%*			*80-120%*	"							"	
4-BFB		*98.6%*			*80-120%*	"							"	

TestAmerica - Seattle, WA

Kate Haney For Blake T Meinert, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	11/30/07 16:35

Notes and Definitions

Report Specific Notes:

B4	-	Target analyte detected in blank at/above method acceptance criteria.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
S3	-	Post digestion spike is out of acceptance limits for this analyte

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica - Seattle, WA

Kate Haney For Blake T. Meinert, Project Manager

APPENDIX B

SAMPLE INTEGRITY DATA SHEETS (SIDS)

X002.14

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-2-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/14/07 **Time** 12:59

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 – 6.36 ft below TOC (bottom at 209.7 ft, 4-in casing)

Sand Pack Interval - NA

Packer Depth – 187.3 ft bgs (16 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-2
Date 11/14/07
Time Begin Purge 1259
Time Collect Sample 1345

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1304	5 gal	6.95	116.1	11.2	4.91	0.37	630.2
	1313	16 gal	6.94	117.6	11.3	2.76	0.37	664.7
	1329	32 gal	6.94	122.9	11.3	1.34	0.37	627.7
	1342	48 gal	6.94	126.4	11.3	0.22	0.50	642.5

Comments: Strong sulphurous odor
Rate of Purge = 5 gal / 55 min = 1 gal / min

Sampler's Initials [signature]

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-3-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/14/07 **Time** 0808

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 – 11.32 ft below TOC (bottom at ft, 4-in casing)

Sand Pack Interval – 47.1 to 64.8 ft bgs (8-in hole)

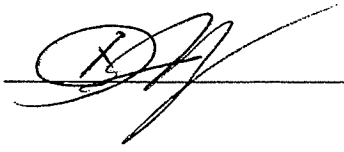
Packer Depth – NA (18 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature)  **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-3
Date 11/14/07
Time Begin Purge 0808
Time Collect Sample 0955

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0817	5 gal	8.07	92.6	12.2	0.51	0.52	875.9
	0827	10 gal	7.99	91.6	12.3	0.32	0.51	886.7
	0842	18 gal	7.96	91.3	12.3	0.28	0.41	834.7
	0916	36 gal	7.90	91.9	12.4	0.23	0.30	799.4
	0950	54 gal	7.88	93.7	12.5	0.35	0.58	804.5

Comments:

Purge rate = 10 gal / 19 min = 0.53 gal/min

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-4-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/14/07 **Time** 11:49

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 – 8.32 ft below TOC (bottom at ft, 4-in casing)

Sand Pack Interval – 189 to 209 ft bgs (11.7 gal/sandpack vol)

Packer Depth – 187.3 ft bgs (14 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) **Date** 11/16/07

FIELD PARAMETERS SHEET

Well ID LMW-4
Date 11/14/07
Time Begin Purge 1149
Time Collect Sample 1245

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1155	5 gal	7.13	112.6	11.0	1.54	0.31	502.6
	1206	14 gal	7.01	113.6	11.1	0.89	0.30	499.6
	1223	25 gal	6.97	114.6	11.1	0.63	0.24	507.9
	1240	42 gal	6.95	115.5	11.3	0.27	0.31	517.8

Comments: Slight sulphurous odor
Rate of Purge = 5 gal / 6 min = 0.83 gal / min
Strong sulphurous odor by end of purge.

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-5-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/14/07 **Time** 1004

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 – 12.87 ft below TOC (bottom at 241.8 ft, 4-in casing)

Sand Pack Interval - NA

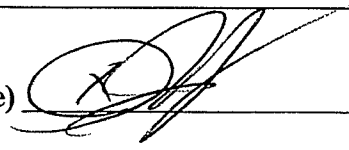
Packer Depth – 222.11 ft bgs (14 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature)  **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-5
Date 11/14/07
Time Begin Purge 1004
Time Collect Sample 1100

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1010	5 gal	6.99	96.5	11.0	0.37	0.62	506.5
	1017	10 gal						
	1022	14 gal	6.99	96.8	11.1	0.34	0.73	558.6
	1040	28 gal	6.97	98.7	11.1	0.25	1.02	550.3
	1058	42 gal	6.98	100.5	11.2	0.21	0.97	589.5

Comments:
Rate of Purge = 10 gal / 13 min = 0.77 gal / min
Strong sulphurous odor

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-6-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/15/07 **Time** 0830

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 – 25.32 ft below TOC

(23.5 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-6
Date 11/15/07
Time Begin Purge 0830
Time Collect Sample 1010

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	0837	5 gal	7.07	80.9	10.2	1.17	3.01	399.6
	0844	10 gal	7.03	76.4	10.2	2.14	0.49	409.5
	0903	23.5 gal	6.96	76.7	10.8	0.86	0.40	387.7
	0936	47	6.93	79.0	11.2	0.46	0.56	493.9
	1009	60.5 gal	6.93	80.5	11.5	0.50	0.92	520.5

Comments: Rate of Purge = 10 gal / 14 min = 0.71

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-7-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/15/07 **Time** 1130

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 – 225.7 ft below TOC

(23 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) _____ **Date** 11/16/07

Supervisor (signature) _____ **Date** _____

FIELD PARAMETERS SHEET

Well ID LMW-7
Date 11/15/07
Time Begin Purge 1136
Time Collect Sample 1310

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1142	5 gal	7.24	135.2	12.6	2.60	1.04	830.1
	1149	10 gal						
	1206	23 gal	7.20	122.7	13.1	0.54	1.28	763.1
	1236	46 gal	7.14	121.5	13.2	0.38	0.52	687.8
	1306	69 gal	7.15	126.6	13.4	0.39	0.55	604.4

Comments:
Rate of purge = 10 gal/13 min = 0.77 gal/min
Sulphurous odor

Sampler's Initials [signature]

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-8-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/13/07 **Time** 1020

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 – 3.28 ft below TOC (bottom at 13 ft, 2-in casing) (1.7 gal/casing vol)

Sand Pack Interval – 6 to 13 ft (8-in hole) (4.3 gal/sandpack vol)

Packer Depth – NA (6 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-8
Date 11/13/07
Time Begin Purge 1020
Time Collect Sample 1235

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh R.I mV
	1037	2.0	7.16	98.3	11.9	0.56	8.45	153.9
	1105	5.5	7.04	89.3	11.1	0.49	1.44	181.1
	1145	11	6.98	91.0	11.7	0.49	1.01	694.3
	1230	16.5	6.99	90.7	11.6	0.41	0.96	670.4

Comments:

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-9-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/15/07 **Time** 1328

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 – 98.68 ft below TOC (bottom at 159 ft, 2-in casing) (10.3 gal/casing vol)

Sand Pack Interval – 143 to 159 ft (8-in hole) (9.7 gal/sandpack vol)

Packer Depth – NA (20 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-9
Date 11/15/07
Time Begin Purge 1328
Time Collect Sample 1440

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1331	5 gal						
	1337	10 gal	7.01	108.8	12.9	0.39	0.62	495.7
	1349	20 gal	7.01	110.5	12.9	0.36	0.56	457.9
	1413	40 gal	7.00	110.5	12.9	0.27	0.61	393.3
	1437	60 gal	7:01	110.3	12.5	0.25	0.58	299.7

Comments:
Purge rate = 5 gal / 6 min = 0.84 gal/min
Sulphurous odor

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-10-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/15/07 **Time** 1021

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 ft below TOC (bottom at 286 ft, 4-in casing)

Sand Pack Interval – 258 to 289 ft bgs

Packer Depth – NA

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-10
Date 11/15/07
Time Begin Purge 1021
Time Collect Sample 1120

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1035	5 gal	8.83	170.0	10.2	0.22	0.64	839.8
	1049	10 gal	8.84	173.7	10.2	0.16	1.01	869.6
	1103	15 gal	8.84	173.4	10.2	0.16	0.51	883.9
	1117	20 gal	8.85	172.5	10.3	0.18	0.46	886.9

Comments:

Strong sulphurous odor

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-11-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 11/16/07 **Time** 0835

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 – 156.56 ft below TOC (bottom at 707 ft, 4-in casing) (363 gal/casing vol)

Sand Pack Interval – 688 to 707 ft (8-in hole) (9.2 gal/sandpack vol)

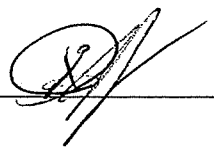
Packer Depth – NA (372 gal/total well vol)

Sample Description

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 – 500 ml	Metals	HDPE	HNO3 (filter)
1 – 500 ml	Metals	HDPE	None (non)
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature)  **Date** 11/16/07

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-11
Date 11/16/07
Time Begin Purge 0835
Time Collect Sample 1135

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1000	~1 gal	7.28	101.4	10.4	1.36	2.14	-134
	1030	~4 gal	7.33	100.2	10.5	0.71	0.87	-136.4
	1100	~7 gal	7.32	99.0	10.5	0.56	0.91	-195.7
	1130	~10 gal	7.32	100.7	10.5	0.49	0.86	-183.2

Comments:

0835 : Set Grundfos pump to ~170 ft below TOC. Began purge. Water is clear, slight sulphurous odor. Controller set at 309 Hz
0840 : Complication with pump - stopped dead.
0917 : Problem resolved. Purge resumed.
0949 : Began purge with bladder pump after pumping in excess of 50 gal with Grundfos.

Sampler's Initials [signature]

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-2-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/16/08 **Time** 1215

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 – ~~6.36~~ ft below TOC (bottom at 209.7 ft, 4-in casing) 6.18 Ft from TOC

Sand Pack Interval - NA

Packer Depth – 187.3 ft bgs (16 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) _____ **Date** 1/16/08

Supervisor (signature) _____ **Date** _____

FIELD PARAMETERS SHEET

Well ID LMW-2
Date 1/16/08
Time Begin Purge 1140
Time Collect Sample 1215

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1143	5	6.93	773	10.7	0.12	0.20	309.1
	1150	16	6.93	773	10.8	0.09	0.17	289.0
	1200	32	6.93	773	10.8	0.08	0.15	280.9
	1210	48	6.93	771	10.8	0.08	0.35	277.1

Comments:

Rate of purge = 5 gal / 3 min = 1.67 gal/min

Strong sulphurous odor

Sampler's Initials X

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-5-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/18/08 **Time** 1130

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 – ~~12.87~~ ft below TOC (bottom at 241.8 ft, 4-in casing) 13.19 below TOC

Sand Pack Interval - NA

Packer Depth – 222.11 ft bgs (14 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 1/18/08

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-5
Date 1/18/08
Time Begin Purge 1048
Time Collect Sample 1130

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1052	5 gal	6.77	600	10.8	0.25	0.31	396.1
	1104	15 gal	6.69	604	10.9	0.15	0.38	382.1
	1116	30 gal	6.66	606	11.0	0.14	0.47	367.8
	1128	45 gal	6.67	607	11.0	0.12	0.53	364.7

Comments:

Rate of purge = 5 gal / 4 min = 1.25 gal/min
Distinct sulphurous odor.

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-6-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/16/08 **Time** 1330

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 – ~~25.32~~ ft below TOC 23.48

(23.5 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 – 40 mL	VOA	VOA Vial	HCl
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 1/16/08

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-6
Date 1/16/08
Time Begin Purge 1240
Time Collect Sample 1330

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1243	5 gal	6.92	188.4	9.4	1.31	5.41	387.9
	1258	24 gal	6.87	196.0	9.7	0.57	0.79	376.6
	1310	48 gal	6.86	200.0	9.9	0.27	0.62	372.5
	1325	72 gal	6.86	203.0	10.0	0.20	0.42	372.1

Comments:

Rate of purge = 5 gal / 3 min = 1.67 gal/min

Sampler's Initials X

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-7-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/16/08 **Time** 1125

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 – ~~225.7~~ ft below TOC 227.47 from TOC, not adjusted for incline of well.

(23 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 – 40 mL	VOA	VOA Vial	HCl

Sampler (signature) [signature] **Date** 1/16/08

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-7
Date 1/16/07
Time Begin Purge 0925
Time Collect Sample 1125

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0933	5 gal	7.48	463	12.6	0.48	0.85	497.8
	0941	10 gal						
	1010	23 gal	7.21	515	12.6	0.53	3.40	388.2
	1047	46 gal	7.03	552	12.3	0.14	0.37	362.3
	1124	69 gal	7.02	556	12.3	0.12	0.37	359.8

Comments:
Rate of purge = 10 gal / 16 min = 0.625 gal/min
Distinct sulphurous odor

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-9-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/18/08 **Time** 0945

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 – ~~98.68~~ ft below TOC (bottom at 159 ft, 2-in casing) (10.3 gal/casing vol) 99.01

Sand Pack Interval – 143 to 159 ft (8-in hole) (9.7 gal/sandpack vol)

Packer Depth – NA (20 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 – 40 mL	VOA	VOA Vial	HCl

Sampler (signature) [signature] **Date** 1/18/08

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-9
Date 1/18/08
Time Begin Purge 0842
Time Collect Sample 0945

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	0846	5 gal	6.					
	0852	10 gal	6.91	575	11.8	0.37	9.92	369.9
	0902	20 gal	6.88	573	11.9	0.23	0.70	373.4
	0922	40 gal	6.96	572	12.3	0.49	2.12	375.7
	0942	60 gal	6.93	573	12.6	0.64	1.08	382.0

Comments:

Rate of purge = 10 gal / 10 min = 1 gal/min

Water very gray upon initial purge. Visibly clear by ~5 gal.

Strong sulphurous odor.

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-10-0108

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/17/08 **Time** 1020

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 ft below TOC (bottom at 286 ft, 4-in casing) Water at TOC

Sand Pack Interval – 258 to 289 ft bgs

Packer Depth – NA

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
3 – 40 mL	VOA	VOA Vial	HCl

Sampler (signature) [signature] **Date** 1/17/08

Supervisor (signature) **Date**

FIELD PARAMETERS SHEET

Well ID LMW-10
Date 1/17/08
Time Begin Purge 0915
Time Collect Sample 1020

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	0930	5 gal	8.68	362	9.6	0.12	0.25	355.7
	0945	10 gal	8.67	361	9.7	0.11	0.32	316.0
	1000	15 gal	8.70	359	9.7	0.11	0.30	296.6
	1015	20 gal	8.70	358	9.7	0.11	0.29	294.3

Comments:

Rate of purge = 5 gal / 15 min = 0.33 gal/min

Strong sulphurous odor

Sampler's Initials

FIELD PARAMETERS SHEET

Well ID LMW-11
Date 1/17/08
Time Begin Purge 1040
Time Collect Sample 1240

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	E_h Rel mV
	1130	~3 gal	7.36	507	10.0	0.83	0.43	356.8
	1200	~6 gal	7.36	506	10.0	0.95	0.44	361.3
	1230	~9 gal	7.34	501	10.1	0.31	0.21	354.2

Comments:

1040 Begin purge with Grundfos pump from ~ 160 ft. Controller set to 300 Hz.
Rate of purge = 5 gal / 5 min = 1 gal / min on Grundfos
Water is clear with strong sulphurous odor.
1100 Begin purge with bladder pump. Controller set to 1 CPM at ~ 90 psi.

Sampler's Initials X

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-11-1107

Sampling Location Groundwater Monitoring Well End of dedicated sampling tube

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

Type of Sampler Dedicated Pump Grundfos or QED Bladder

Date 1/17/08 **Time** 1240

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 – 156.56 ft below TOC (bottom at 707 ft, 4-in casing) (363 gal/casing vol)

Sand Pack Interval – 688 to 707 ft (8-in hole) (9.2 gal/sandpack vol)

Packer Depth – NA (372 gal/total well vol)

Sample Description

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

SEE FIELD PARAMETERS SHEET

Aliquot Amount	Analysis	Container	Preservation / Amount
2 – 1 Liter	TPH-HCID	Glass Amber	HCl

Sampler (signature) [signature] **Date** 1/17/08

Supervisor (signature) **Date**