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

July 15, 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 – MAY, 2008

Dear Mr. Kombol:

Golder Associates Inc. (Golder) completed an interim groundwater monitoring event at the Landsburg Mine Site during May, 2008. 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. Groundwater samples were also collected 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,

Several volatile organics compounds associated with fuels had previously been detected from newly installed monitoring wells during previous groundwater monitoring events, but were not detected in this most recent 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 five sampling periods obtained in February 2006, December 2006, June 2007, November 2007, and Mat 2008. 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 have been steadily declining after well installation and became undetectable for the last two 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.

for Ian Young,
Project Hydrogeologist

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

Attachments: Tables 1-2
Figure
Appendices A-B

cc: Landsburg Mine Site PLP Group
Jerome Cruz, Ecology

IY/DJM/tp

- Analyses of groundwater for volatile organic compounds (EPA Method 8260B), priority pollutant metals (EPA Method 6000/7000 Series), and a petroleum hydrocarbon identification scan (HCID).

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

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, of Bothell, Washington, for analyses. Screening levels are based on maximum contaminant levels (MCLs) or State of Washington MTCA Method B groundwater cleanup levels whichever value is less. In cases where an established MCL or Method B Cleanup Level does not exist, a similar (surrogate) compound regulatory screening level is identified for comparison.

The analytical results indicate no significant changes in groundwater conditions from those observed during the remedial investigation (RI) and on-going interim groundwater monitoring. Table 2 presents the field parameter measurements and laboratory analytical results for each groundwater sample. Laboratory analyses did not detect any volatile organic compound (VOC) or petroleum hydrocarbon (HCID) in any of the groundwater samples. The primary parameters detected in groundwater samples were metals that are naturally occurring. The method reporting limits (MRLs) and method detection limits (MDLs) for all analytes were at or below acceptable concentrations under the Model Toxics Control Act (MTCA).

Several groundwater samples from site wells contained iron and manganese concentrations above State of Washington secondary drinking water levels (SMCLs) of 0.3µg/L and 0.05µg/L, respectively, which are not health-based standards, but are protective of aesthetic qualities of water. Iron and Manganese are naturally occurring metals that are typically associated with groundwater from coal mines. The concentrations of iron and manganese detected during the May, 2008 sampling event are similar to concentrations detected during the RI (Golder, 1996)[1] and the Interim Groundwater Sampling events previously conducted at the site.

The groundwater sample from the deep well (LMW-11) contained total arsenic at a concentration of 6.9 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 groundwater and the unfiltered sample contain suspended solid particles probably form the coal mine residues that add arsenic to the water sample. The MTCA groundwater cleanup level is based on groundwater background levels in the State. It is probable that the arsenic concentrations are naturally occurring deep within the mine where groundwater is more stagnant and its geochemistry may be different than shallow groundwater within the mine.

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

TABLES

Groundwater Elevation Data Collected May 6, 2008
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	9:20 AM	9:25 AM	11:10 AM	8:40 AM	11:05 AM	8:25 AM	9:40 AM	11:15 AM	8:45 AM	8:20 AM	10.55 AM	8:05 AM	8:42 AM	NA	NA
Measured to Top of PVC	ft bgs	141.86	131.18	6.86	11.90	8.88	13.44	23.42	225.73	3.97	99.38	0.00	157.26	6.51	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	**623.30**	**628.33**	**610.87**	**644.85**	**610.38**	**644.83**	**608.91**	**545.78**	**643.00**	**644.61**	**618.87**	**644.61**	**644.86**	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

May 2008 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2 11/14/2007	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-6 1/16/2008	LMW-6 Duplicate	LMW-7 1/16/2008	LMW-8 11/13/2007	LMW-9 1/18/2008	LMW-10 1/17/2008	LMW-11 11/16/2007
Field Parameter												
pH	stnd	6.59	7.43	6.84	6.74	6.69	NA	6.97	6.64	6.89	8.44	7.11
Conductivity	uS/cm	746	268	784	677	183	NA	462	466	510	315	417
Dissolved Oxygen	mg/L	0.12	0.16	0.12	0.14	0.21	NA	0.26	0.24	0.18	0.11	0.28
Temperature	°C	11.2	11.6	10.9	11.1	11.3	NA	14.1	9.5	15.6	9.8	10.4
E_h	Rel mV	-244	-20.9	-261	-166	-50.3	NA	-94.2	-104.0	-130.0	-203	-152
Turbidity	NTU	0.47	0.44	0.54	0.63	0.83	NA	2.1	0.44	0.71	0.52	1.24
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	**0.452**	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	0.001 U	**0.00266**	**0.0017**	0.001 U	0.001 U	**0.00694**
Barium	mg/L	**0.325**	**0.0739**	**0.368**	**0.279**	**0.103**	**0.103**	**0.465**	**0.0416**	**0.298**	**0.0159**	**0.257**
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	**119**	**35**	**121**	**103.0**	**26.7**	**26.9**	**55.5**	**61.2**	**83.9**	**6.33**	**63.3**
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	0.001 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
Iron	mg/L	0.15 U	0.15 U	**0.839**	**0.204**	**2.1**	**2.1**	**1.22**	**10.4**	**1.780**	**2.70**	**1.6**
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	0.001 U
Magnesium	mg/L	**75.1**	**14.6**	**74.8**	**60.1**	**13.5**	**13.7**	**26**	**34.3**	**47.9**	**2.18**	**27.9**
Manganese	mg/L	**0.228**	**0.0464**	**0.167**	**0.244**	**0.0295**	**0.0288**	**0.134**	**0.473**	**0.172**	0.01 U	**0.224**
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	**0.00109**	**0.00102**	**0.00114**	0.001 U	0.001 U	0.001 U	**0.001**	0.001 U	**0.00114**	0.001 U	**0.00107**
Potassium	mg/L	**3.7**	2.0 U	**4.14**	3.0 U	3.0 U	3.0 U	**3.00**	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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	**0.00142**
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

May 2008 Groundwater Analytical Results Landsburg Mine Site

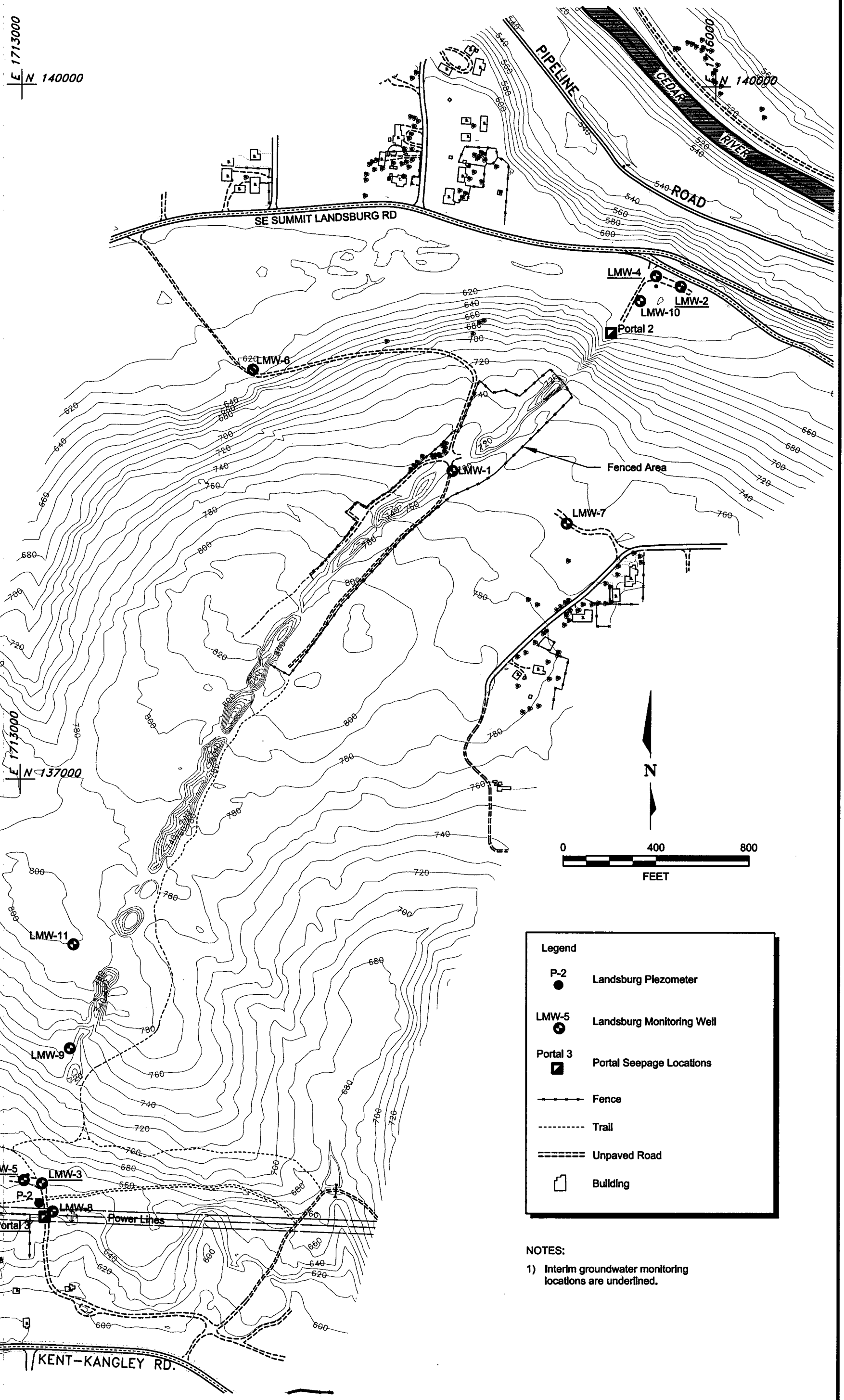
ANALYTE	UNITS	LMW-2 11/14/2007	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-6 1/16/2008	LMW-6 Duplicate	LMW-7 1/16/2008	LMW-8 11/13/2007	LMW-9 1/18/2008	LMW-10 1/17/2008	LMW-11 11/16/2007
sec-Butylbenzene	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
tert-Butylbenzene	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

May 2008 Groundwater Analytical Results Landsburg Mine Site

ANALYTE	UNITS	LMW-2 11/14/2007	LMW-3 11/14/2007	LMW-4 11/14/2007	LMW-5 11/14/2007	LMW-6 1/16/2008	LMW-6 Duplicate	LMW-7 1/16/2008	LMW-8 11/13/2007	LMW-9 1/18/2008	LMW-10 1/17/2008	LMW-11 11/16/2007
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	--	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Gas Range	mg/L	--	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Heavy Fuel Oil	mg/L	--	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Insulating Oil	mg/L	--	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Kerosene Range	mg/L	--	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Lube Oil Range	mg/L	--	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U

FIGURE



NOTES:

1) Interim groundwater monitoring locations are underlined.

FIGURE 1

GROUNDWATER MONITORING LOCATIONS

PALMER/LANDSBURG MINE/WA

Golder Associates

APPENDIX A

LABORATORY ANALYTICAL 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

May 20, 2008

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 05/09/08 16:20. The following list is a summary of the Work Orders contained in this report, generated on 05/20/08 16:06.

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

Work Order	Project	ProjectNumber
BRE0129	Landsburg Mine	923-1000-002-R273

Curtis D. Armstrong 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	05/20/08 16:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-9-0508	BRE0129-01	Water	05/09/08 14:50	05/09/08 16:20
LMW-10-0508	BRE0129-02	Water	05/09/08 08:25	05/09/08 16:20
LMW-11-0508	BRE0129-03	Water	05/09/08 12:40	05/09/08 16:20
Trip Blank	BRE0129-04	Water	05/09/08 16:20	05/09/08 16:20

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-01 (LMW-9-0508)		**Water**			**Sampled: 05/09/08 14:50**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 20:00	
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			*90.3%*		*50 - 150 %*	"			"	
Octacosane			*110%*		*50 - 150 %*	"			"	
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 20:26	
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			*90.1%*		*50 - 150 %*	"			"	
Octacosane			*107%*		*50 - 150 %*	"			"	
BRE0129-03 (LMW-11-0508)		**Water**			**Sampled: 05/09/08 12:40**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 20:52	
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			*88.5%*		*50 - 150 %*	"			"	
Octacosane			*111%*		*50 - 150 %*	"			"	

Curtis D. Armstrong 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	05/20/08 16:06

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-01 (LMW-9-0508)		**Water**			**Sampled: 05/09/08 14:50**					
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:35	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Arsenic	"	ND	----	0.00100	"	"	"	"	"	
Barium	"	**0.298**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**83.9**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:35	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**1.78**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:35	
Lead	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Magnesium	EPA 6010B	**47.9**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:35	
Manganese	EPA 6020	**0.172**	----	0.0100	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:33	
Nickel	EPA 6020	**0.00114**	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:35	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:47	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
Aluminum	EPA 6010B	**0.452**	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:39	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	
Arsenic	"	ND	----	0.00100	"	"	"	"	"	
Barium	"	**0.0159**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**6.33**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:39	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**2.70**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:39	
Lead	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	
Magnesium	EPA 6010B	**2.18**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:39	
Manganese	EPA 6020	ND	----	0.0100	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:36	
Nickel	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:39	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:53	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
Silver	EPA 6020	ND	----	0.00100	mg/l	1x	8E13017	05/13/08 08:06	05/13/08 15:53	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	
BRE0129-03 (LMW-11-0508)		**Water**			**Sampled: 05/09/08 12:40**					
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:42	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Arsenic	"	**0.00694**	----	0.00100	"	"	"	"	"	
Barium	"	**0.257**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**63.3**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:42	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**1.60**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:42	
Lead	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Magnesium	EPA 6010B	**27.9**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:42	
Manganese	EPA 6020	**0.224**	----	0.0100	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:38	
Nickel	EPA 6020	**0.00107**	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:42	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E13017	05/13/08 08:06	05/13/08 15:59	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	**0.00142**	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-01 (LMW-9-0508)		**Water**			**Sampled: 05/09/08 14:50**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 04:51	
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

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-01 (LMW-9-0508)		**Water**			**Sampled: 05/09/08 14:50**					
Isopropylbenzene	EPA 8260B	ND	----	0.500	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 04:51	
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			*96.1%*		*76 - 138 %*	"			"	
Toluene-d8			*89.6%*		*80 - 120 %*	"			"	
4-BFB			*92.2%*		*80 - 120 %*	"			"	
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 05:18	
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

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
Chlorobenzene	EPA 8260B	ND	----	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 05:18	
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

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-02 (LMW-10-0508)		**Water**			**Sampled: 05/09/08 08:25**					
1,1,1-Trichloroethane	EPA 8260B	ND	----	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 05:18	
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 %*	"			"	
Toluene-d8			*88.0%*		*80 - 120 %*	"			"	
4-BFB			*92.8%*		*80 - 120 %*	"			"	
BRE0129-03 (LMW-11-0508)		**Water**			**Sampled: 05/09/08 12:40**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 05:45	
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

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-03 (LMW-11-0508)		**Water**			**Sampled: 05/09/08 12:40**					
Dichlorodifluoromethane	EPA 8260B	ND	—	0.500	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 05:45	
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			*97.4%*		*76 - 138 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-03 (LMW-11-0508)		**Water**			**Sampled: 05/09/08 12:40**					
Toluene-d8		*91.2%*			*80 - 120 %*	*1x*			*05/17/08 05:45*	
4-BFB		*91.2%*			*80 - 120 %*	"			"	
BRE0129-04 (Trip Blank)		**Water**			**Sampled: 05/09/08 16:20**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 02:36	
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

Curtis D. Armstrong 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	05/20/08 16:06

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-04 (Trip Blank)		**Water**			**Sampled: 05/09/08 16:20**					
Ethylbenzene	EPA 8260B	ND	—	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 02:36	
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			*97.8%*		*76 - 138 %*	"			"	
Toluene-d8			*92.0%*		*80 - 120 %*	"			"	
4-BFB			*94.4%*		*80 - 120 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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

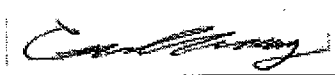
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 16:06

Total Metals by EPA 200 Series Methods

TestAmerica Spokane

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0129-01 (LMW-9-0508)		**Water**				**Sampled: 05/09/08 14:50**				
Sodium	EPA 200.7	**16.7**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:23	
BRE0129-02 (LMW-10-0508)		**Water**				**Sampled: 05/09/08 08:25**				
Sodium	EPA 200.7	**77.7**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:29	
BRE0129-03 (LMW-11-0508)		**Water**				**Sampled: 05/09/08 12:40**				
Sodium	EPA 200.7	**19.7**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:33	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E12014 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12014-BLK1)									Extracted: 05/12/08 09:03					
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/15/08 15:39	
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: 99.4%*			*Limits: 50-150%*	"							*05/15/08 15:39*	
Octacosane		*115%*			*50-150%*	"							"	
LCS (8E12014-BS1)									Extracted: 05/12/08 09:03					
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	96.4%	(58-125)	--	--	05/15/08 16:06	
Surrogate(s): 2-FBP		*Recovery: 102%*			*Limits: 50-150%*	"							*05/15/08 16:06*	
Octacosane		*118%*			*50-150%*	"							"	
LCS Dup (8E12014-BSD1)									Extracted: 05/12/08 09:03					
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	94.2%	(58-125)	2.27%	(40)	05/15/08 16:31	
Surrogate(s): 2-FBP		*Recovery: 102%*			*Limits: 50-150%*	"							*05/15/08 16:31*	
Octacosane		*116%*			*50-150%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E12043 **Water Preparation Method: EPA 3010A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12043-BLK1)								Extracted: 05/12/08 14:12						
Calcium	EPA 6010B	ND	---	0.750	mg/l	1x	--	--	--	--	--	--	05/13/08 11:33	
Magnesium	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0.150	"	"	--	--	--	--	--	--	"	
Aluminum	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
LCS (8E12043-BS1)								Extracted: 05/12/08 14:12						
Potassium	EPA 6010B	9.22	---	3.00	mg/l	1x	--	10.0	92.2%	(80-120)	--	--	05/13/08 11:36	
Calcium	"	4.88	---	0.750	"	"	--	5.00	97.6%	"	--	--	"	
Iron	"	5.27	---	0.150	"	"	--	"	105%	"	--	--	"	
Aluminum	"	5.09	---	0.200	"	"	--	"	102%	"	--	--	"	
Magnesium	"	4.85	---	0.500	"	"	--	"	97.0%	"	--	--	"	
Duplicate (8E12043-DUP1)				QC Source: BRE0088-01				Extracted: 05/12/08 14:12						
Iron	EPA 6010B	ND	---	0.150	mg/l	1x	ND	--	--	--		(30)	05/13/08 11:43	
Magnesium	"	14.8	---	0.500	"	"	14.6	--	--	--	0.816%	"	"	
Potassium	"	ND	---	3.00	"	"	ND	--	--	--	0.460%	"	"	
Calcium	"	35.4	---	0.750	"	"	35.0	--	--	--	1.19%	(25)	"	
Aluminum	"	ND	---	0.200	"	"	ND	--	--	--	NR	"	"	
Matrix Spike (8E12043-MS1)				QC Source: BRE0088-01				Extracted: 05/12/08 14:12						
Aluminum	EPA 6010B	5.26	---	0.200	mg/l	1x	ND	5.00	105%	(74-142)	--	--	05/13/08 11:40	
Iron	"	5.40	---	0.150	"	"	ND	"	108%	(78-130)	--	--	"	
Potassium	"	11.5	---	3.00	"	"	1.53	10.0	99.3%	(75-127)	--	--	"	
Calcium	"	41.4	---	0.750	"	"	35.0	5.00	127%	(70-137)	--	--	"	
Magnesium	"	20.5	---	0.500	"	"	14.6	"	117%	(76-129)	--	--	"	
Post Spike (8E12043-PS1)				QC Source: BRE0088-01				Extracted: 05/12/08 14:12						
Magnesium	EPA 6010B	20.0	---		ug/ml	1x	14.6	5.00	106%	(75-125)	--	--	05/13/08 11:47	
Potassium	"	11.5	---		"	"	1.53	10.0	99.4%	"	--	--	"	
Calcium	"	40.0	---		"	"	35.0	5.00	99.2%	"	--	--	"	
Iron	"	5.58	---		"	"	0.0473	"	111%	"	--	--	"	
Aluminum	"	5.36	---		"	"	0.00450	"	107%	"	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E13017 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E13017-BLK1)									Extracted: 05/13/08 08:06					
Cadmium	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	05/13/08 15:17	
Manganese	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Antimony	"	ND	---	0.00300	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Barium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Beryllium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
LCS (8E13017-BS1)									Extracted: 05/13/08 08:06					
Silver	EPA 6020	0.0763	---	0.00100	mg/l	1x	--	0.0800	95.3%	(80-120)	--	--	05/13/08 15:23	
Nickel	"	0.0749	---	0.00100	"	"	--	"	93.6%	"	--	--	"	
Vanadium	"	0.0798	---	0.00100	"	"	--	"	99.8%	"	--	--	"	
Cadmium	"	0.0755	---	0.00100	"	"	--	"	94.4%	"	--	--	"	
Chromium	"	0.0793	---	0.00100	"	"	--	"	99.2%	"	--	--	"	
Selenium	"	0.0740	---	0.00100	"	"	--	"	92.5%	"	--	--	"	
Arsenic	"	0.0743	---	0.00100	"	"	--	"	92.8%	"	--	--	"	
Lead	"	0.0782	---	0.00100	"	"	--	"	97.8%	"	--	--	"	
Cobalt	"	0.0782	---	0.00100	"	"	--	"	97.8%	"	--	--	"	
Beryllium	"	0.0736	---	0.00100	"	"	--	"	92.0%	"	--	--	"	
Manganese	"	0.0798	---	0.0100	"	"	--	"	99.7%	"	--	--	"	
Barium	"	0.0786	---	0.0100	"	"	--	"	98.2%	"	--	--	"	
Antimony	"	0.0573	---	0.00300	"	"	--	0.0600	95.4%	"	--	--	"	
Zinc	"	0.0779	---	0.0100	"	"	--	0.0800	97.4%	"	--	--	"	
Copper	"	0.0755	---	0.00100	"	"	--	"	94.4%	"	--	--	"	
Thallium	"	0.0791	---	0.00100	"	"	--	"	98.8%	"	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

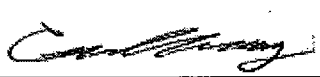
Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E13017 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8E13017-DUP1)				**QC Source: BRE0129-01**					**Extracted: 05/13/08 08:06**					
Chromium	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	4.08%	(20)	05/13/08 15:41	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Copper	"	ND	---	0.00100	"	"	ND	--	--	--	15.4%	"	"	
Barium	"	0.294	---	0.0100	"	"	0.298	--	--	--	1.35%	"	"	
Zinc	"	ND	---	0.0100	"	"	ND	--	--	--		"	"	
Vanadium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Selenium	"	ND	---	0.00100	"	"	ND	--	--	--	9.68%	"	"	
Arsenic	"	ND	---	0.00100	"	"	ND	--	--	--	9.52%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Nickel	"	0.00114	---	0.00100	"	"	0.00114	--	--	--	0.00%	"	"	
Beryllium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	0.173	---	0.0100	"	"	0.172	--	--	--	0.812%	"	"	
Thallium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Antimony	"	ND	---	0.00300	"	"	ND	--	--	--		"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	(50)	"	
Cobalt	"	ND	---	0.00100	"	"	ND	--	--	--	NR	(20)	"	
Matrix Spike (8E13017-MS1)				**QC Source: BRE0129-01**					**Extracted: 05/13/08 08:06**					
Cobalt	EPA 6020	0.0740	---	0.00100	mg/l	1x	ND	0.0800	92.5%	(71-131)	--	--	05/13/08 15:35	
Silver	"	0.0725	---	0.00100	"	"	ND	"	90.6%	(19-153)	--	--	"	
Arsenic	"	0.0741	---	0.00100	"	"	0.000400	"	92.2%	(75-125)	--	--	"	
Vanadium	"	0.0783	---	0.00100	"	"	ND	"	97.9%	(83-120)	--	--	"	
Beryllium	"	0.0724	---	0.00100	"	"	ND	"	90.5%	(75-125)	--	--	"	
Nickel	"	0.0711	---	0.00100	"	"	0.00114	"	87.5%	(78-120)	--	--	"	
Cadmium	"	0.0721	---	0.00100	"	"	ND	"	90.1%	(75-125)	--	--	"	
Antimony	"	0.0584	---	0.00300	"	"	ND	0.0600	97.4%	(74-133)	--	--	"	
Thallium	"	0.0781	---	0.00100	"	"	ND	0.0800	97.6%	(80-120)	--	--	"	
Chromium	"	0.0764	---	0.00100	"	"	0.000500	"	94.9%	"	--	--	"	
Lead	"	0.0758	---	0.00100	"	"	ND	"	94.8%	"	--	--	"	
Copper	"	0.0713	---	0.00100	"	"	0.000630	"	88.3%	(75-125)	--	--	"	
Selenium	"	0.0731	---	0.00100	"	"	0.000650	"	90.6%	(58-120)	--	--	"	
Manganese	"	0.249	---	0.0100	"	"	0.172	"	96.5%	(65-145)	--	--	"	
Zinc	"	0.0754	---	0.0100	"	"	ND	"	94.3%	(53-125)	--	--	"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E13017 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8E13017-MS2)				QC Source: BRE0129-01				Extracted: 05/13/08 08:06						
Barium	EPA 6020	0.404	---	0.0200	mg/l	2x	0.298	0.0800	133%	(75-125)	--	--	05/14/08 11:01	M1
Post Spike (8E13017-PS1)				QC Source: BRE0129-01				Extracted: 05/13/08 08:06						
Thallium	EPA 6020	0.101	---		ug/ml	1x	0.0000500	0.100	100%	(75-125)	--	--	05/13/08 15:29	
Zinc	"	0.0957	---		"	"	0.00265	"	92.6%	"	--	--	"	
Beryllium	"	0.0924	---		"	"	-0.0000400	0.0995	92.9%	"	--	--	"	
Cobalt	"	0.0960	---		"	"	0.0000700	0.100	95.9%	"	--	--	"	
Lead	"	0.0976	---		"	"	-0.0000100	"	97.1%	"	--	--	"	
Selenium	"	0.0937	---		"	"	0.000650	"	93.0%	"	--	--	"	
Vanadium	"	0.102	---		"	"	0.000130	"	101%	"	--	--	"	
Nickel	"	0.0920	---		"	"	0.00114	0.0995	91.3%	"	--	--	"	
Cadmium	"	0.0959	---		"	"	-0.0000800	0.100	95.9%	"	--	--	"	
Manganese	"	0.260	---		"	"	0.172	"	88.2%	"	--	--	"	
Antimony	"	0.0476	---		"	"	0.000170	0.0510	92.9%	"	--	--	"	
Copper	"	0.0933	---		"	"	0.000630	0.100	92.2%	"	--	--	"	
Silver	"	0.0921	---		"	"	-0.0000200	"	92.1%	"	--	--	"	
Chromium	"	0.100	---		"	"	0.000500	"	99.2%	"	--	--	"	
Arsenic	"	0.0976	---		"	"	0.000400	0.0995	97.7%	"	--	--	"	
Post Spike (8E13017-PS2)				QC Source: BRE0129-01				Extracted: 05/13/08 08:06						
Barium	EPA 6020	0.423	---		ug/ml	2x	0.298	0.100	126%	(75-125)	--	--	05/14/08 10:55	S3

Curtis D. Armstrong 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	05/20/08 16:06

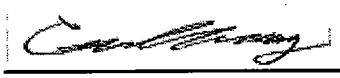
Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E14050 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E14050-BLK1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	05/15/08 12:51	
LCS (8E14050-BS1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	--	--	05/15/08 12:53	
LCS Dup (8E14050-BSD1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	0.0466%	(20)	05/15/08 12:56	
Matrix Spike (8E14050-MS1)				**QC Source: BRE0151-01**				**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00447	---	0.000200	mg/l	1x	ND	0.00500	89.4%	(75-125)	--	--	05/15/08 12:58	
Matrix Spike Dup (8E14050-MSD1)				**QC Source: BRE0151-01**				**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00456	---	0.000200	mg/l	1x	ND	0.00500	91.2%	(75-125)	2.03%	(20)	05/15/08 13:01	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E16057-BLK1)								**Extracted: 05/16/08 18:00**						
Acetone	EPA 8260B	ND	---	10.0	ug/l	1x	--	--	--	--	--	--	05/17/08 01:43	
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

Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E16057-BLK1)									**Extracted: 05/16/08 18:00**					
Hexachlorobutadiene	EPA 8260B	ND	---	2.50	ug/l	1x	--	--	--	--	--	--	05/17/08 01:43	
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*	*Recovery:*	*94.8%*	*Limits:*	*76-138%*	"							*05/17/08 01:43*	
	Toluene-d8		*95.1%*		*80-120%*	"							"	
	4-BFB		*94.2%*		*80-120%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

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

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8E16057-BS1)								**Extracted: 05/16/08 18:00**						
Benzene	EPA 8260B	33.0	---	0.200	ug/l	1x	--	40.0	82.6%	(80-120)	--	--	05/16/08 23:21	
Chlorobenzene	"	35.4	---	0.200	"	"	--	"	88.4%	"	--	--	"	
1,1-Dichloroethene	"	37.0	---	0.200	"	"	--	"	92.4%	"	--	--	"	
Methyl tert-butyl ether	"	35.0	---	1.00	"	"	--	"	87.6%	"	--	--	"	
Toluene	"	33.2	---	0.200	"	"	--	"	82.9%	(75-125)	--	--	"	
Trichloroethene	"	34.4	---	0.200	"	"	--	"	85.9%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 92.9%*			*Limits: 76-138%*	"							*05/16/08 23:21*	
Toluene-d8		*91.4%*			*80-120%*	"							"	
4-BFB		*100%*			*80-120%*	"							"	
LCS Dup (8E16057-BSD1)								**Extracted: 05/16/08 18:00**						
Benzene	EPA 8260B	34.0	---	0.200	ug/l	1x	--	40.0	85.1%	(80-120)	3.04%	(20)	05/16/08 23:48	
Chlorobenzene	"	36.2	---	0.200	"	"	--	"	90.6%	"	2.37%	"	"	
1,1-Dichloroethene	"	36.4	---	0.200	"	"	--	"	90.9%	"	1.64%	"	"	
Methyl tert-butyl ether	"	35.5	---	1.00	"	"	--	"	88.8%	"	1.33%	"	"	
Toluene	"	34.2	---	0.200	"	"	--	"	85.4%	(75-125)	3.00%	"	"	
Trichloroethene	"	34.8	---	0.200	"	"	--	"	86.9%	(80-120)	1.13%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 99.2%*			*Limits: 76-138%*	"							*05/16/08 23:48*	
Toluene-d8		*94.3%*			*80-120%*	"							"	
4-BFB		*97.6%*			*80-120%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

Total Metals by EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Spokane

QC Batch: 8050074 **Water Preparation Method: Metals**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8050074-BLK1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	ND	---	0.500	mg/l	1x	--	--	--	--	--	--	05/14/08 11:24	
LCS (8050074-BS1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	9.72	---	0.500	mg/l	1x	--	10.0	97.2%	(85-115)	--	--	05/14/08 11:21	
Duplicate (8050074-DUP1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	41.2	---	0.500	mg/l	1x	40.8	--	--	--	0.901%	(20)	05/14/08 12:38	
Matrix Spike (8050074-MS1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.1	---	0.500	mg/l	1x	40.8	10.0	102%	(75-125)	--	--	05/14/08 12:44	
Matrix Spike Dup (8050074-MSD1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.0	---	0.500	mg/l	1x	40.8	10.0	101%	(75-125)	0.184%	(20)	05/14/08 12:50	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 16:06

Notes and Definitions

Report Specific Notes:

M1 - The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

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.

Curtis D. Armstrong 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 #: BRE0129

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

INVOICE TO:
P.O. NUMBER:

PROJECT NAME: Lindsburg 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.

PRESERVATIVE

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOCs	TPH-HCID	TAML total	TAML dissolved		MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	LMW-9-0508	5/8/08 @ 1450	X	X	X		Hold all filtered samples pending initial analytical results.	W	7		01
2	LMW-10-0508	@ 0825							7		02
3	LMW-11-0508	@ 1240							7		03
4	Trip Blank								1		04
5											
6											
7											
8											
9											
10											

RELEASED BY: [signature] DATE: 5/9/08
PRINT NAME: Ian Young FIRM: GAI TIME: 1620
RECEIVED BY: [signature] DATE: 5/9/08
PRINT NAME: B Brech FIRM: TA-SEA TIME: 1620

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

ADDITIONAL REMARKS:
TEMP: 9.5° 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

May 20, 2008

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 05/08/08 16:50. The following list is a summary of the Work Orders contained in this report, generated on 05/20/08 15:43.

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

Work Order	Project	ProjectNumber
BRE0109	Landsburg Mine	923-1000-002-R273

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-2-0508	BRE0109-01	Water	05/08/08 14:45	05/08/08 16:50
LMW-4-0508	BRE0109-02	Water	05/08/08 15:30	05/08/08 16:50
LMW-6-0508	BRE0109-03	Water	05/08/08 13:40	05/08/08 16:50
LMW-6-0508D	BRE0109-04	Water	05/08/08 13:50	05/08/08 16:50
LMW-EB-0508	BRE0109-05	Water	05/08/08 16:50	05/08/08 16:50

TestAmerica Seattle

Curtis D. Armstrong 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

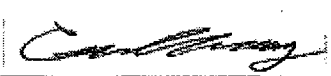
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 15:43

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-01 (LMW-2-0508)		**Water**			**Sampled: 05/08/08 14:45**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 16:58	
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			*93.4%*		*50 - 150 %*	"			"	
Octacosane			*105%*		*50 - 150 %*	"			"	
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 17:24	
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			*93.1%*		*50 - 150 %*	"			"	
Octacosane			*111%*		*50 - 150 %*	"			"	
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 17:50	
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			*90.6%*		*50 - 150 %*	"			"	
Octacosane			*108%*		*50 - 150 %*	"			"	
BRE0109-04 (LMW-6-0508D)		**Water**			**Sampled: 05/08/08 13:50**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E12014	05/12/08 09:03	05/15/08 18:16	
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			*96.9%*		*50 - 150 %*	"			"	
Octacosane			*110%*		*50 - 150 %*	"			"	

TestAmerica Seattle



Curtis D. Armstrong 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

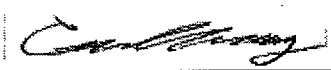
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 15:43

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-01 (LMW-2-0508)		**Water**				**Sampled: 05/08/08 14:45**				
Aluminum	EPA 6010B	ND	——	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:21	
Antimony	EPA 6020	ND	——	0.00300	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Arsenic	"	ND	——	0.00100	"	"	"	"	"	
Barium	"	**0.325**	——	0.0100	"	"	"	"	"	
Beryllium	"	ND	——	0.00100	"	"	"	"	"	
Cadmium	"	ND	——	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**119**	——	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:21	
Chromium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Cobalt	"	ND	——	0.00100	"	"	"	"	"	
Copper	"	ND	——	0.00100	"	"	"	"	"	
Iron	EPA 6010B	ND	——	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:21	
Lead	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Magnesium	EPA 6010B	**75.1**	——	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:21	
Manganese	EPA 6020	**0.228**	——	0.0100	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Mercury	EPA 7470A	ND	——	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:23	
Nickel	EPA 6020	**0.00109**	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Potassium	EPA 6010B	**3.70**	——	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:21	
Selenium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:42	
Silver	"	ND	——	0.00100	"	"	"	"	"	
Thallium	"	ND	——	0.00100	"	"	"	"	"	
Vanadium	"	ND	——	0.00100	"	"	"	"	"	
Zinc	"	ND	——	0.0100	"	"	"	"	"	
BRE0109-02 (LMW-4-0508)		**Water**				**Sampled: 05/08/08 15:30**				
Aluminum	EPA 6010B	ND	——	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:25	
Antimony	EPA 6020	ND	——	0.00300	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Arsenic	"	ND	——	0.00100	"	"	"	"	"	
Beryllium	"	ND	——	0.00100	"	"	"	"	"	
Cadmium	"	ND	——	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**121**	——	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:25	
Chromium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Cobalt	"	ND	——	0.00100	"	"	"	"	"	
Copper	"	ND	——	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**0.839**	——	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:25	
Lead	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Magnesium	EPA 6010B	**74.8**	——	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:25	
Manganese	EPA 6020	**0.167**	——	0.0100	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Mercury	EPA 7470A	ND	——	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:26	
Nickel	EPA 6020	**0.00114**	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Potassium	EPA 6010B	**4.14**	——	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:25	
Selenium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:48	
Silver	"	ND	——	0.00100	"	"	"	"	"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:43

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Thallium	EPA 6020	ND	——	0.00100	mg/l	1x	8E12024	05/12/08 09:51	05/13/08 10:48	
Vanadium	"	ND	——	0.00100	"	"	"	"	"	
Zinc	"	ND	——	0.0100	"	"	"	"	"	
BRE0109-02RE1 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Barium	EPA 6020	**0.368**	——	0.0200	mg/l	2x	8E12024	05/12/08 09:51	05/13/08 11:12	
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Aluminum	EPA 6010B	ND	——	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:28	
Antimony	EPA 6020	ND	——	0.00300	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Arsenic	"	ND	——	0.00100	"	"	"	"	"	
Barium	"	**0.103**	——	0.0100	"	"	"	"	"	
Beryllium	"	ND	——	0.00100	"	"	"	"	"	
Cadmium	"	ND	——	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**26.7**	——	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:28	
Chromium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Cobalt	"	ND	——	0.00100	"	"	"	"	"	
Copper	"	ND	——	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**2.10**	——	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:28	
Lead	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Magnesium	EPA 6010B	**13.5**	——	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:28	
Manganese	EPA 6020	**0.0295**	——	0.0100	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Mercury	EPA 7470A	ND	——	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:28	
Nickel	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Potassium	EPA 6010B	ND	——	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:28	
Selenium	EPA 6020	ND	——	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 10:54	
Silver	"	ND	——	0.00100	"	"	"	"	"	
Thallium	"	ND	——	0.00100	"	"	"	"	"	
Vanadium	"	ND	——	0.00100	"	"	"	"	"	
Zinc	"	ND	——	0.0100	"	"	"	"	"	

TestAmerica Seattle

Curtis D. Armstrong For Blake T. Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

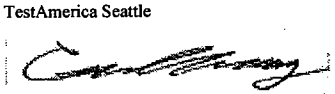
SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

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	05/20/08 15:43

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-04 (LMW-6-0508D)		**Water**			**Sampled: 05/08/08 13:50**					
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:32	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Arsenic	"	ND	----	0.00100	"	"	"	"	"	
Barium	"	**0.103**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**26.9**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:32	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**2.10**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:32	
Lead	EPA 6020	ND	----	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Magnesium	EPA 6010B	**13.7**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:32	
Manganese	EPA 6020	**0.0288**	----	0.0100	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:31	
Nickel	EPA 6020	ND	----	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:32	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E12024	05/12/08 09:51	05/13/08 11:00	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	



Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-01 (LMW-2-0508)		**Water**			**Sampled: 05/08/08 14:45**					
Acetone	EPA 8260B	ND	——	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:03	
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

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-01 (LMW-2-0508)		**Water**			**Sampled: 05/08/08 14:45**					
Isopropylbenzene	EPA 8260B	ND	----	0.500	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:03	
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		*97.8%*		*76 - 138 %*	"				"	
Toluene-d8		*89.4%*		*80 - 120 %*	"				"	
4-BFB		*94.6%*		*80 - 120 %*	"				"	
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:30	
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

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Chlorobenzene	EPA 8260B	ND	----	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:30	
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

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
1,1,1-Trichloroethane	EPA 8260B	ND	----	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:30	
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		*94.9%*			*76 - 138 %*	"			"	
Toluene-d8		*91.4%*			*80 - 120 %*	"			"	
4-BFB		*95.4%*			*80 - 120 %*	"			"	
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:57	
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

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Dichlorodifluoromethane	EPA 8260B	ND	----	0.500	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 03:57	
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		*98.6%*			*76 - 138 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Toluene-d8		*90.2%*			*80 - 120 %*	*1x*			*05/17/08 03:57*	
4-BFB		*91.9%*			*80 - 120 %*	"			"	
BRE0109-04 (LMW-6-0508D)		**Water**			**Sampled: 05/08/08 13:50**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 04:24	
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

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-04 (LMW-6-0508D)		**Water**			**Sampled: 05/08/08 13:50**					
Ethylbenzene	EPA 8260B	ND	----	0.200	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 04:24	
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			*93.8%*		*76 - 138 %*	"			"	
Toluene-d8			*90.3%*		*80 - 120 %*	"			"	
4-BFB			*90.6%*		*80 - 120 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-05 (LMW-EB-0508)		**Water**			**Sampled: 05/08/08 16:50**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 02:09	
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

Curtis D. Armstrong 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

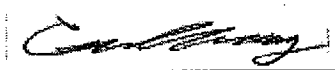
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 15:43

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-05 (LMW-EB-0508)		**Water**			**Sampled: 05/08/08 16:50**					
Isopropylbenzene	EPA 8260B	ND	----	0.500	ug/l	1x	8E16057	05/16/08 18:00	05/17/08 02:09	
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*		*95.4%*			*76 - 138 %*	"			"	
Toluene-d8		*93.7%*			*80 - 120 %*	"			"	
4-BFB		*94.9%*			*80 - 120 %*	"			"	

TestAmerica Seattle



Curtis D. Armstrong 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

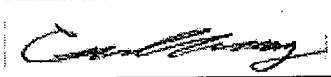
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 15:43

Total Metals by EPA 200 Series Methods

TestAmerica Spokane

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0109-01 (LMW-2-0508)		**Water**			**Sampled: 05/08/08 14:45**					
Sodium	EPA 200.7	**22.1**	—	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:52	
BRE0109-02 (LMW-4-0508)		**Water**			**Sampled: 05/08/08 15:30**					
Sodium	EPA 200.7	**32.7**	—	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:10	
BRE0109-03 (LMW-6-0508)		**Water**			**Sampled: 05/08/08 13:40**					
Sodium	EPA 200.7	**7.10**	—	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:15	
BRE0109-04 (LMW-6-0508D)		**Water**			**Sampled: 05/08/08 13:50**					
Sodium	EPA 200.7	**7.14**	—	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 12:19	

TestAmerica Seattle



Curtis D. Armstrong 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.

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	05/20/08 15:43

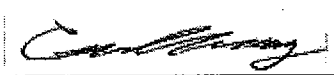
Hydrocarbon Identification by Washington DOE Method NWTPH-HCID - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E12014 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12014-BLK1)									Extracted: 05/12/08 09:03					
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/15/08 15:39	
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: 99.4%*			*Limits: 50-150%*	"							*05/15/08 15:39*	
Octacosane		*115%*			*50-150%*	"							"	
LCS (8E12014-BS1)									Extracted: 05/12/08 09:03					
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	96.4%	(58-125)	--	--	05/15/08 16:06	
Surrogate(s): 2-FBP		*Recovery: 102%*			*Limits: 50-150%*	"							*05/15/08 16:06*	
Octacosane		*118%*			*50-150%*	"							"	
LCS Dup (8E12014-BSD1)									Extracted: 05/12/08 09:03					
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	94.2%	(58-125)	2.27%	(40)	05/15/08 16:31	
Surrogate(s): 2-FBP		*Recovery: 102%*			*Limits: 50-150%*	"							*05/15/08 16:31*	
Octacosane		*116%*			*50-150%*	"							"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:43

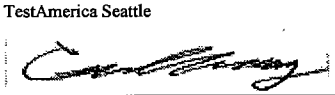
Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E12024 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12024-BLK1)									Extracted: 05/12/08 09:51					
Lead	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	05/13/08 08:30	
Manganese	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Beryllium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Antimony	"	ND	---	0.00300	"	"	--	--	--	--	--	--	"	
Barium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
LCS (8E12024-BS1)									Extracted: 05/12/08 09:51					
Zinc	EPA 6020	0.0753	---	0.0100	mg/l	1x	--	0.0800	94.2%	(80-120)	--	--	05/13/08 08:36	
Copper	"	0.0728	---	0.00100	"	"	--	"	91.0%	"	--	--	"	
Nickel	"	0.0724	---	0.00100	"	"	--	"	90.4%	"	--	--	"	
Lead	"	0.0740	---	0.00100	"	"	--	"	92.5%	"	--	--	"	
Silver	"	0.0732	---	0.00100	"	"	--	"	91.5%	"	--	--	"	
Manganese	"	0.0766	---	0.0100	"	"	--	"	95.8%	"	--	--	"	
Vanadium	"	0.0760	---	0.00100	"	"	--	"	95.0%	"	--	--	"	
Antimony	"	0.0556	---	0.00300	"	"	--	0.0600	92.7%	"	--	--	"	
Beryllium	"	0.0740	---	0.00100	"	"	--	0.0800	92.5%	"	--	--	"	
Selenium	"	0.0720	---	0.00100	"	"	--	"	90.0%	"	--	--	"	
Cobalt	"	0.0758	---	0.00100	"	"	--	"	94.8%	"	--	--	"	
Arsenic	"	0.0720	---	0.00100	"	"	--	"	89.9%	"	--	--	"	
Chromium	"	0.0759	---	0.00100	"	"	--	"	94.9%	"	--	--	"	
Thallium	"	0.0754	---	0.00100	"	"	--	"	94.2%	"	--	--	"	
Barium	"	0.0744	---	0.0100	"	"	--	"	93.1%	"	--	--	"	
Cadmium	"	0.0738	---	0.00100	"	"	--	"	92.3%	"	--	--	"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E12024 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8E12024-DUP1)				**QC Source: BRE0108-08**					**Extracted: 05/12/08 09:51**					
Copper	EPA 6020	ND	---	0.00100	mg/l	1x	0.0136	--	--	--	--	(20)	05/13/08 09:00	
Cobalt	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Nickel	"	0.00131	---	0.00100	"	"	0.00159	--	--	--	19.3%	"	"	
Arsenic	"	ND	---	0.00100	"	"	ND	--	--	--	17.1%	"	"	
Beryllium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	(50)	"	
Chromium	"	ND	---	0.00100	"	"	ND	--	--	--	43.5%	(20)	"	R4
Barium	"	ND	---	0.0100	"	"	ND	--	--	--	0.673%	"	"	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	0.274	---	0.0100	"	"	0.265	--	--	--	3.27%	"	"	
Antimony	"	ND	---	0.00300	"	"	ND	--	--	--		"	"	
Lead	"	ND	---	0.00100	"	"	0.00134	--	--	--	91.3%	"	"	R3
Thallium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0.0100	"	"	0.0112	--	--	--	109%	"	"	R3
Vanadium	"	ND	---	0.00100	"	"	ND	--	--	--	5.26%	"	"	
Selenium	"	ND	---	0.00100	"	"	ND	--	--	--	1.98%	"	"	
Matrix Spike (8E12024-MS1)				**QC Source: BRE0108-08**					**Extracted: 05/12/08 09:51**					
Beryllium	EPA 6020	0.0764	---	0.00100	mg/l	1x	ND	0.0800	95.5%	(75-125)	--	--	05/13/08 08:48	
Vanadium	"	0.0803	---	0.00100	"	"	0.000740	"	99.4%	(83-120)	--	--	"	
Chromium	"	0.0786	---	0.00100	"	"	0.000420	"	97.8%	(80-120)	--	--	"	
Antimony	"	0.0599	---	0.00300	"	"	ND	0.0600	99.8%	(74-133)	--	--	"	
Barium	"	0.0836	---	0.0100	"	"	0.00592	0.0800	97.2%	(75-125)	--	--	"	
Selenium	"	0.0748	---	0.00100	"	"	0.000500	"	92.9%	(58-120)	--	--	"	
Thallium	"	0.0790	---	0.00100	"	"	ND	"	98.7%	(80-120)	--	--	"	
Cadmium	"	0.0748	---	0.00100	"	"	ND	"	93.4%	(75-125)	--	--	"	
Nickel	"	0.0744	---	0.00100	"	"	0.00159	"	91.0%	(78-120)	--	--	"	
Zinc	"	0.0788	---	0.0100	"	"	0.0112	"	84.5%	(53-125)	--	--	"	
Copper	"	0.0738	---	0.00100	"	"	0.0136	"	75.2%	(75-125)	--	--	"	
Manganese	"	0.352	---	0.0100	"	"	0.265	"	109%	(65-145)	--	--	"	
Cobalt	"	0.0772	---	0.00100	"	"	ND	"	96.5%	(71-131)	--	--	"	
Lead	"	0.0776	---	0.00100	"	"	0.00134	"	95.3%	(80-120)	--	--	"	
Silver	"	0.0749	---	0.00100	"	"	ND	"	93.6%	(19-153)	--	--	"	
Arsenic	"	0.0758	---	0.00100	"	"	0.000640	"	94.0%	(75-125)	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E12024 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (8E12024-MSD1)				**QC Source: BRE0108-08**					**Extracted: 05/12/08 09:51**					
Copper	EPA 6020	0.0723	---	0.00100	mg/l	1x	0.0136	0.0800	73.3%	(75-125)	2.11%	(20)	05/13/08 08:54	M2
Nickel	"	0.0745	---	0.00100	"	"	0.00159	"	91.1%	(78-120)	0.0940%	"	"	
Arsenic	"	0.0740	---	0.00100	"	"	0.000640	"	91.7%	(75-125)	2.43%	"	"	
Antimony	"	0.0578	---	0.00300	"	"	ND	0.0600	96.4%	(74-133)	3.48%	"	"	
Zinc	"	0.0777	---	0.0100	"	"	0.0112	0.0800	83.2%	(53-125)	1.29%	"	"	
Barium	"	0.0810	---	0.0100	"	"	0.00592	"	93.9%	(75-125)	3.16%	"	"	
Cobalt	"	0.0754	---	0.00100	"	"	ND	"	94.3%	(71-131)	2.32%	"	"	
Cadmium	"	0.0732	---	0.00100	"	"	ND	"	91.4%	(75-125)	2.16%	"	"	
Silver	"	0.0732	---	0.00100	"	"	ND	"	91.5%	(19-153)	2.27%	(30)	"	
Thallium	"	0.0776	---	0.00100	"	"	ND	"	97.0%	(80-120)	1.78%	(20)	"	
Chromium	"	0.0766	---	0.00100	"	"	0.000420	"	95.2%	"	2.67%	"	"	
Vanadium	"	0.0784	---	0.00100	"	"	0.000740	"	97.1%	(83-120)	2.33%	"	"	
Selenium	"	0.0726	---	0.00100	"	"	0.000500	"	90.2%	(58-120)	2.96%	"	"	
Lead	"	0.0765	---	0.00100	"	"	0.00134	"	93.9%	(80-120)	1.48%	"	"	
Manganese	"	0.340	---	0.0100	"	"	0.265	"	94.4%	(65-145)	3.47%	"	"	
Beryllium	"	0.0746	---	0.00100	"	"	ND	"	93.2%	(75-125)	2.42%	"	"	
Post Spike (8E12024-PS1)				**QC Source: BRE0108-08**					**Extracted: 05/12/08 09:51**					
Beryllium	EPA 6020	0.102	---		ug/ml	1x	-0.0000400	0.0995	102%	(75-125)	--	--	05/13/08 08:42	
Silver	"	0.0984	---		"	"	0.0000200	0.100	98.4%	"	--	--	"	
Zinc	"	0.104	---		"	"	0.0112	"	92.5%	"	--	--	"	
Cadmium	"	0.103	---		"	"	-0.0000200	"	103%	"	--	--	"	
Vanadium	"	0.108	---		"	"	0.000740	"	107%	"	--	--	"	
Selenium	"	0.0996	---		"	"	0.000500	"	99.1%	"	--	--	"	
Copper	"	0.101	---		"	"	0.0136	"	86.6%	"	--	--	"	
Cobalt	"	0.104	---		"	"	0.000160	"	104%	"	--	--	"	
Nickel	"	0.101	---		"	"	0.00159	0.0995	100%	"	--	--	"	
Arsenic	"	0.105	---		"	"	0.000640	"	105%	"	--	--	"	
Thallium	"	0.107	---		"	"	-0.0000100	0.100	106%	"	--	--	"	
Barium	"	0.110	---		"	"	0.00592	"	104%	"	--	--	"	
Antimony	"	0.0510	---		"	"	-0.0000200	0.0510	100%	"	--	--	"	
Chromium	"	0.107	---		"	"	0.000420	0.100	106%	"	--	--	"	
Lead	"	0.103	---		"	"	0.00134	"	101%	"	--	--	"	

Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E12024 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (8E12024-PS2)					QC Source: BRE0108-08				Extracted: 05/12/08 09:51					
Manganese	EPA 6020	0.373	---		ug/ml	2x	0.265	0.100	108%	(75-125)	--	--	05/13/08 10:12	

QC Batch: 8E12043 **Water Preparation Method: EPA 3010A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12043-BLK1)									Extracted: 05/12/08 14:12					
Aluminum	EPA 6010B	ND	---	0.200	mg/l	1x	--	--	--	--	--	--	05/13/08 11:33	
Magnesium	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0.150	"	"	--	--	--	--	--	--	"	
Calcium	"	ND	---	0.750	"	"	--	--	--	--	--	--	"	
LCS (8E12043-BS1)									Extracted: 05/12/08 14:12					
Potassium	EPA 6010B	9.22	---	3.00	mg/l	1x	--	10.0	92.2%	(80-120)	--	--	05/13/08 11:36	
Calcium	"	4.88	---	0.750	"	"	--	5.00	97.6%	"	--	--	"	
Aluminum	"	5.09	---	0.200	"	"	--	"	102%	"	--	--	"	
Iron	"	5.27	---	0.150	"	"	--	"	105%	"	--	--	"	
Magnesium	"	4.85	---	0.500	"	"	--	"	97.0%	"	--	--	"	
Duplicate (8E12043-DUP1)					QC Source: BRE0088-01				Extracted: 05/12/08 14:12					
Calcium	EPA 6010B	35.4	---	0.750	mg/l	1x	35.0	--	--	--	1.19%	(25)	05/13/08 11:43	
Magnesium	"	14.8	---	0.500	"	"	14.6	--	--	--	0.816%	(30)	"	
Aluminum	"	ND	---	0.200	"	"	ND	--	--	--	NR	(25)	"	
Iron	"	ND	---	0.150	"	"	ND	--	--	--		(30)	"	
Potassium	"	ND	---	3.00	"	"	ND	--	--	--	0.460%	"	"	
Matrix Spike (8E12043-MS1)					QC Source: BRE0088-01				Extracted: 05/12/08 14:12					
Calcium	EPA 6010B	41.4	---	0.750	mg/l	1x	35.0	5.00	127%	(70-137)	--	--	05/13/08 11:40	
Magnesium	"	20.5	---	0.500	"	"	14.6	"	117%	(76-129)	--	--	"	
Potassium	"	11.5	---	3.00	"	"	1.53	10.0	99.3%	(75-127)	--	--	"	
Iron	"	5.40	---	0.150	"	"	ND	5.00	108%	(78-130)	--	--	"	
Aluminum	"	5.26	---	0.200	"	"	ND	"	105%	(74-142)	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E12043 **Water Preparation Method: EPA 3010A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (8E12043-PS1)				QC Source: BRE0088-01				Extracted: 05/12/08 14:12						
Aluminum	EPA 6010B	5.36	---		ug/ml	1x	0.00450	5.00	107%	(75-125)	--	--	05/13/08 11:47	
Potassium	"	11.5	---		"	"	1.53	10.0	99.4%	"	--	--	"	
Iron	"	5.58	---		"	"	0.0473	5.00	111%	"	--	--	"	
Calcium	"	40.0	---		"	"	35.0	"	99.2%	"	--	--	"	
Magnesium	"	20.0	---		"	"	14.6	"	106%	"	--	--	"	

QC Batch: 8E14050 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E14050-BLK1)								Extracted: 05/14/08 19:23						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	05/15/08 12:51	
LCS (8E14050-BS1)								Extracted: 05/14/08 19:23						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	--	--	05/15/08 12:53	
LCS Dup (8E14050-BSD1)								Extracted: 05/14/08 19:23						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	0.0466%	(20)	05/15/08 12:56	
Matrix Spike (8E14050-MS1)				QC Source: BRE0151-01				Extracted: 05/14/08 19:23						
Mercury	EPA 7470A	0.00447	---	0.000200	mg/l	1x	ND	0.00500	89.4%	(75-125)	--	--	05/15/08 12:58	
Matrix Spike Dup (8E14050-MSD1)				QC Source: BRE0151-01				Extracted: 05/14/08 19:23						
Mercury	EPA 7470A	0.00456	---	0.000200	mg/l	1x	ND	0.00500	91.2%	(75-125)	2.03%	(20)	05/15/08 13:01	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E16057-BLK1)								Extracted: 05/16/08 18:00						
Acetone	EPA 8260B	ND	---	10.0	ug/l	1x	--	--	--	--	--	--	05/17/08 01:43	
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

Curtis D. Armstrong 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	05/20/08 15:43

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

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E16057-BLK1)								Extracted: 05/16/08 18:00						
Hexachlorobutadiene	EPA 8260B	ND	---	2.50	ug/l	1x	--	--	--	--	--	--	05/17/08 01:43	
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		*Recovery: 94.8%*			*Limits: 76-138%*	"							*05/17/08 01:43*	
Toluene-d8		*95.1%*			*80-120%*	"							"	
4-BFB		*94.2%*			*80-120%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

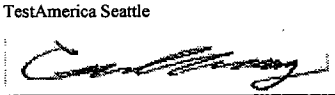
Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E16057 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8E16057-BS1)								**Extracted: 05/16/08 18:00**						
Benzene	EPA 8260B	33.0	---	0.200	ug/l	1x	--	40.0	82.6%	(80-120)	--	--	05/16/08 23:21	
Chlorobenzene	"	35.4	---	0.200	"	"	--	"	88.4%	"	--	--	"	
1,1-Dichloroethene	"	37.0	---	0.200	"	"	--	"	92.4%	"	--	--	"	
Methyl tert-butyl ether	"	35.0	---	1.00	"	"	--	"	87.6%	"	--	--	"	
Toluene	"	33.2	---	0.200	"	"	--	"	82.9%	(75-125)	--	--	"	
Trichloroethene	"	34.4	---	0.200	"	"	--	"	85.9%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 92.9%*			*Limits: 76-138%*	"							*05/16/08 23:21*	
Toluene-d8		*91.4%*			*80-120%*	"							"	
4-BFB		*100%*			*80-120%*	"							"	
LCS Dup (8E16057-BSD1)								**Extracted: 05/16/08 18:00**						
Benzene	EPA 8260B	34.0	---	0.200	ug/l	1x	--	40.0	85.1%	(80-120)	3.04%	(20)	05/16/08 23:48	
Chlorobenzene	"	36.2	---	0.200	"	"	--	"	90.6%	"	2.37%	"	"	
1,1-Dichloroethene	"	36.4	---	0.200	"	"	--	"	90.9%	"	1.64%	"	"	
Methyl tert-butyl ether	"	35.5	---	1.00	"	"	--	"	88.8%	"	1.33%	"	"	
Toluene	"	34.2	---	0.200	"	"	--	"	85.4%	(75-125)	3.00%	"	"	
Trichloroethene	"	34.8	---	0.200	"	"	--	"	86.9%	(80-120)	1.13%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 99.2%*			*Limits: 76-138%*	"							*05/16/08 23:48*	
Toluene-d8		*94.3%*			*80-120%*	"							"	
4-BFB		*97.6%*			*80-120%*	"							"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:43

Total Metals by EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Spokane

QC Batch: 8050074 **Water Preparation Method: Metals**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8050074-BLK1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	ND	---	0.500	mg/l	1x	--	--	--	--	--	--	05/14/08 11:24	
LCS (8050074-BS1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	9.72	---	0.500	mg/l	1x	--	10.0	97.2%	(85-115)	--	--	05/14/08 11:21	
Duplicate (8050074-DUP1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	41.2	---	0.500	mg/l	1x	40.8	--	--	--	0.901%	(20)	05/14/08 12:38	
Matrix Spike (8050074-MS1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.1	---	0.500	mg/l	1x	40.8	10.0	102%	(75-125)	--	--	05/14/08 12:44	
Matrix Spike Dup (8050074-MSD1)				QC Source: SRE0052-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.0	---	0.500	mg/l	1x	40.8	10.0	101%	(75-125)	0.184%	(20)	05/14/08 12:50	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:43

Notes and Definitions

Report Specific Notes:

M2 - The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

R3 - The RPD exceeded the acceptance limit due to sample matrix effects.

R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

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.

Curtis D. Armstrong 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 #: BRE0109

CLIENT: Golder Associates

REPORT TO: Douglas Morell
ADDRESS: 18300 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-R223
SAMPLED BY: Ian Young

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

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOCs	TPH-HCID	TAML total	TAML dissolved	REQUESTED ANALYSES / PRESERVATIVE	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	LMW-2-0508	5/6/08 @ 1445	X	X	X		Hold all Filtered unpreserved samples pending initial analytical results	W	7		01
2	LMW-4-0508	@ 1530									02
3	LMW-6-0508	@ 1340									03
4	LMW-6-0508-D	@ 1350									04
5	LMW-EB-0508	@							1		05
6											
7											
8											
9											
10											

RELEASED BY: [signature] DATE: 5/8/08
PRINT NAME: Ian Young FIRM: GAI TIME: 1650

RECEIVED BY: [signature] DATE: 5/8/08
PRINT NAME: Brea FIRM: TA-SEA TIME: 1650

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

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

ADDITIONAL REMARKS:

TEMP: 7.1 & wb

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

May 20, 2008

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 05/07/08 14:55. The following list is a summary of the Work Orders contained in this report, generated on 05/20/08 15:22.

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

Work Order	Project	ProjectNumber
BRE0088	Landsburg Mine	923-1000-002-R273

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LMW-3-0508	BRE0088-01	Water	05/07/08 09:15	05/07/08 14:55
LMW-5-0508	BRE0088-02	Water	05/07/08 10:20	05/07/08 14:55
LMW-7-0508	BRE0088-03	Water	05/07/08 13:30	05/07/08 14:55
LMW-8-0508	BRE0088-04	Water	05/07/08 10:55	05/07/08 14:55
LMW-EB-0508	BRE0088-05	Water	05/07/08 07:30	05/07/08 14:55
Trip Blank	BRE0088-06	Water	05/07/08 07:30	05/07/08 14:55

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-01 (LMW-3-0508)		**Water**			**Sampled: 05/07/08 09:15**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E08020	05/08/08 08:33	05/12/08 12:40	
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			*82.6%*		*50 - 150 %*	"			"	
Octacosane			*114%*		*50 - 150 %*	"			"	
BRE0088-02 (LMW-5-0508)		**Water**			**Sampled: 05/07/08 10:20**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E08020	05/08/08 08:33	05/12/08 13:09	
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			*81.6%*		*50 - 150 %*	"			"	
Octacosane			*115%*		*50 - 150 %*	"			"	
BRE0088-03 (LMW-7-0508)		**Water**			**Sampled: 05/07/08 13:30**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E08020	05/08/08 08:33	05/12/08 13:38	
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			*79.8%*		*50 - 150 %*	"			"	
Octacosane			*113%*		*50 - 150 %*	"			"	
BRE0088-04 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E08020	05/08/08 08:33	05/12/08 14:08	
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			*74.0%*		*50 - 150 %*	"			"	
Octacosane			*118%*		*50 - 150 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Hydrocarbon Identification by Washington DOE Method NWTPH-HCID

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-05 (LMW-EB-0508)		**Water**			**Sampled: 05/07/08 07:30**					
Gx Range Hydrocarbons	NWTPH-HCID	ND	----	0.236	mg/l	1x	8E08020	05/08/08 08:33	05/12/08 14:38	
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			*73.8%*		*50 - 150 %*	"			"	
Octacosane			*115%*		*50 - 150 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-01 (LMW-3-0508)		**Water**				**Sampled: 05/07/08 09:15**				
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 11:50	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E07029	05/08/08 06:00	05/09/08 18:26	
Arsenic	"	ND	----	0.00100	"	"	"	"	05/08/08 12:22	
Barium	"	**0.0739**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**35.0**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 11:50	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:22	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	ND	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 11:50	
Lead	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:22	
Magnesium	EPA 6010B	**14.6**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 11:50	
Manganese	EPA 6020	**0.0464**	----	0.0100	"	"	8E07029	05/08/08 06:00	05/08/08 12:22	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:03	
Nickel	EPA 6020	**0.00102**	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:22	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 11:50	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:22	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	
BRE0088-02 (LMW-5-0508)		**Water**				**Sampled: 05/07/08 10:20**				
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 11:54	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E07029	05/08/08 06:00	05/09/08 18:32	
Arsenic	"	ND	----	0.00100	"	"	"	"	05/08/08 13:04	
Barium	"	**0.279**	----	0.0100	"	"	"	"	"	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**103**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 11:54	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:04	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**0.204**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 11:54	
Lead	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:04	
Magnesium	EPA 6010B	**60.1**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 11:54	
Manganese	EPA 6020	**0.244**	----	0.0100	"	"	8E07029	05/08/08 06:00	05/08/08 13:04	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:05	
Nickel	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:04	
Potassium	EPA 6010B	ND	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 11:54	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:04	

TestAmerica Seattle

Curtis D. Armstrong For Blake T. Meinert, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

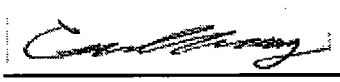
SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

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	05/20/08 15:22

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-02 (LMW-5-0508)		**Water**				**Sampled: 05/07/08 10:20**				
Silver	EPA 6020	ND	----	0.00100	mg/l	1x	8E07029	05/08/08 06:00	05/08/08 13:04	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	
BRE0088-03 (LMW-7-0508)		**Water**				**Sampled: 05/07/08 13:30**				
Aluminum	EPA 6010B	ND	----	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 11:57	
Antimony	EPA 6020	ND	----	0.00300	"	"	8E07029	05/08/08 06:00	05/09/08 18:38	
Arsenic	"	**0.00266**	----	0.00100	"	"	"	"	05/08/08 13:10	
Beryllium	"	ND	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**55.5**	----	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 11:57	
Chromium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:10	
Cobalt	"	ND	----	0.00100	"	"	"	"	"	
Copper	"	ND	----	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**1.22**	----	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 11:57	
Lead	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:10	
Magnesium	EPA 6010B	**26.0**	----	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 11:57	
Manganese	EPA 6020	**0.134**	----	0.0100	"	"	8E07029	05/08/08 06:00	05/08/08 13:10	
Mercury	EPA 7470A	ND	----	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:08	
Nickel	EPA 6020	**0.00100**	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:10	
Potassium	EPA 6010B	**3.00**	----	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 11:57	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:10	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	
BRE0088-03RE1 (LMW-7-0508)		**Water**				**Sampled: 05/07/08 13:30**				
Barium	EPA 6020	**0.465**	----	0.0500	mg/l	5x	8E07029	05/08/08 06:00	05/09/08 09:01	



Curtis D. Armstrong 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	05/20/08 15:22

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-04 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Aluminum	EPA 6010B	ND	——	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:01	
Antimony	EPA 6020	ND	——	0.00300	"	"	8E07029	05/08/08 06:00	05/09/08 18:44	
Arsenic	"	**0.00170**	——	0.00100	"	"	"	"	05/08/08 13:16	
Barium	"	**0.0416**	——	0.0100	"	"	"	"	"	
Beryllium	"	ND	——	0.00100	"	"	"	"	"	
Cadmium	"	ND	——	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	**61.2**	——	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:01	
Chromium	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:16	
Cobalt	"	ND	——	0.00100	"	"	"	"	"	
Copper	"	ND	——	0.00100	"	"	"	"	"	
Iron	EPA 6010B	**10.4**	——	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:01	
Lead	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:16	
Magnesium	EPA 6010B	**34.3**	——	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:01	
Mercury	EPA 7470A	ND	——	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:10	
Nickel	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:16	
Potassium	EPA 6010B	ND	——	3.00	"	"	8E12043	05/12/08 14:12	05/13/08 12:01	
Selenium	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 13:16	
Silver	"	ND	——	0.00100	"	"	"	"	"	
Thallium	"	ND	——	0.00100	"	"	"	"	"	
Vanadium	"	ND	——	0.00100	"	"	"	"	"	
Zinc	"	ND	——	0.0100	"	"	"	"	"	
BRE0088-04RE1 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Manganese	EPA 6020	**0.473**	——	0.0200	mg/l	2x	8E07029	05/08/08 06:00	05/09/08 09:07	
BRE0088-05 (LMW-EB-0508)		**Water**			**Sampled: 05/07/08 07:30**					
Aluminum	EPA 6010B	ND	——	0.200	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:14	
Antimony	EPA 6020	ND	——	0.00300	"	"	8E07029	05/08/08 06:00	05/09/08 18:50	
Arsenic	"	ND	——	0.00100	"	"	"	"	05/08/08 12:16	
Barium	"	ND	——	0.0100	"	"	"	"	"	
Beryllium	"	ND	——	0.00100	"	"	"	"	"	
Cadmium	"	ND	——	0.00100	"	"	"	"	"	
Calcium	EPA 6010B	ND	——	0.750	"	"	8E12043	05/12/08 14:12	05/13/08 12:14	
Chromium	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:16	
Cobalt	"	ND	——	0.00100	"	"	"	"	"	
Copper	"	ND	——	0.00100	"	"	"	"	"	
Iron	EPA 6010B	ND	——	0.150	"	"	8E12043	05/12/08 14:12	05/13/08 12:14	
Lead	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:16	
Magnesium	EPA 6010B	ND	——	0.500	"	"	8E12043	05/12/08 14:12	05/13/08 12:14	
Manganese	EPA 6020	ND	——	0.0100	"	"	8E07029	05/08/08 06:00	05/08/08 12:16	
Mercury	EPA 7470A	ND	——	0.000200	"	"	8E14050	05/14/08 19:23	05/15/08 13:13	
Nickel	EPA 6020	ND	——	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:16	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-05 (LMW-EB-0508)		**Water**					**Sampled: 05/07/08 07:30**			
Potassium	EPA 6010B	ND	----	3.00	mg/l	1x	8E12043	05/12/08 14:12	05/13/08 12:14	
Selenium	EPA 6020	ND	----	0.00100	"	"	8E07029	05/08/08 06:00	05/08/08 12:16	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Thallium	"	ND	----	0.00100	"	"	"	"	"	
Vanadium	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	ND	----	0.0100	"	"	"	"	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-01 (LMW-3-0508)		**Water**			**Sampled: 05/07/08 09:15**					
Acetone	EPA 8260B	ND	—	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 17:23	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-01 (LMW-3-0508)		**Water**			**Sampled: 05/07/08 09:15**					
Isopropylbenzene	EPA 8260B	ND	----	0.500	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 17:23	
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		*97.6%*		*76 - 138 %*	"				"	
Toluene-d8		*99.4%*		*80 - 120 %*	"				"	
4-BFB		*96.6%*		*80 - 120 %*	"				"	
BRE0088-02 (LMW-5-0508)		**Water**			**Sampled: 05/07/08 10:20**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 17:50	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-02 (LMW-5-0508)		**Water**			**Sampled: 05/07/08 10:20**					
Chlorobenzene	EPA 8260B	ND	——	0.200	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 17:50	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-02 (LMW-5-0508)		**Water**			**Sampled: 05/07/08 10:20**					
1,1,1-Trichloroethane	EPA 8260B	ND	----	0.200	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 17:50	
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		*98.4%*			*76 - 138 %*	"			"	
Toluene-d8		*97.2%*			*80 - 120 %*	"			"	
4-BFB		*99.1%*			*80 - 120 %*	"			"	
BRE0088-03 (LMW-7-0508)		**Water**			**Sampled: 05/07/08 13:30**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 18:17	
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	"	"	"	"	"	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-03 (LMW-7-0508)		**Water**			**Sampled: 05/07/08 13:30**					
Dichlorodifluoromethane	EPA 8260B	ND	----	0.500	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 18:17	
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			*99.5%*		*76 - 138 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-03 (LMW-7-0508)		**Water**			**Sampled: 05/07/08 13:30**					
Toluene-d8		*97.5%*			*80 - 120 %*	*1x*			*05/14/08 18:17*	
4-BFB		*95.4%*			*80 - 120 %*	"			"	
BRE0088-04 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Acetone	EPA 8260B	ND	-----	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 18:44	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-04 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Ethylbenzene	EPA 8260B	ND	----	0.200	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 18:44	
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			*97.1%*		*76 - 138 %*	"			"	
Toluene-d8			*97.1%*		*80 - 120 %*	"			"	
4-BFB			*96.4%*		*80 - 120 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-05 (LMW-EB-0508)		**Water**			**Sampled: 05/07/08 07:30**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 19:10	
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	"	**1.04**	----	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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-05 (LMW-EB-0508)		**Water**			**Sampled: 05/07/08 07:30**					
Isopropylbenzene	EPA 8260B	ND	----	0.500	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 19:10	
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	"	**0.320**	----	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			*99.2%*		*76 - 138 %*	"			"	
Toluene-d8			*96.6%*		*80 - 120 %*	"			"	
4-BFB			*93.2%*		*80 - 120 %*	"			"	
BRE0088-06 (Trip Blank)		**Water**			**Sampled: 05/07/08 07:30**					
Acetone	EPA 8260B	ND	----	10.0	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 16:29	
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

Curtis D. Armstrong 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	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-06 (Trip Blank)		**Water**				**Sampled: 05/07/08 07:30**				
Chlorobenzene	EPA 8260B	ND	——	0.200	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 16:29	
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

Curtis D. Armstrong 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

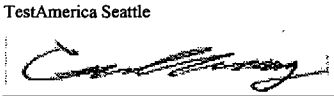
Golder Associates Inc.	Project Name:	**Landsburg Mine**	
18300 NE Union Hill Rd, Suite 200	Project Number:	923-1000-002-R273	Report Created:
Redmond, WA/USA 98052-3333	Project Manager:	Douglas Morell	05/20/08 15:22

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-06 (Trip Blank)		**Water**			**Sampled: 05/07/08 07:30**					
1,1,1-Trichloroethane	EPA 8260B	ND	----	0.200	ug/l	1x	8E14008	05/14/08 13:10	05/14/08 16:29	
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			*95.8%*		*76 - 138 %*	"			"	
Toluene-d8			*101%*		*80 - 120 %*	"			"	
4-BFB			*99.6%*		*80 - 120 %*	"			"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:22

Total Metals by EPA 200 Series Methods

TestAmerica Spokane

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRE0088-01 (LMW-3-0508)		**Water**			**Sampled: 05/07/08 09:15**					
Sodium	EPA 200.7	**9.10**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:28	
BRE0088-02 (LMW-5-0508)		**Water**			**Sampled: 05/07/08 10:20**					
Sodium	EPA 200.7	**17.9**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:32	
BRE0088-03 (LMW-7-0508)		**Water**			**Sampled: 05/07/08 13:30**					
Sodium	EPA 200.7	**40.8**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:38	
BRE0088-04 (LMW-8-0508)		**Water**			**Sampled: 05/07/08 10:55**					
Sodium	EPA 200.7	**11.0**	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:43	
BRE0088-05 (LMW-EB-0508)		**Water**			**Sampled: 05/07/08 07:30**					
Sodium	EPA 200.7	ND	----	0.500	mg/l	1x	8050074	05/14/08 10:46	05/14/08 11:48	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E08020 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E08020-BLK1)								Extracted: 05/08/08 08:33						
Gx Range Hydrocarbons	NWTPH-HCID	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/12/08 11:11	
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: 93.4%*			*Limits: 50-150%*	"							*05/12/08 11:11*	
Octacosane		*118%*			*50-150%*	"							"	
LCS (8E08020-BS1)								Extracted: 05/08/08 08:33						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	96.8%	(58-125)	--	--	05/12/08 11:40	
Surrogate(s): 2-FBP		*Recovery: 89.6%*			*Limits: 50-150%*	"							*05/12/08 11:40*	
Octacosane		*112%*			*50-150%*	"							"	
LCS Dup (8E08020-BSD1)								Extracted: 05/08/08 08:33						
Diesel Range Hydrocarbons	NWTPH-HCID	DET	---	0.630	mg/l	1x	--	2.00	95.7%	(58-125)	1.20%	(40)	05/12/08 12:10	
Surrogate(s): 2-FBP		*Recovery: 86.8%*			*Limits: 50-150%*	"							*05/12/08 12:10*	
Octacosane		*110%*			*50-150%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E07029 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E07029-BLK1)								Extracted: 05/08/08 06:00						
Beryllium	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	05/08/08 11:52	
Barium	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Thallium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Antimony	"	ND	---	0.00300	"	"	--	--	--	--	--	--	05/09/08 17:44	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	05/08/08 11:52	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Vanadium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
LCS (8E07029-BS1)								Extracted: 05/08/08 06:00						
Selenium	EPA 6020	0.0740	---	0.00100	mg/l	1x	--	0.0800	92.4%	(80-120)	--	--	05/08/08 11:46	
Arsenic	"	0.0738	---	0.00100	"	"	--	"	92.2%	"	--	--	"	
Cadmium	"	0.0749	---	0.00100	"	"	--	"	93.6%	"	--	--	"	
Vanadium	"	0.0757	---	0.00100	"	"	--	"	94.6%	"	--	--	"	
Thallium	"	0.0744	---	0.00100	"	"	--	"	93.0%	"	--	--	"	
Manganese	"	0.0764	---	0.0100	"	"	--	"	95.5%	"	--	--	"	
Silver	"	0.0748	---	0.00100	"	"	--	"	93.5%	"	--	--	"	
Nickel	"	0.0742	---	0.00100	"	"	--	"	92.7%	"	--	--	"	
Zinc	"	0.0775	---	0.0100	"	"	--	"	96.9%	"	--	--	"	
Antimony	"	0.0538	---	0.00300	"	"	--	0.0600	89.8%	"	--	--	05/09/08 17:50	
Cobalt	"	0.0758	---	0.00100	"	"	--	0.0800	94.7%	"	--	--	05/08/08 11:46	
Lead	"	0.0766	---	0.00100	"	"	--	"	95.8%	"	--	--	"	
Barium	"	0.0766	---	0.0100	"	"	--	"	95.7%	"	--	--	"	
Copper	"	0.0749	---	0.00100	"	"	--	"	93.6%	"	--	--	"	
Beryllium	"	0.0724	---	0.00100	"	"	--	"	90.5%	"	--	--	"	
Chromium	"	0.0743	---	0.00100	"	"	--	"	92.9%	"	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E07029 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8E07029-DUP1)				**QC Source: BRE0088-05**					**Extracted: 05/08/08 06:00**					
Barium	EPA 6020	ND	---	0.0100	mg/l	1x	ND	--	--	--	NR	(20)	05/08/08 12:10	
Arsenic	"	ND	---	0.00100	"	"	ND	--	--	--		"	"	
Zinc	"	ND	---	0.0100	"	"	ND	--	--	--	NR	"	"	
Thallium	"	ND	---	0.00100	"	"	ND	--	--	--	6.45%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	26.7%	"	"	R4
Manganese	"	ND	---	0.0100	"	"	ND	--	--	--		"	"	
Copper	"	ND	---	0.00100	"	"	ND	--	--	--		"	"	
Beryllium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Cobalt	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	(50)	"	
Vanadium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	(20)	"	
Chromium	"	ND	---	0.00100	"	"	ND	--	--	--	2.90%	"	"	
Selenium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Nickel	"	ND	---	0.00100	"	"	ND	--	--	--	46.2%	"	"	R4
Matrix Spike (8E07029-MS1)				**QC Source: BRE0088-05**					**Extracted: 05/08/08 06:00**					
Beryllium	EPA 6020	0.0750	---	0.00100	mg/l	1x	ND	0.0800	93.8%	(75-125)	--	--	05/08/08 12:04	
Copper	"	0.0779	---	0.00100	"	"	ND	"	97.3%	"	--	--	"	
Zinc	"	0.128	---	0.0100	"	"	ND	"	160%	(53-125)	--	--	"	M1
Barium	"	0.0779	---	0.0100	"	"	ND	"	97.4%	(75-125)	--	--	"	
Silver	"	0.0765	---	0.00100	"	"	ND	"	95.6%	(19-153)	--	--	"	
Manganese	"	0.0789	---	0.0100	"	"	ND	"	98.6%	(65-145)	--	--	"	
Arsenic	"	0.0747	---	0.00100	"	"	ND	"	93.4%	(75-125)	--	--	"	
Nickel	"	0.0770	---	0.00100	"	"	0.000100	"	96.2%	(78-120)	--	--	"	
Antimony	"	0.0578	---	0.00300	"	"	ND	0.0600	96.4%	(74-133)	--	--	05/09/08 18:14	
Selenium	"	0.0756	---	0.00100	"	"	ND	0.0800	94.6%	(58-120)	--	--	05/08/08 12:04	
Cadmium	"	0.0767	---	0.00100	"	"	ND	"	95.9%	(75-125)	--	--	"	
Thallium	"	0.0769	---	0.00100	"	"	0.000150	"	95.9%	(80-120)	--	--	"	
Cobalt	"	0.0778	---	0.00100	"	"	ND	"	97.2%	(71-131)	--	--	"	
Chromium	"	0.0774	---	0.00100	"	"	0.000350	"	96.2%	(80-120)	--	--	"	
Vanadium	"	0.0783	---	0.00100	"	"	ND	"	97.8%	(83-120)	--	--	"	
Lead	"	0.0789	---	0.00100	"	"	0.000260	"	98.3%	(80-120)	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

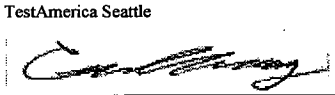
QC Batch: 8E07029 **Water Preparation Method: EPA 3020A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Post Spike (8E07029-PS1)					**QC Source: BRE0088-05**				**Extracted: 05/08/08 06:00**					
Lead	EPA 6020	0.102	---		ug/ml	1x	0.000260	0.100	101%	(75-125)	--	--	05/08/08 11:58	
Selenium	"	0.0969	---		"	"	-0.0000700	"	97.0%	"	--	--	"	
Chromium	"	0.101	---		"	"	0.000350	"	99.8%	"	--	--	"	
Nickel	"	0.100	---		"	"	0.000100	0.0995	101%	"	--	--	"	
Manganese	"	0.103	---		"	"	0.000410	0.100	102%	"	--	--	"	
Copper	"	0.103	---		"	"	0.000120	"	102%	"	--	--	"	
Arsenic	"	0.0989	---		"	"	0.0000500	0.0995	99.3%	"	--	--	"	
Zinc	"	0.101	---		"	"	0.00132	0.100	99.6%	"	--	--	"	
Thallium	"	0.0999	---		"	"	0.000150	"	99.3%	"	--	--	"	
Silver	"	0.0989	---		"	"	-0.000130	"	99.1%	"	--	--	"	
Cobalt	"	0.101	---		"	"	0.000130	"	101%	"	--	--	"	
Barium	"	0.102	---		"	"	0.000120	"	102%	"	--	--	"	
Beryllium	"	0.0948	---		"	"	0.0000200	0.0995	95.2%	"	--	--	"	
Cadmium	"	0.0990	---		"	"	-0.0000500	0.100	99.1%	"	--	--	"	
Antimony	"	0.0488	---		"	"	-0.000100	0.0510	95.8%	"	--	--	05/09/08 18:08	
Vanadium	"	0.101	---		"	"	0.0000500	0.100	101%	"	--	--	05/08/08 11:58	

QC Batch: 8E12043 **Water Preparation Method: EPA 3010A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E12043-BLK1)									**Extracted: 05/12/08 14:12**					
Calcium	EPA 6010B	ND	---	0.750	mg/l	1x	--	--	--	--	--	--	05/13/08 11:33	
Aluminum	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Potassium	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Iron	"	ND	---	0.150	"	"	--	--	--	--	--	--	"	
Magnesium	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
LCS (8E12043-BS1)									**Extracted: 05/12/08 14:12**					
Iron	EPA 6010B	5.27	---	0.150	mg/l	1x	--	5.00	105%	(80-120)	--	--	05/13/08 11:36	
Magnesium	"	4.85	---	0.500	"	"	--	"	97.0%	"	--	--	"	
Aluminum	"	5.09	---	0.200	"	"	--	"	102%	"	--	--	"	
Potassium	"	9.22	---	3.00	"	"	--	10.0	92.2%	"	--	--	"	
Calcium	"	4.88	---	0.750	"	"	--	5.00	97.6%	"	--	--	"	

TestAmerica Seattle



Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E12043 **Water Preparation Method: EPA 3010A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8E12043-DUP1)				**QC Source: BRE0088-01**					**Extracted: 05/12/08 14:12**					
Iron	EPA 6010B	ND	---	0.150	mg/l	1x	ND	--	--	--		(30)	05/13/08 11:43	
Potassium	"	ND	---	3.00	"	"	ND	--	--	--	0.460%	"	"	
Aluminum	"	ND	---	0.200	"	"	ND	--	--	--	NR	(25)	"	
Magnesium	"	14.8	---	0.500	"	"	14.6	--	--	--	0.816%	(30)	"	
Calcium	"	35.4	---	0.750	"	"	35.0	--	--	--	1.19%	(25)	"	
Matrix Spike (8E12043-MS1)				**QC Source: BRE0088-01**					**Extracted: 05/12/08 14:12**					
Calcium	EPA 6010B	41.4	---	0.750	mg/l	1x	35.0	5.00	127%	(70-137)	--	--	05/13/08 11:40	
Aluminum	"	5.26	---	0.200	"	"	ND	"	105%	(74-142)	--	--	"	
Iron	"	5.40	---	0.150	"	"	ND	"	108%	(78-130)	--	--	"	
Potassium	"	11.5	---	3.00	"	"	1.53	10.0	99.3%	(75-127)	--	--	"	
Magnesium	"	20.5	---	0.500	"	"	14.6	5.00	117%	(76-129)	--	--	"	
Post Spike (8E12043-PS1)				**QC Source: BRE0088-01**					**Extracted: 05/12/08 14:12**					
Iron	EPA 6010B	5.58	---		ug/ml	1x	0.0473	5.00	111%	(75-125)	--	--	05/13/08 11:47	
Calcium	"	40.0	---		"	"	35.0	"	99.2%	"	--	--	"	
Magnesium	"	20.0	---		"	"	14.6	"	106%	"	--	--	"	
Aluminum	"	5.36	---		"	"	0.00450	"	107%	"	--	--	"	
Potassium	"	11.5	---		"	"	1.53	10.0	99.4%	"	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E14050 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E14050-BLK1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	05/15/08 12:51	
LCS (8E14050-BS1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	--	--	05/15/08 12:53	
LCS Dup (8E14050-BSD1)								**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(80-120)	0.0466%	(20)	05/15/08 12:56	
Matrix Spike (8E14050-MS1)				**QC Source: BRE0151-01**				**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00447	---	0.000200	mg/l	1x	ND	0.00500	89.4%	(75-125)	--	--	05/15/08 12:58	
Matrix Spike Dup (8E14050-MSD1)				**QC Source: BRE0151-01**				**Extracted: 05/14/08 19:23**						
Mercury	EPA 7470A	0.00456	---	0.000200	mg/l	1x	ND	0.00500	91.2%	(75-125)	2.03%	(20)	05/15/08 13:01	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E14008 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E14008-BLK1)								**Extracted: 05/14/08 13:10**						
Acetone	EPA 8260B	ND	---	10.0	ug/l	1x	--	--	--	--	--	--	05/14/08 15:31	
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	"	"	--	--	--	--	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E14008 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E14008-BLK1)								**Extracted: 05/14/08 13:10**						
Hexachlorobutadiene	EPA 8260B	ND	---	2.50	ug/l	1x	--	--	--	--	--	--	05/14/08 15:31	
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	"	"	--	--	--	--	--	--	"	
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: 99.6%*			*Limits: 76-138%*	"							*05/14/08 15:31*	
Toluene-d8		*102%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

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

TestAmerica Seattle

QC Batch: 8E14008 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8E14008-BS1)									**Extracted: 05/14/08 13:10**					
Benzene	EPA 8260B	37.0	---	0.200	ug/l	1x	--	40.0	92.4%	(80-120)	--	--	05/14/08 13:36	
Chlorobenzene	"	37.7	---	0.200	"	"	--	"	94.3%	"	--	--	"	
1,1-Dichloroethene	"	39.0	---	0.200	"	"	--	"	97.6%	"	--	--	"	
Methyl tert-butyl ether	"	38.3	---	1.00	"	"	--	"	95.7%	"	--	--	"	
Toluene	"	37.6	---	0.200	"	"	--	"	94.0%	(75-125)	--	--	"	
Trichloroethene	"	35.8	---	0.200	"	"	--	"	89.5%	(80-120)	--	--	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 97.4%*			*Limits: 76-138%*	"							*05/14/08 13:36*	
Toluene-d8		*97.9%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	
LCS Dup (8E14008-BSD1)									**Extracted: 05/14/08 13:10**					
Benzene	EPA 8260B	38.7	---	0.200	ug/l	1x	--	40.0	96.6%	(80-120)	4.50%	(20)	05/14/08 14:03	
Chlorobenzene	"	38.6	---	0.200	"	"	--	"	96.5%	"	2.33%	"	"	
1,1-Dichloroethene	"	40.7	---	0.200	"	"	--	"	102%	"	4.14%	"	"	
Methyl tert-butyl ether	"	38.7	---	1.00	"	"	--	"	96.8%	"	1.17%	"	"	
Toluene	"	38.5	---	0.200	"	"	--	"	96.3%	(75-125)	2.42%	"	"	
Trichloroethene	"	36.8	---	0.200	"	"	--	"	92.0%	(80-120)	2.78%	"	"	
Surrogate(s): 1,2-DCA-d4		*Recovery: 100%*			*Limits: 76-138%*	"							*05/14/08 14:03*	
Toluene-d8		*98.6%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Total Metals by EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Spokane

QC Batch: 8050074 **Water Preparation Method: Metals**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8050074-BLK1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	ND	---	0.500	mg/l	1x	--	--	--	--	--	--	05/14/08 11:24	
LCS (8050074-BS1)								Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	9.72	---	0.500	mg/l	1x	--	10.0	97.2%	(85-115)	--	--	05/14/08 11:21	
Duplicate (8050074-DUP1)				QC Source: BRE0088-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	41.2	---	0.500	mg/l	1x	40.8	--	--	--	0.901%	(20)	05/14/08 12:38	
Matrix Spike (8050074-MS1)				QC Source: BRE0088-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.1	---	0.500	mg/l	1x	40.8	10.0	102%	(75-125)	--	--	05/14/08 12:44	
Matrix Spike Dup (8050074-MSD1)				QC Source: BRE0088-03				Extracted: 05/14/08 10:46						
Sodium	EPA 200.7	51.0	---	0.500	mg/l	1x	40.8	10.0	101%	(75-125)	0.184%	(20)	05/14/08 12:50	

TestAmerica Seattle

Curtis D. Armstrong 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	05/20/08 15:22

Notes and Definitions

Report Specific Notes:

B - Analyte was detected in the associated Method Blank.

M1 - The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

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

Curtis D. Armstrong 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 #: BRE0088

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.

PRESERVATIVE

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOCs	TPH-HCID	TAML total	TAML dissolved	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	LMW-3-0508	5/7/08 @ 0915	X	X	X		W	7		01
2	LMW-5-0508	@ 1020						7		02
3	LMW-7-0508	@ 1330						7		03
4	LMW-8-0508	@ 1055						7		04
5	LMW-EB-0508	5/7/08 @ 0730						6		05
6	Trip Blank							1		06
7										
8										
9										
10										

Hold all filtered unpreserved sample pending initial analytical results

RELEASED BY: [signature] DATE: 5/7/08
PRINT NAME: Ian Young FIRM: GAI TIME: 14:55

RECEIVED BY: [signature] DATE: 5/7/08
PRINT NAME: Brent FIRM: TA-SEA TIME: 1455

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

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

ADDITIONAL REMARKS:

TEMP: 10.0°C w/o

COC REV 05/2006

PAGE OF

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and for any additional analyses performed on this project.
Payment for services is due within 30 days from the date of invoice unless otherwise contracted. Sample(s) will be disposed of after 30 days unless otherwise contracted.

APPENDIX B

SAMPLE INTEGRITY DATA SHEETS (SIDS)

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-2-0508

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 5/6/08 **Time** 1145

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 – 6.86 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** 5/6/08

Supervisor (signature) [signature] **Date** 5/30/2008

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-3-0508

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 5/7/08 **Time** 0915

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 – 11.90 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) [signature] **Date** 5/7/08

Supervisor (signature) [signature] **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-3
Date 5/7/08
Time Begin Purge 0800
Time Collect Sample 0915

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0806	5 gal						
	0813	10 gal	6.92	258	11.3	0.92	0.65	266.1
	0823	18 gal	7.31	261	11.5	0.75	0.44	191.0
	0846	36 gal	7.33	238	11.2	0.25	0.48	134.1
	0909	48 gal	7.43	268	11.6	0.16	0.441	-20.9

Comments: 10 gal / 13 min = 0.77 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-4-0508

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 5/8/08 **Time** 1530

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 – 8.88 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** 5/8/08

5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-4
Date 5/8/08
Time Begin Purge 1447
Time Collect Sample 1530

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1457	10 gal	6.72	768	10.8	0.14	0.75	-241.0
	1501	18 gal	6.78	771	10.9	0.13	0.57	-253.8
	1515	28 gal	6.83	787	10.9	0.12	0.68	-260.0
	1529	42 gal	6.84	784	10.9	0.12	0.54	-261.3

Comments: 10 gal / 10 min = 10 gal/min
Sulphurous odor to purge water.

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-5-0508

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 5/7/08 **Time** 1020

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 – 13.44 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** 5/7/08

Supervisor (signature) _____ **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-5
Date 5/7/08
Time Begin Purge 0922
Time Collect Sample 1020

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0935	10 gal						
	0940	14 gal	6.77	667	10.9	0.21	0.53	-142.8
	0958	28 gal	6.72	665	11.0	0.16	0.52	-149.3
	1016	42 gal	6.74	677	11.1	0.14	0.63	-166.4

Comments: 10 gal / 13 min = 0.77 gal/min
Strong sulphurous odor to purge.

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-6-0508

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 5/8/08 **Time** 1340

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 – 23.42 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** 5/8/08

Supervisor (signature) [signature] **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-6
Date 5/8/08
Time Begin Purge 1138
Time Collect Sample 1340

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1155	10 gal	6.75	185.1	10.2	0.89	1.59	-79
	1218	23.5	6.72	185.0	10.5	0.48	1.04	-23.6
	1258	47	6.68	182.9	10.9	0.28	0.88	-40.9
	1338	70.5	6.69	182.8	11.3	0.21	0.83	-50.3

Comments: 10 gal / 17 min = 0.59 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-7-0508

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 5/7/08 **Time** 1330

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 – 225.73 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) [signature] **Date** 5/7/08

Supervisor (signature) [signature] **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-7
Date 5/7/08
Time Begin Purge 1130
Time Collect Sample 1330

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1143	10 gal	~~6.97~~	~~416~~	~~13.5~~	1.03	~~5.68~~	~~-57.2~~
	1200	23 gal	6.97	416	12.5	1.03	5.68	-57.2
	1230	46 gal	6.94	442	13.3	0.56	2.19	-60.0
	1300	69 gal	6.91	463	14.1	0.30	2.76	-88.6
	1330	82 gal	6.97	462	14.1	0.26	2.10	-94.2

Comments: 10 gal / 13 min = 0.77 gal/min
Slight sulphurous odor to 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-8-0508

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~~ Peristaltic Pump

Date 5/7/08 **Time** 1055

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 – 3.97 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** 5/7/08

Supervisor (signature) [signature] **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-8
Date 5/7/08
Time Begin Purge 0750
Time Collect Sample 1055

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0840	5 gal	6.80	462	9.5	0.92	3.43	44.9
	0950	12 gal	6.75	466	9.5	0.69	0.78	+98.0
	1050	18 gal	6.64	466	9.5	0.24	0.44	-104.1

Comments: 5 gal / 50 min = 1 gal / 10 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-9-0508

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 5/9/08 **Time** 1450

Media Water **Station** LMW-9

Sample Type: **grab** time composite space composite

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

SWL – 99.38 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) _____ **Date** 5/9/08

Supervisor (signature) _____ **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW9
Date 5/9/08
Time Begin Purge 1335
Time Collect Sample 1450

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1343	10 gal	6.87	521	15.2	0.25	1.97	-92.2
	1356	20 gal	6.90	516	15.8	0.21	1.30	-117.3
	1422	40	6.89	512	15.9	0.19	1.41	-124.5
	1448	60	6.89	510	15.6	0.18	0.71	-130.6

Comments:
1340: Some trouble with pump and tubing. Resolved.
10 gal / 13 min = 0.77 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-10-0508

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 5/9/08 **Time** 0825

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** 5/9/08

Supervisor (signature) [signature] **Date** 5/30/2008

FIELD PARAMETERS SHEET

Well ID LMW-10
Date 5/9/08
Time Begin Purge 0730
Time Collect Sample 0825

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	0740	~2.25 gal	8.45	316	9.8	2.12	1.10	-165.3
	0750	4.5 gal	8.39	318	9.8	0.12	0.75	-190.7
	0800	6.75 gal	8.51	315	9.8	0.11	0.66	-201.9
	0810	9.0 gal	8.48	316	9.8	0.11	0.41	-203.9
	0820	11.25	8.49	315	9.8	0.11	0.52	-202.9

Comments:

Distinct sulphurous odor to purge water.

Sampler's Initials

SAMPLE INTEGRITY DATA SHEET

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

Site Location Ravensdale, WA **Sample ID** LMW-11-0508

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 5/9/08 **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 – 157.26 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) [signature] **Date** 5/9/08

Supervisor (signature) [signature] **Date** 5/20/2008

FIELD PARAMETERS SHEET

Well ID LMW-11
Date 5/9/08
Time Begin Purge 1100
Time Collect Sample 1240

Water Level feet bmp	Time	Volume Purged	pH	Conductivity uS/cm	Temp. °C	DO mg/L	Turbidity NTU	Eh Rel mV
	1100	~.25 gal	7.28	438	10.8	0.75	13.0	-95.1
	1130	~45	7.13	422	10.5	0.35	5.95	-131.0
	1200	~8	7.12	422	10.5	0.33	2.16	-145.7
	1230	~12 gal	7.11	417	10.4	0.28	1.24	-152.3

Comments: 0845: Begin setting up.
0930: Begin purge - Submersible pump set at 170 Ft below TOC.
0945: Problem with pump and generator
1030: Problems somewhat resolved. Beginning purge.
1100: Begin purge with bladder pump after purging ~45 gal.

Sampler's Initials _____