2008 MMI SOIL GEOCHEMICAL REPORT

on the

HEIDI PROPERTY

HEIDI 1-82 (YC10778 - YC61191), HEIDI 84-220 (YC61192 - YC56580)

Mayo & Dawson Mining District

NTS 116A05
Lat 64° 22’ N, Long 137° 36’ W
UTM 7141000 N, 374500 E

for

LOGAN RESOURCES LTD.
1640 - 1066 West Hastings Street
Vancouver, BC V6E 3X1

by

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Date Work Performed:
July 1 - 13, 2008

Work Supervised By:
Daithi Mac Gearailt, B.Sc.

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SUMMARY

The 2008 exploration program on the Heidi property consisted of a property wide, reconnaissance MMI (mobile metal ions) soil geochemical survey by Logan Resources Ltd. from July 1 – 13, 2008.

The Heidi property is underlain by Proterozoic metasediments of the Hyland Group. The exploration target is a stratabound carbonate unit which has been invaded by epithermal fluids from a shallow Tombstone Intrusive. Replacement type mineralization consisting of massive to disseminated arsenopyrite, pyrite, and stibnite/jamesonite has returned anomalous values in gold and silver in past exploration programs (silt and soil geochemistry, trenching, and diamond drilling).

In the 2008 program, several significant multi-sample and multi-element anomalies were delineated in the northern part of the property including high contrast Au and Ag responses in the range of 700-800 times background. Other elements with notable response ratios include As (274 times background), Sb (454), Pb (290), and Zn (96).

It is recommended that these anomalies be followed up by integrating geology and geophysical survey results with diamond drilling.

INTRODUCTION

Location and Access

The Heidi property is located 95 km northeast of Dawson City, Yukon, about 30 km east of the Dempster Highway. It is centered at Lat 64°22' N, Long 137°36' W / UTM 7141000 N, 374500 E on NTS map sheet 116 A/05 (Figure 1).

The property can be accessed via helicopter from Dawson City, about 90 km to the west-southwest. The North Fork Pass on the Dempster Highway, approximately 20 km to the west, can be used as a staging area.

Physiography and Climate

The property is situated within the Ogilvie Mountain physiographic subdivision. It lies above tree line at elevations ranging from 3,600 to 6,000 feet. Vegetation includes moss, alpine grasses, sedges and willows with bedrock exposures occurring mainly in ridges and steep slopes with many gradual slopes being talus covered. The claim area is covered by forest terrain which includes spruce, balsam, fir, pine, poplar, dwarf alder, and willow. Relief is gentle to moderate with elevations ranging from 1,000 to 1,410 metres above sea level.

The climate in this region is characterized by short, warm summers and long, cold winters. Temperatures range from about -28° C in the winter to 21° C in the summer. Precipitation is light to moderate year round. The area is snow free from early June until mid-September.

Exploration History

Prior to 1995, there is no record of any mineral exploration in the immediate area of the Heidi property. The Geological Survey of Canada completed regional stream sediment and geological surveys in the area in the 1970's and 80's. The following is a brief chronology of the exploration history of the Heidi claims:

1995: Homestake Canada stakes the property to cover a new gold showing discovered while investigating a stream sediment geochemical gold-arsenic anomaly coincident with an aeromagnetic geophysical anomaly. Trenching in late summer returned values up to 2.93 g/t Au.

1996: Homestake completed prospecting, geological mapping, soil sampling and trench resampling. A 2,000 – 3,000 metre drill program was recommended to test the extent of the mineralization. No further work was carried out and the property lapsed.

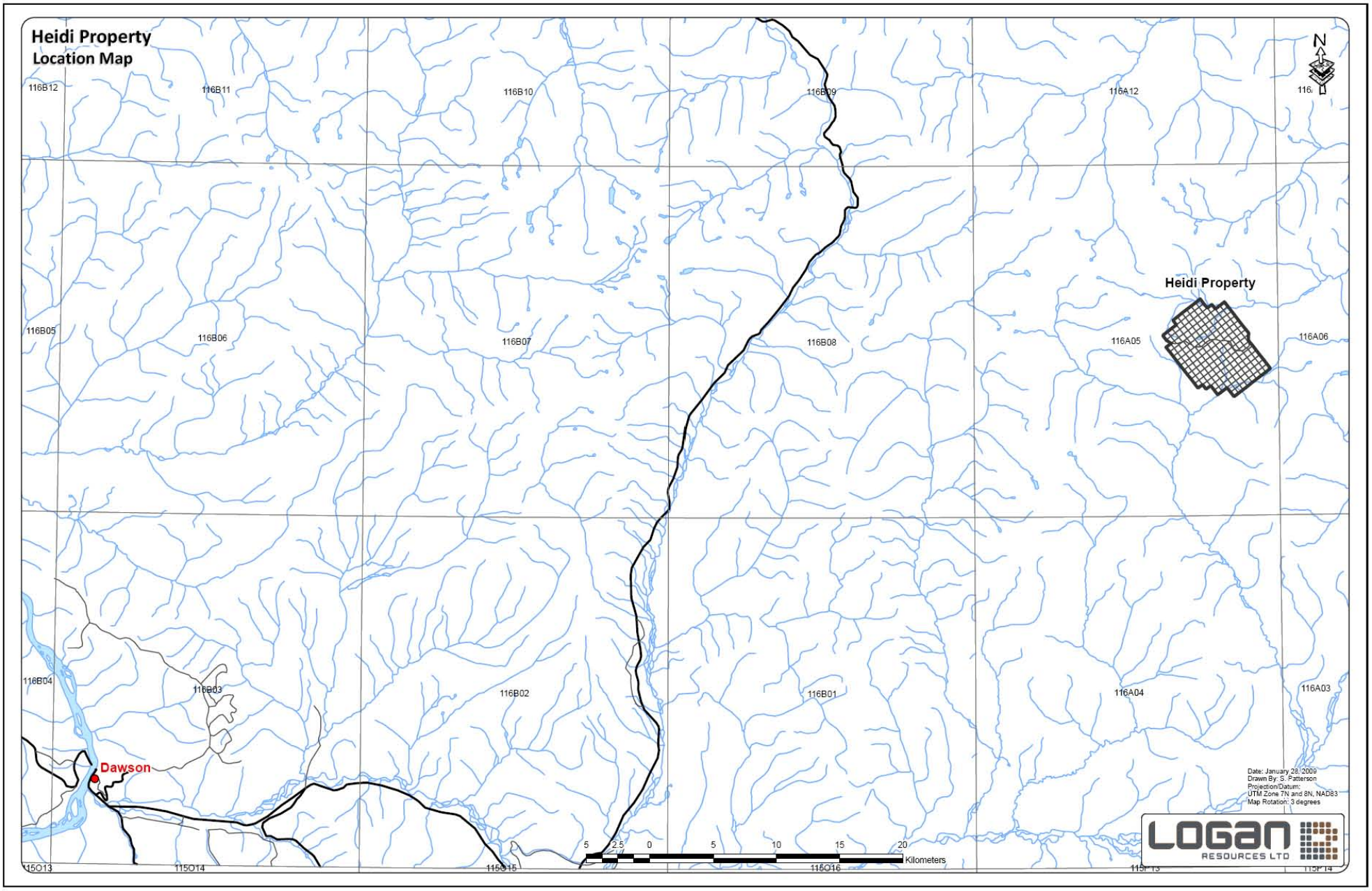

Heidi Property
Location Map
116B12
116B11
116B10
116B09
116A12
116B05
116B06
116B07
116B08
116A05
116A06
Heidi Property
116B04
116B03
116B02
116B01
116A04
116A03
Dawson
115O13
115O14
115O15
115O16
115P13
115P14
5 2.5 0 5 10 15 20
Kilometers
Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 7N and 8N, NAD83
Map Rotation: 3 degrees
LOGAN RESOURCES LTD

FIGURE 1

2003: Propsector Shawn Ryan acquired the property and completed additional soil geochemical work and ran several lines of induced polarization geophysics across an area of coincident gold and arsenic soil geochemical anomalies. An IP anomaly coincides with the geochemical target.

Logan Resources Ltd. acquired property from Shawn Ryan.

2004: Logan completed a due diligence site examination during the summer which confirmed the gold values reported by Homestake as well as returning grab samples running up to 19.9 g/t gold.

2005: Review of 2003 geophysics data by a geophysical consultant and property evaluation by an independent geologist, funded by Logan. Additional IP geophysics and a 1,600 m diamond drill program was recommended, to be followed by a 7,600 m drill program.

2006: Two diamond drill holes totaling 425 m (1,394 feet) completed by Logan. Hole HDI-06-02 intersected a 26 m mineralized zone containing 2.09 g/t Au and 9.5 g/t Ag over 4 m, including 4.04 g/t Au and 18 g/t Ag over 2 m in HDI 06-02.

2007: An additional 19 diamond drill holes totaling 2,686 m (8,812 feet) were completed by Logan to test coincident IP, magnetic and gold geochemical anomalies. Results included 1.51 g/t Au and 14.3 g/t Ag over 3 m in HDI 07-07. The combined 2006 and 2007drilling intersected gold-silver mineralization in 16 of 21 holes covering a 1 km strike extent, with anomalous arsenic (As), antimony (Sb), and bismuth (Bi).

A helicopter airborne magnetic survey completed late in 2007 outlined new targets for the next phase of drilling.

2008 Exploration Program

From July 1 – 13, 2008, Logan Resources Ltd. completed a property-wide program of reconnaissance MMI soil geochemical sampling on the Heidi property. The purpose of this program was to define target areas for further investigation.

A total of 631 soil samples were collected for analysis.

Claim Status

The Heidi property consists of 219 quartz mineral claims covering 4,577 ha (11,312 acres) in the Dawson and Mayo Mining Districts (Figure 2). The claims are owned 100% by Logan Resources Ltd., subject to a 2% NSR.

Table 1: Claims List

District	Grant No.	Claim Name	Claim No.	Registered Owner	Recording Date	Expiry Date
Mayo	YC56532	Heidi	55	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56533	Heidi	56	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56534	Heidi	57	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56535	Heidi	58	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56536	Heidi	59	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56537	Heidi	60	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61170	Heidi	61	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61171	Heidi	62	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61172	Heidi	63	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61173	Heidi	64	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61174	Heidi	65	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61175	Heidi	66	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61176	Heidi	67	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61177	Heidi	68	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61178	Heidi	69	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61179	Heidi	70	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61180	Heidi	71	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61181	Heidi	72	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61182	Heidi	73	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61183	Heidi	74	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61184	Heidi	75	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61185	Heidi	76	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61186	Heidi	77	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61187	Heidi	78	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61188	Heidi	79	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61189	Heidi	80	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61190	Heidi	81	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61191	Heidi	82	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61192	Heidi	84	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61193	Heidi	85	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61194	Heidi	86	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61195	Heidi	87	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61196	Heidi	88	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61197	Heidi	89	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61198	Heidi	90	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61199	Heidi	91	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61200	Heidi	92	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61201	Heidi	93	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61202	Heidi	94	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61203	Heidi	95	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61204	Heidi	96	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61205	Heidi	97	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61206	Heidi	98	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61207	Heidi	99	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61208	Heidi	100	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61209	Heidi	101	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61210	Heidi	102	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61211	Heidi	103	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61212	Heidi	104	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012

District	Grant No.	Claim Name	Claim No.	Registered Owner	Recording Date	Expiry Date
Dawson	YC61213	Heidi	105	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61214	Heidi	106	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61215	Heidi	107	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61216	Heidi	108	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61217	Heidi	109	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61218	Heidi	110	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61219	Heidi	111	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61220	Heidi	112	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61221	Heidi	113	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Dawson	YC61248	Heidi	140	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61249	Heidi	141	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61250	Heidi	142	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Dawson	YC61261	Heidi	153	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61262	Heidi	154	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61263	Heidi	155	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012

District	Grant No.	Claim Name	Claim No.	Registered Owner	Recording Date	Expiry Date
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Dawson	YC61266	Heidi	158	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61267	Heidi	159	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61268	Heidi	160	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61269	Heidi	161	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61270	Heidi	162	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61271	Heidi	163	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Dawson	YC61273	Heidi	165	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Dawson	YC61278	Heidi	170	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61279	Heidi	171	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61280	Heidi	172	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61281	Heidi	173	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61282	Heidi	174	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Dawson	YC61284	Heidi	176	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Dawson	YC61285	Heidi	177	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56538	Heidi	178	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56539	Heidi	179	Alfred Bell - 100%.	7/5/2007	7/5/2012
Mayo	YC56540	Heidi	180	Alfred Bell - 100%.	7/5/2007	7/5/2012
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Mayo	YC56551	Heidi	191	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56552	Heidi	192	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
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Mayo	YC56554	Heidi	194	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56555	Heidi	195	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56556	Heidi	196	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56557	Heidi	197	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56558	Heidi	198	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56559	Heidi	199	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56560	Heidi	200	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56561	Heidi	201	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56562	Heidi	202	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56563	Heidi	203	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56564	Heidi	204	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56565	Heidi	205	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012
Mayo	YC56566	Heidi	206	Logan Resources Ltd. - 100%.	7/5/2007	7/5/2012

District	Grant No.	Claim Name	Claim No.	Registered Owner	Recording Date	Expiry Date
Mayo	YC56567	Heidi	207	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56568	Heidi	208	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56569	Heidi	209	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56570	Heidi	210	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56571	Heidi	211	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56572	Heidi	212	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56573	Heidi	213	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56574	Heidi	214	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56575	Heidi	215	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56576	Heidi	216	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56577	Heidi	217	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56578	Heidi	218	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56579	Heidi	219	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC56580	Heidi	220	Henry Tremblay - 100%.	7/5/2007	7/5/2012
Mayo	YC39455	Heidi	37	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39456	Heidi	38	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39457	Heidi	39	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39458	Heidi	40	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39459	Heidi	41	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39460	Heidi	42	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39461	Heidi	43	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39462	Heidi	44	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39463	Heidi	45	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39464	Heidi	46	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39465	Heidi	47	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39466	Heidi	48	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39467	Heidi	49	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39468	Heidi	50	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39469	Heidi	51	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39470	Heidi	52	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39471	Heidi	53	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC39472	Heidi	54	Logan Resources Ltd. - 100%.	4/1/2005	4/1/2016
Mayo	YC10928	Heidi	21	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10929	Heidi	22	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10930	Heidi	23	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10931	Heidi	24	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10932	Heidi	25	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10933	Heidi	26	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10934	Heidi	27	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10935	Heidi	28	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10936	Heidi	29	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10937	Heidi	30	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10938	Heidi	31	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10939	Heidi	32	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10940	Heidi	33	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10941	Heidi	34	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10942	Heidi	35	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10943	Heidi	36	Logan Resources Ltd. - 100%.	8/12/2003	8/12/2016
Mayo	YC10778	Heidi	1	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10779	Heidi	2	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10780	Heidi	3	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017

District	Grant No.	Claim Name	Claim No.	Registered Owner	Recording Date	Expiry Date
Mayo	YC10781	Heidi	4	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10782	Heidi	5	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10783	Heidi	6	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10784	Heidi	7	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10785	Heidi	8	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10786	Heidi	9	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10787	Heidi	10	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10788	Heidi	11	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10789	Heidi	12	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10790	Heidi	13	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10791	Heidi	14	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10792	Heidi	15	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10793	Heidi	16	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10794	Heidi	17	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10795	Heidi	18	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10796	Heidi	19	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017
Mayo	YC10797	Heidi	20	Logan Resources Ltd. - 100%.	1/3/2003	1/3/2017

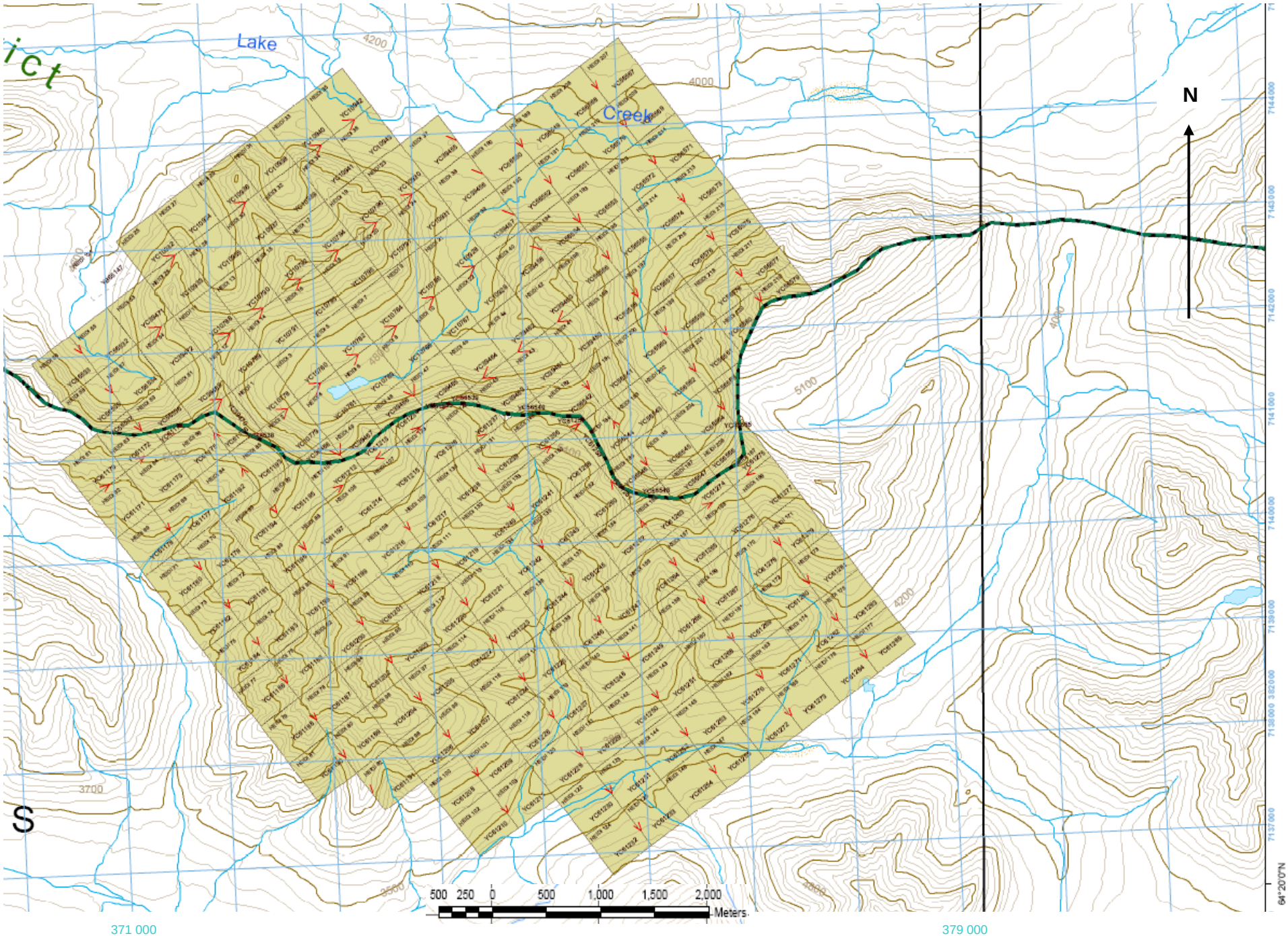

ict
Lake
Creek
N
S
4200
4000
5100
4200
3700
500 250 0 500 1,000 1,500 2,000
Meters
371 000
379 000
64°20'0"N

FIGURE 2

REGIONAL GEOLOGY

The following information on regional and property geology is taken from Peter George's evaluation report on the Heidi property (George, 2005).

The geological setting of west central Yukon comprises three regional terranes, the Yukon-Tanana Terrane, the Selwyn Basin (between the Tintina and Dawson Faults), and the North American Shelf (north of the Tintina and Dawson Faults).

The Selwyn Basin consists of a package of Late Proterozoic to Jurassic sedimentary rocks deposited in a deep basin on the west margin of the continental platform.

Proterozoic basement rocks are exposed in the core of regional anticlines and in fault-bounded horst blocks. The mid-Cretaceous intrusive site occurs throughout the central part of the Selywn basin along trends that roughly parallel the Tintina structure.

In terms of mineralization, skarn and replacement type minerals deposits are formed where Tombstone intrusives intrude limestone and calcareous grit sequences. The intrusions commonly have gold showings within the intrusive and in the alteration halo that surrounds the intrusives.

Tombstone Suite intrusives typically display a donut shaped aeromagnetic signature which consists of a non-magnetic core and a more magnetic contact area and alteration halo that is sulphide-rich, including pyrrhotite. There is a small donut-shaped anomaly underlying the Heidi property (Figure 4) which is inferred to be a Tombstone intrusive. The nature of gold mineralization at Heidi appears to support the presence of a Tombstone intrusive at shallow depth below the mineralization.

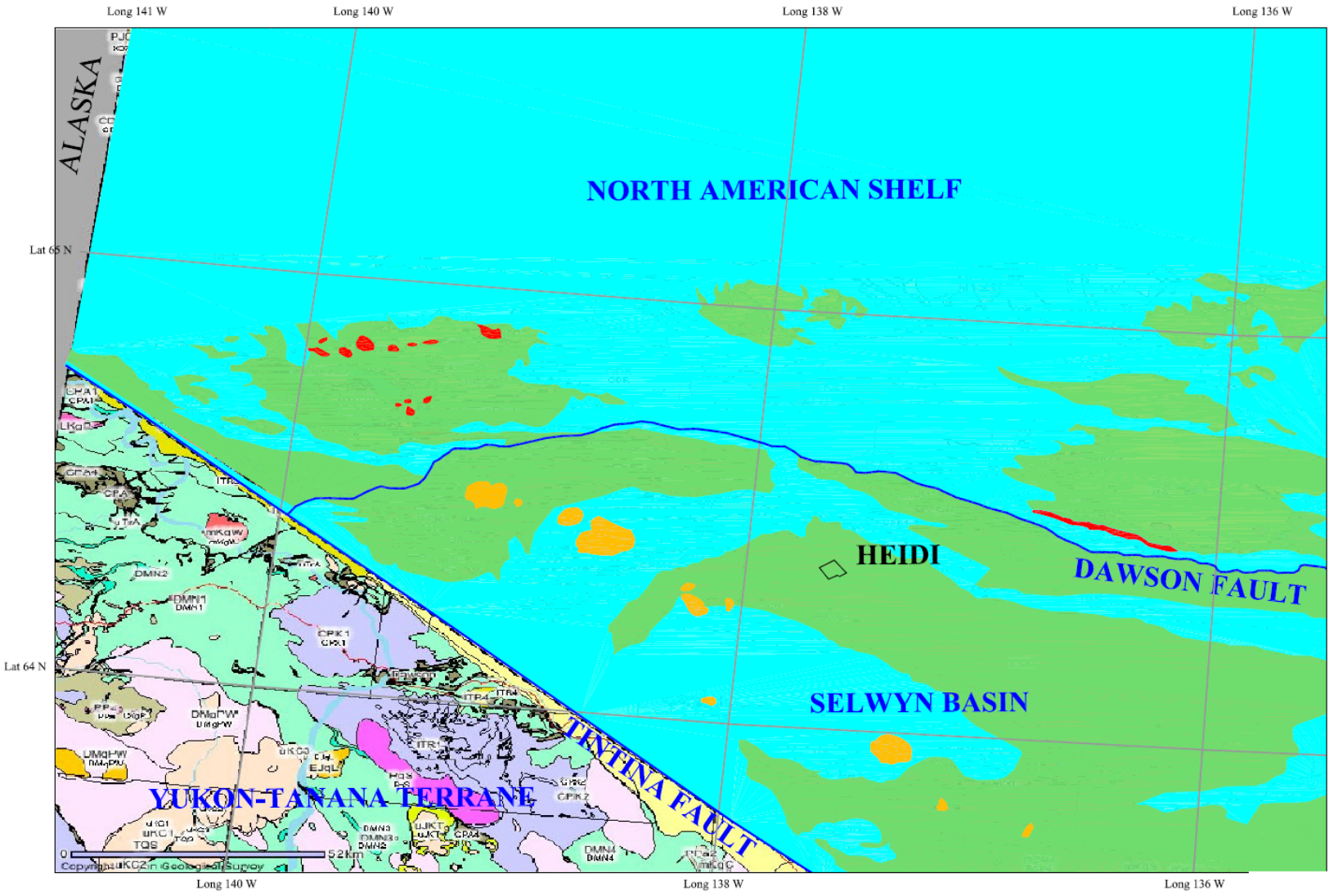

Long 141 W
Long 140 W
Long 138 W
Long 136 W
Lat 65 N
Lat 64 N
ALASKA
NORTH AMERICAN SHELF
HEIDI
DAWSON FAULT
SELWYN BASIN
TINTINA FAULT
YUKON-TANANA TERRANE
0
52km
Copyright Geological Survey
Post Proterozoic Strata
Proterozoic Strata
Tombstone Intrusives (100 Ma)
Wernecke Breccia (1595 Ma)
Major Faults, separating regional geologic terranes
Background base map is from Yukon Government website
REGIONAL GEOLOGY, HEIDI AREA
SCALE
0 5 10 25 50 Km
Peter T. George, P.Geo., Consulting Geologist

FIGURE 3

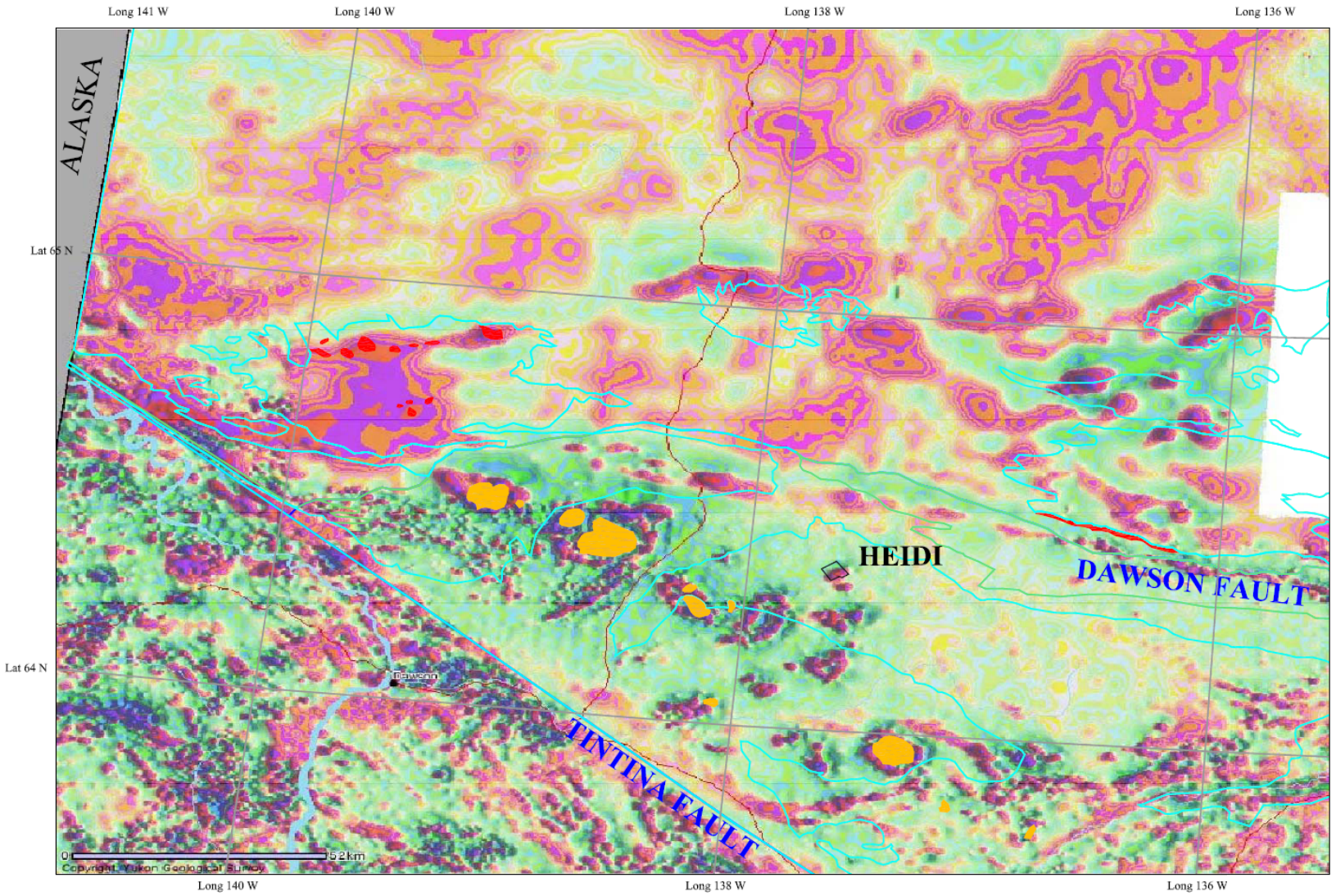

Long 141 W
Long 140 W
Long 138 W
Long 136 W
ALASKA
Lat 65 N
Lat 64 N
HEIDI
DAWSON FAULT
TINTINA FAULT
Dawson
0
152km
Copyright Yukon Geological Survey
Long 140 W
Long 138 W
Long 136 W
REGIONAL 1st Vertical Derivative Aeromagnetics, HEIDI AREA
SCALE
0 5 10 25 50 Km
Peter T. George, P.Geo., Consulting Geologist

FIGURE 4

PROPERTY GEOLOGY & MINERALIZATION

The Heidi property is underlain by Proterozoic metasediments of the Hyland Group that have been subdivided in this part of the Yukon into the Yusezyu and Narchilla Formations. The Yusezyu Formation consists of rusty weathering gritty quartzite, sandstone, and quartz-pebble conglomerate. Minor interbeds of limestone, calcareous sandstone and shale are common. The Narchilla Formation consists of black, maroon and green shales and slates. This unit is quite distinct and is usually identifiable from a distance.

Bedding strikes range from 90 to 120° and dip 30 to 45° south at an angle close to slope of the south facing side of the ridge on the property. The discovery showing on the Heidi is located on the east facing slope at the east end of the ridge, approximately 20 metres below the peak of the ridge.

The Heidi gold showing consists of 5 to 50% massive to disseminated arsenopyrite, pyrite, and stibnite/jamesonite replacing limestone and calcareous grit units. Irregular narrow quartz-arsenopyrite veins intersect the mineralized beds and probably channeled the mineralizing fluids into the favourable horizons. The mineralization is poddy but is mainly localized within the recumbently folded south limb of Heidi anticline near the Yusezyu/Narchilla contact. The mineralization occurs within an area of approximately 300 m by 100 m. This style of mineralization is consistent with Tombstone intrusive at depth.

The exploration target at Heidi is a stratabound (high porosity, carbonate rich) sedimentary unit which has been invaded by epithermal fluids from a Tombstone Intrusive at shallow depth below the surface. There is a defined gold-arsenic soil geochemical anomaly with coincident induced polarization anomaly covering an area of approximately 1,200 metres by 250 – 750 metres. The target area is down dip from the discovery showing.

2008 MMI SOIL SURVEY

From July 1 -13, 2008, Logan Resources conducted a reconnaissance MMI soil geochemical survey on the Heidi property. A crew of 6 people working under the direction of geologist Daithi Mac Gearailt collected a total of 631 samples for analysis (see sample location map in Figure 5).

The samples were spaced at 250 metres with a line spacing of 250 m. Locations of collection points were determined using a Garmin GPS unit. The samples were collected using a stainless steel augur from a depth of between 10 and 25cm, both A and B horizons were sampled and marked accordingly. The control samples were collected using a spade to dig a hole 25cm deep, scraping clean the sides of the hole using a plastic trowel then collecting the sample using a plastic trowel. An augur sample was taken beside the control to allow for comparison between the two. The samples were placed in Kraft sample bags and then placed in plastic zip lock bags, labelled with a property code, sample number and year. The samples were shipped in boxes to SGS laboratories in Toronto for analysis by MMI (46 elements).

Please refer to the report by Mark Fedikow in Appendix A for details on the methodology, results and conclusions of the MMI soil survey.

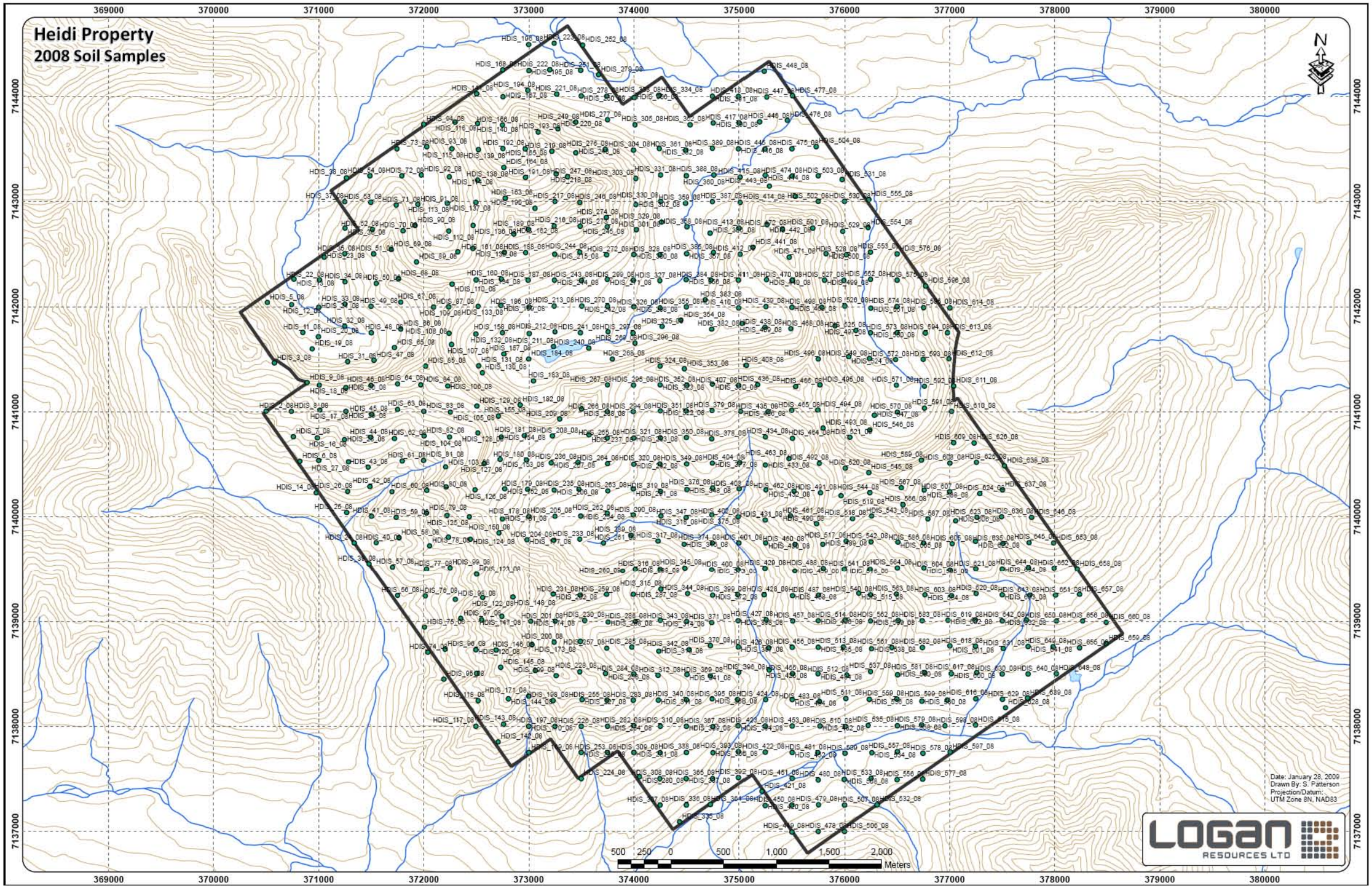

Heidi Property
2008 Soil Samples
N
369000
370000
371000
372000
373000
374000
375000
376000
377000
378000
379000
380000
7144000
7143000
7142000
7141000
7140000
7139000
7138000
7137000
500 250 0 500 1,000 1,500 2,000
Meters
Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83
LOGAN
RESOURCES LTD

FIGURE 5

REFERENCES

Ash, Chris H. (2005): 2004 Geological & Geochemical Report on the Heidi Property; for Logan Resources Ltd.

George, Peter T. (2005): Evaluation Report Heidi Property, Ogilvie Mountains, Mayo Mining District, Yukon, Canada; for Logan Resources Ltd.

Papageorge, Mike (1998): Assessment Report, 1998 Geological and Geochemical Program, Heidi Property; for Homestake Canada Inc.

STATEMENT OF COSTS

Personnel:	
Daithi Mac Gearailt, Geologist (July 1 – 13, 2008; 13 days @ $400/day)	5,200
Aiden Lavelle, Geologist (July 1 -13, 2008; 13 days @ $400/day)	5,200
Shane Treacy, Geologist (July 1 -13; 13 days @ $300/day)	3,900
Sarah Cummings, Geological Asst. (July 1-13; 13 days @ $185/day)	2,405
Kevin Trudel, Soil Sampler (July 1-13; 13 days @ $185/day)	2,405
Thomas Barrette, Soil Sampler (July 1-13; 13 days @ $185/day)	2,405
Archie Halkett, Soil Sampler (July 1 -13; 13 days @ $300/day)	3,900
Alfred Bell, Soil Sampler (July 1 -13; 13 days @ $300/day)	3,900
Susan Wilson, Cook (July 1-13; 13 days @ $325/day)	4,225
Accommodation & Meals:	11,031
Analyses:	
631 MMI soil samples (46 elements) @ $30.75/sample	19,407
Helicopter Support	53,300
Fuel	1,201
Supplies	2,175
Drafting/Maps	3,773
Transportation & Shipping	1,756
Communications & Misc.	7,469
Report preparation	5,000
TOTAL:	**138,652**

STATEMENT OF QUALIFICATIONS

I, Rita Myatt, of 340 Richard Street, Coquitlam, British Columbia, do hereby declare that:

1. I graduated from the University of British Columbia with a B.Sc. degree (first class standing) in Geological Sciences in 1995.

2. I have been employed in the mineral exploration industry for 7 years.

3. This report is based on work done on the property during the period of July 1 - 13, 2008 and on references as listed.

Dated at Vancouver, British Columbia, this 29th day of January, 2010.

_____

Rita Myatt

APPENDIX A

Results of a Mobile Metal Ions Process (MMI-M) Soil Geochemical Survey
on the Heidi Property

by Mark Fedikow of Mount Morgan Resources Ltd.

Results Of A Mobile Metal Ions Process (MMI-M) Soil Geochemical Survey on The Heidi Property of Logan Resources Ltd., Ogilvie Mountains, Mayo Mining Division, Yukon

February 9, 2009

Prepared For:
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Canada
Telephone: 604-689-0299
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Prepared By:
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E-mail: mfedikow@shaw.ca

EXECUTIVE SUMMARY

A Mobile Metal Ions (MMI-M) soil geochemical survey undertaken on the Heidi property of Logan Resources has delineated multi-sample and multi-element MMI-M anomalies. These anomalies are high-contrast Au-Ag responses with 738 and 892 times background, respectively. Associated metals that form anomalies include As (274 times background), Sb (454 times background), Pb (290 times background) and Zn (96 times background). These anomalies occur in the northern 1/3 of the property as ovoid and sinuous shapes and a considerable amount of coincidence between the various metals. The responses are significant and should be followed up by integrating geology and geophysical survey results with diamond drill testing.

The analysis of inorganic and organic soil using MMI-M extraction and sample spacing on the grid are adequate to delineate precious and base metal anomalies.

The methodical and consistent sample collection and good data quality has resulted in an excellent database from which significant, high-contrast anomalies have been recognized.

PREAMBLE

The exploitation of mineral commodities in the near-surface geological environment has become increasingly difficult due to the exhaustion of mineralization exposed at surface and the mantling of prospective bedrock by glacially transported till and its derivatives. Thick glaciofluvial and glaciolacustrine sediments topped by organic deposits make mineral exploration in these terrains challenging. For this reason a plethora of innovative exploration geochemical selective and partial digestions, coupled with state-of-the-art instrumentation capable of measuring concentrations in the parts per billion (ppb) and sub-parts per billion ranges, have been developed. These techniques offer the explorationist tools to "see through" overburden and derive useful mineral exploration data for integration with geology and geophysics and ultimately for drill-testing multivariate anomalies. Disrupted overburden, such as that observed with logging practices (scarification), tends to complicate MMI responses although modified sampling practices can be adopted to rectify this disturbed environment. Areas affected by landslide are also complicating factors.

The proprietary Mobile Metal Ions Process (MMI) soil geochemical technique has been utilized on a wide range of commodity types from base and precious metals to diamonds worldwide. The Process is based upon proprietary partial extraction techniques, specific combinations of ligands to keep metals in solution, and relies on strict adherence to sampling protocols usually established during an

orientation program. Geochemical data resulting from MMI analysis of improperly collected soils cannot be ameliorated with univariate and/or multivariate statistical and/or graphical solutions.

The recognition of anomalies in geochemical data has progressed from simple visual inspection in small data sets to multivariate, parametric and non-parametric or robust statistical methods for large datasets usually extracted from regional geochemical surveys. Derived parameters from these statistical exercises, such as factor scores or discriminant functions, have been successfully utilized in reducing a large number of potentially useful variables to a select few variables that identify and localize anomalous geochemical signatures. These statistical approaches have been required to manipulate accurate and precise, low-cost, multi-element geochemical data.

The MMI technology uses a different approach to exploration geochemistry by analyzing soils for a select few commodity elements upon which to base property evaluations. Having stated this, the MMI-M multi-element suite that was utilized to analyze inorganic soils from the Heidi property survey comprises analyses for 45 elements. These consist of a multi-element suite that reports ppb and sub-ppb analyses for base and precious metals, pathfinder elements for these commodities, as well as elements useful for mapping bedrock geology obscured by glacial overburden and its derivatives. A small number of elements in this package report in the parts per million ("ppm") concentration range (Al, Ca, Mg,

and Fe). The large number of elements in the database provides an opportunity to assess an area of interest for a wide range of metallic mineral deposits with only minor drawbacks in terms of lower limits of determination. The specific details of this assessment are described below.

TERMS OF REFERENCE

The author of this report was contracted by Mr. Seamus Young of Logan Resources Ltd. to undertake the interpretation of Mobile Metal Ions soil geochemical survey data from the Heidi property of Logan Resources Ltd. The Heidi property is located in west-central Yukon Territory approximately 95 km east-northeast of Dawson City and 30 km east of the Dempster Highway. This report represents a final interpretation of work and is completed with recommendations for follow-up exploration. The MMI-M survey was undertaken to assess the property for MMI-M geochemical signatures related to skarn and replacement-type mineral deposits within Intrusions. Massive to disseminated arsenopyrite, pyrite, and stibnite/jamesonite occurs as bedded replacement-type sulphide mineralization in limestone and calcareous grit units of Proterozoic age. Previous exploration including rock samples from trenches returned values up to 2.93 grams per tonne gold. The target at Heidi is interpreted to be proximal epithermal gold mineralization in the alteration zone at the upper contact of an intrusion.

APPROACH TO THE SURVEY

The Heidi MMI-M exploration survey undertaken by Logan Resources was designed to assess the survey area for high-contrast geochemical signatures for precious and base metal mineralization. Overburden cover and mineralization that is essentially blind has hindered exploration and the MMI survey is an attempt to provide a tool for focused exploration.

SAMPLE COLLECTION AND ANALYSIS

In MMI surveys there are some general approaches that are used to guide sample collection including preferred depths of sampling and these are described briefly here. Additional information is also available from the SGS website (www.sgs/geochemistry.com).

Soil samples, each weighing approximately 250 grams, are usually collected at variable sample spacing along single transects over known mineralized zones or extrapolated trends of these zones. Generally, 25-m stations in precious metal exploration and up to 50 m in the case of base metals are the routine spacing. Sample spacing should be established on the basis of a "best-estimate" of the likely target being sought with estimates from historical data or exploration results from nearby programs. Initially, samples are often collected at a closer spacing until it is determined that a larger spacing is appropriate to the target being sought. At the Heidi property soils were sampled at a depth of 10-25 cm below the active or live organic layer or the point at which soil formation is initiated in

this environment. The sample collected between10-25 cm is a continuous 15 cm long plug of sediment or a continuous vertical channel of sediment.

Samples are bagged on site without preparation and shipped to SGS Laboratories (Toronto, Ont.) for MMI-M analysis. The MMI-M is a neutral extraction with analytical finish by inductively coupled plasma-mass spectrometry (ICP-MS).

A review of sample collection information provided by Logan Resources indicates that this approach to sampling has resulted in both inorganic and organic soil samples being submitted for analysis. Sampled material was a variably colored sand-silt-clay collected from the B-horizon and humified organic material from the A-horizon. A total of 634 soil samples were collected for this survey.

DATA TREATMENT AND PRESENTATION

In exploration surveys where sampling and analytical protocols have been determined by an orientation survey, analytical data is examined visually for analyses less than the lower limit of detection (<LLD) for ICP-MS. Data <LLD are replaced with a value ½ of the LLD for statistical calculations and graphical representation. For most exploration surveys, MMI data is plotted as response ratios. For the calculation of response ratios the 25th percentile is determined using the software program SYSTAT (V10) and the arithmetic mean of the lower quartile used to normalize all analyses. The normalized data represent "response

ratios" which are then utilized in subsequent plots. Zeros resulting from this calculation are replaced with "1". Response ratios are a simple way to compare MMI data collected from different grids, areas and environments from year to year. This normalized approach also significantly removes or "smoothes" analytical variability due to inconsistent dissolution or instrument instability. For the Heidi survey the interpretation is based on response ratios.

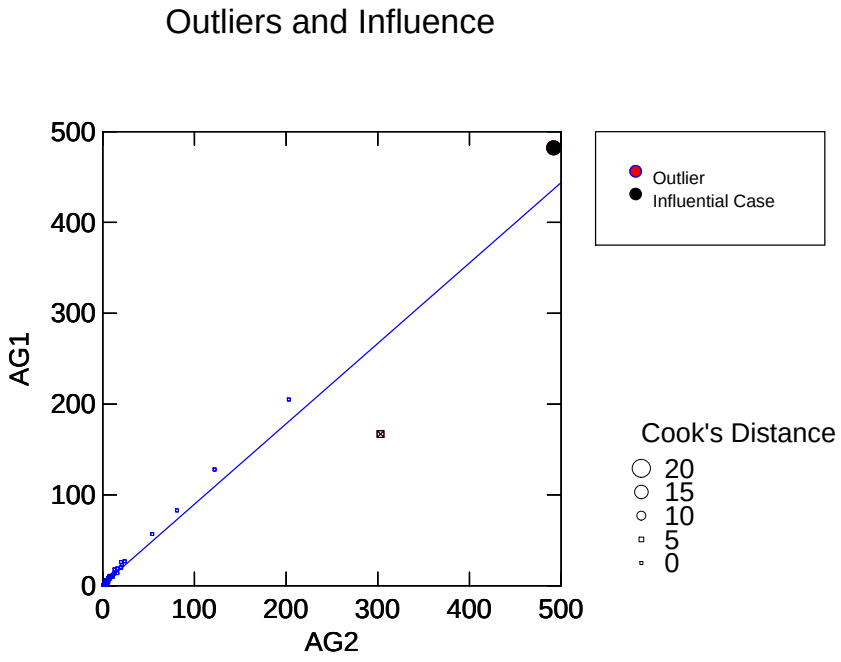
Analytical data as received from SGS Mineral Services and Logan Resources is presented in Appendix 1 along with sample descriptions. Analytical data from analytical duplicates, replicate analyses of standard MMI reference materials and analytical blanks are given in Appendix 2 as "QAQC". The 25th percentiles and backgrounds used to calculate response ratios are included in Appendix 2 with the edited analytical data. The variation in concentration of MMI-M suite elements on the property is discussed in a geochemical narrative based on bubble plots produced with ARCVIEW software. Prior to plotting organic and inorganic samples were separated and response ratios calculated separately. In this way geochemical flux in both organic and inorganic samples can be reviewed for each population.

RESULTS

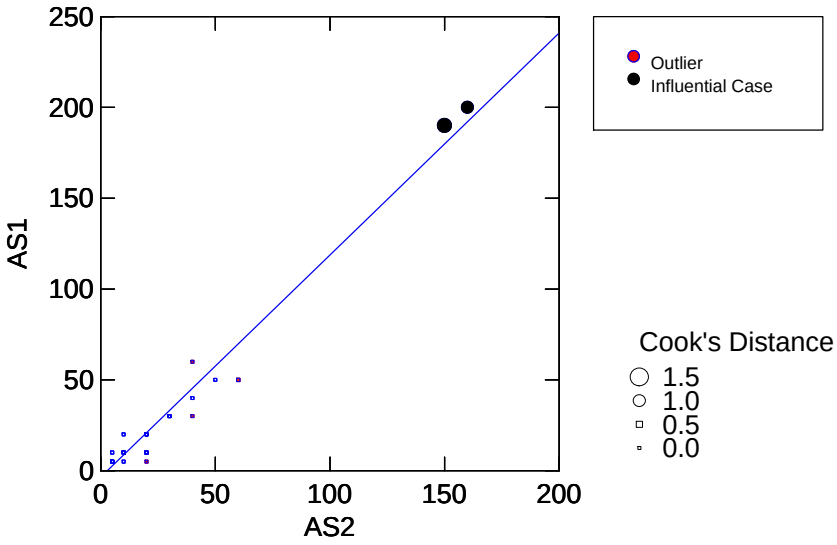
Data Reproducibility-Analytical Duplicates

Analytical duplicate sample analyses are presented below as simple linear regression plots and in Appendix 2 and permit an assessment of the ability to

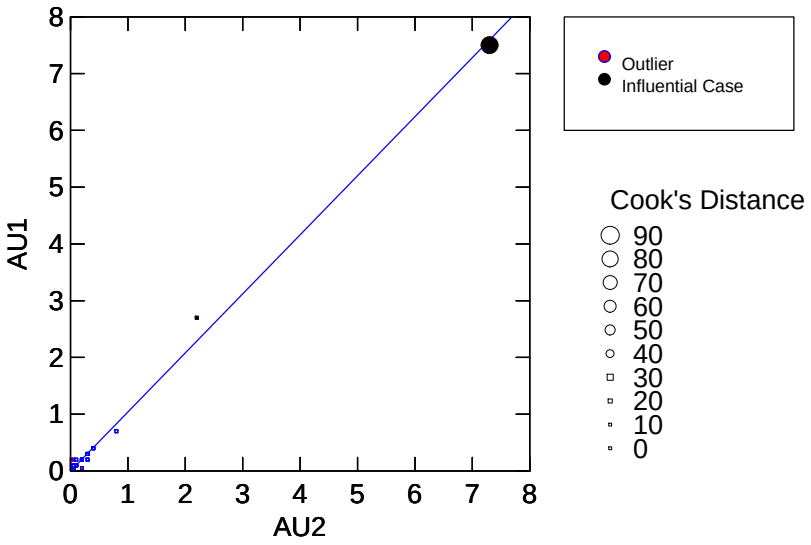
reproduce analyses at a wide range in concentration. It is observed that the duplicate pairs exhibit a very high degree of reproducibility across a wide range in concentration for most MMI-M elements including the base metal commodity elements Au, Cu and Mo. Any variability that exists between duplicates is within +/- 25% and as such is interpreted not to be a hindrance to interpretation and the recognition of bona fide trends in the dataset. Most variability occurs at or near the lower limit of determination. This is particularly true for the elements that have numerous samples at or close to the lower limit of determination. The excellent analytical reproducibility for the important commodity elements Au, Ag, Zn and pathfinder As is demonstrated in the simple linear regression plots below.

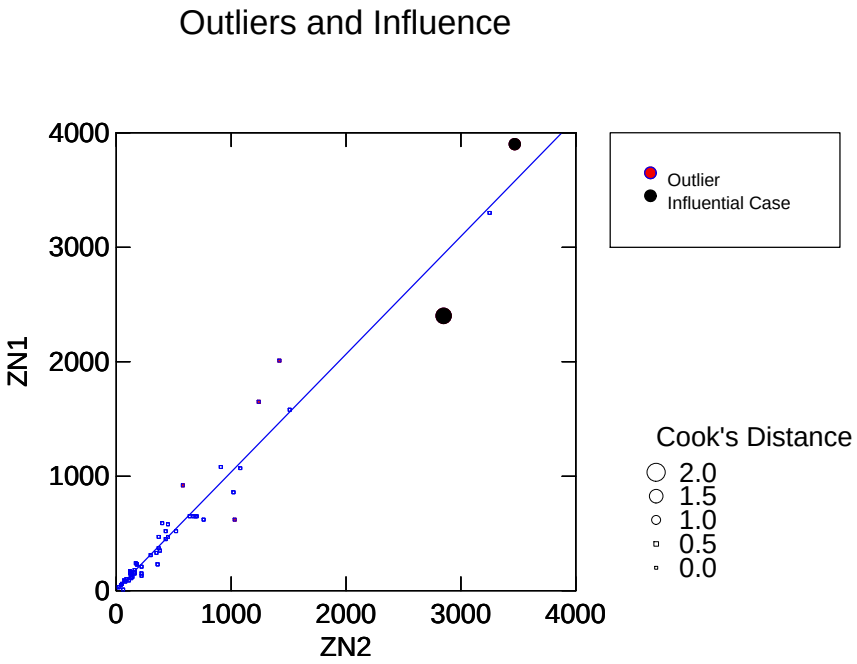


Outliers and Influence



Outliers and Influence





Note: ***Cook's distance is a commonly used estimate of the influence of a data point when doing regression. Cook's distance measures the effect of deleting a given observation. Data points with large residuals (outliers) may distort the outcome and accuracy of a regression.***

Standard Reference Materials

A review of the QC analytical data in Appendix 2 indicates there is excellent agreement of the replicate analyses for the standard reference material MMISRM16 with the accepted or recommended values. This is particularly true for the commodity elements. Minor variation in reproducibility in expected values is observed for some of the rare earths.

Analytical Blank Replicates

A review of the replicate analyses of the analytical blanks (Appendix 2) indicates very minor amounts of contamination are present in the blanks. The table below summarizes the elements present and in what quantities for the blanks. This demonstrates the absence of **significant** laboratory-based contamination that is being introduced into the sample.

Summary of detected contaminants in analytical blanks, Heidi MMI-M survey.

Element	Samples Reporting	Concentration Level
Al	5	4@ 1ppm, 1@2 ppm
As	1	10 ppb
Au	1	0.3 ppb
Ba	1	10 ppb
Ce	1	5 ppb
Cu	1	20 ppb
Dy	2	1 ppb
Fe	2	1@1 ppm, 1@ 2 ppm
Gd	2	1 ppb
La	6	5@1 ppb, 1@ 2 ppb
Nd	8	5@ 1 ppb, 3@ 2 ppb
Ni	2	1@ 10 ppb, 1@ 9 ppb
Pb	1	10 ppb
Pr	1	1 ppb
Sm	2	1 ppb
Sr	5	2@ 10 ppb, 2@ 20 ppb
Th	3	1@ 0.6 ppb, 1@ 0.7 ppb, 1@ 0.8 ppb
Ti	4	2@ 3 ppb, 1@ 4 ppb, 1@ 5 ppb
U	1	1 ppb
W	2	1 ppb
Y	2	1@ 6 ppb, 1@ 8 ppb
Zn	1	20 ppb

Data Description

The Heidi MMI-M dataset is marked by several elements that are at or below the LLD. These include Bi, Cr, Li, Mo, Nb, Pd, Pt, Sn, Ta, Te, Tl, W and Zr. Some of these elements are typically less mobile than Cu or Zn and their presence in measurable quantities in a small number of samples is testament to this. The high percentage of samples with Au contents <LLD in this survey is not surprising given the very low mobility of Au in the surficial/secondary environment. It is worth noting that the diagnostic signal of a significantly mineralized zone will generally produce moderate- to high-contrast apical responses over the target; however, away from the mineralization at "background" locations there may be no trace of the presence of a specific metal in the analysis. This is another consideration when viewing MMI data-the presence of significant numbers of elements < the LLD is not necessarily cause for concern or that the MMI extraction is not working or has been "buffered" by soil composition. The MMI process is designed to only extract metals that are moving from source to surface and characteristically report metal contents in low ppb concentrations.

Method of Interpretation

Multivariate statistical and graphical techniques were not utilized for the interpretation of MMI data in the Heidi survey interpretation. A simple visual approach was used. The MMI-M data was examined for anomalous spikes or groups of elevated responses for single and/or coincident elements. Element

groupings such as Au-Ag, Au-Ag-Pd, Zn-Cd, Ni-Co, Ni-Co-Ag and Ni-Cu all have relevance to underlying geological conditions and their contained mineralization and are used to assist the rankings of any particular MMI response in terms of follow-up.

When concentration-only data is reviewed unique "spikes" or anomalous responses are assessed. When response ratios are used there are general guidelines brought to bear on the interpretation. Generally, a response ratio of <10 indicates less than interesting responses and is usually an indication of the lack of a significant mineralized zone in the bedrock underpinning the survey area. A response ratio >20 or 20 times background is an initial indication of a low-contrast anomalous response although this "threshold" is not universal. A response of between 21 and 50 is used as a moderate response with RR>51 being referred to as high contrast. Often, pattern recognition in the interpretation of geochemical data is paramount. These parameters were applied to the interpretation of MMI-M geochemical data from the Heidi property.

AREAL DISTRIBUTION OF ANOMALOUS RESPONSES IN THE HEIDI MMI-M SURVEY AREA

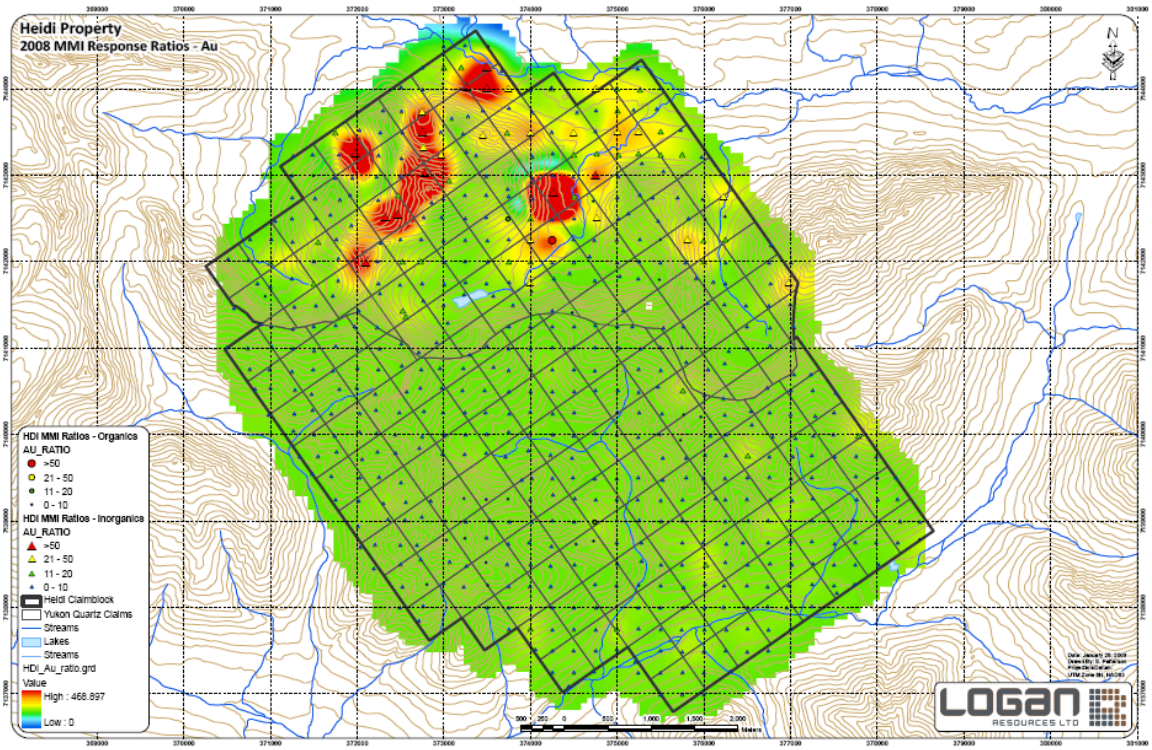
ARCVIEW Bubble Plots

The variation in concentration and the resulting morphologies of anomalous responses in the MMI-M data from the Heidi survey area are described in the following section. All plots of MMI-M suite elements considered to be significant are available for viewing in Appendix 3. The plots are produced so as to provide

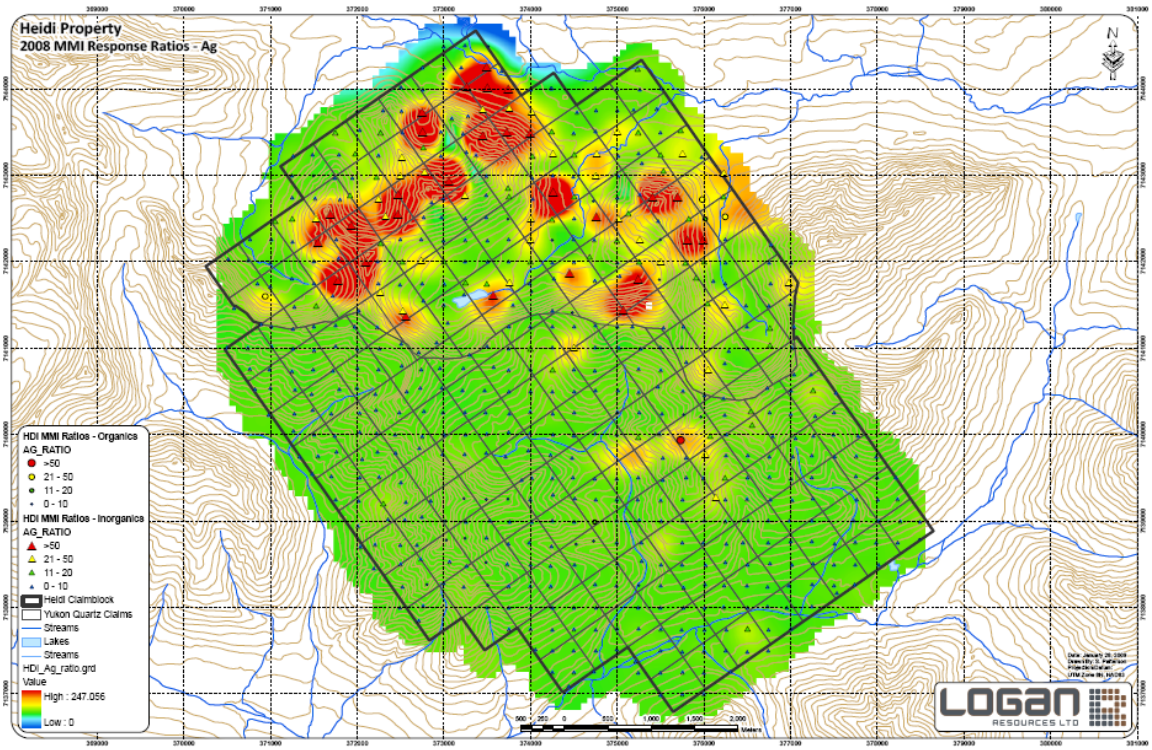
a different symbology for the individual sample types. That is, organic and inorganic soils are given a distinctive symbol (triangles for inorganic soils and circles for organic soils) so that responses on the grid for each of these different sample types can be deduced from one another. Plots of MMI-M geochemistry are draped upon topography including streams and lakes and also claim boundaries. The individual responses are presented as bubbles whose diameter is directly proportional to the magnitude of the geochemical response (as response ratios) and they are also color-coded so that hot colors represent high responses and the cooler colors indicate low responses.

Precious and Related Metal Responses (Au, Ag, As, W and Sb)

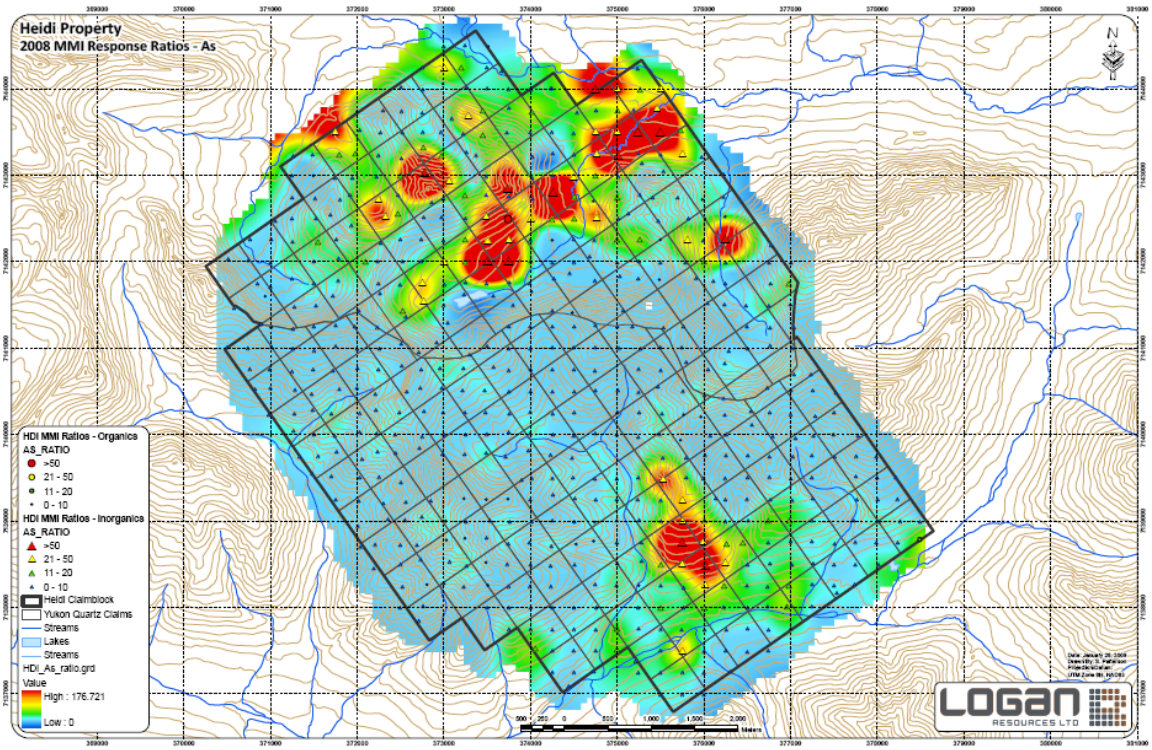
AuRR (1-738): The location of significantly elevated MMI-M responses for Au document the presence of four distinctive ovoid and linear anomalies that are restricted to the northern portion of the claim group. Each of these responses is high-contrast (response ratios>50) and multi-sample in nature. The remainder of the claim group is characterized by background responses. The four documented Au anomalies depicted below are considered to be precious metal targets unto themselves and could be integrated with a geophysical data layer to focus diamond drill holes.



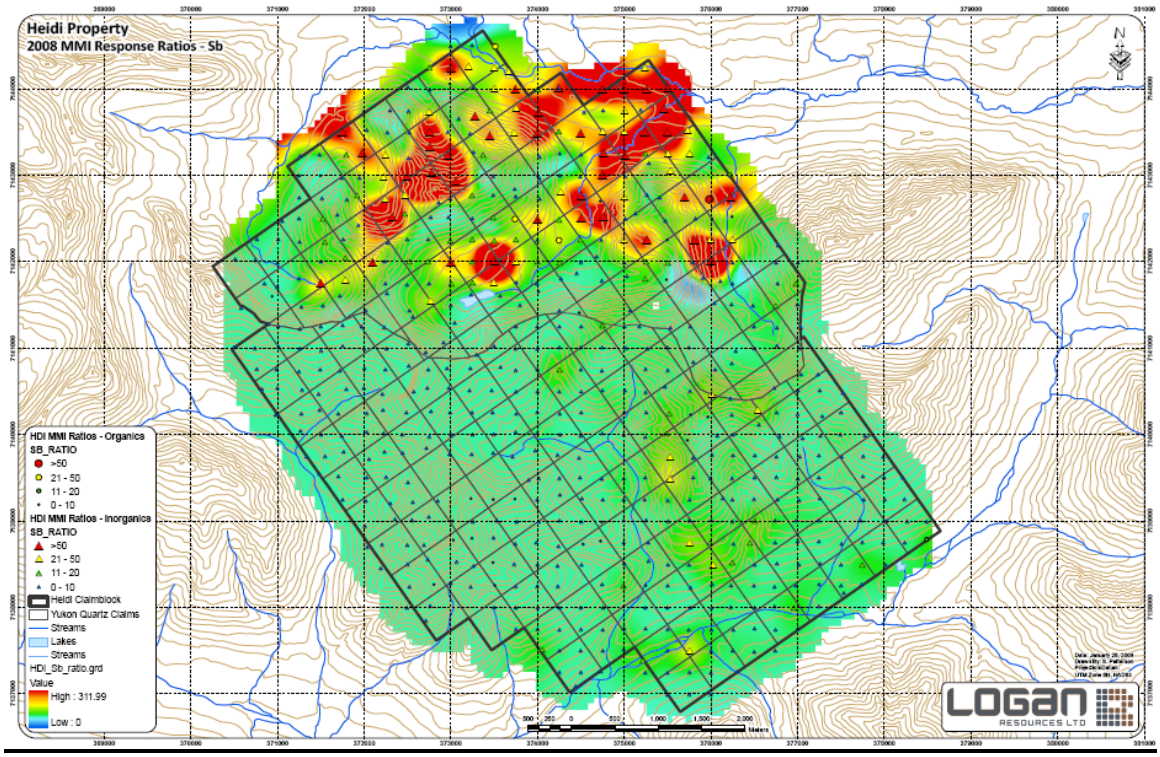
AgRR (1-892): The Ag responses on the Heidi grid are very similar to those for Au in terms of areal distribution and extent. There tends to be a greater number of responses >RR50 in the Ag data and this is likely related to the fact that Ag is a much more mobile element in the secondary or surficial environment. The Ag anomalies are multi-sample and like the Au results anomalies are restricted to the northern 1/3 of the claim group. There is good coincidence between the Au and Ag anomalous responses.



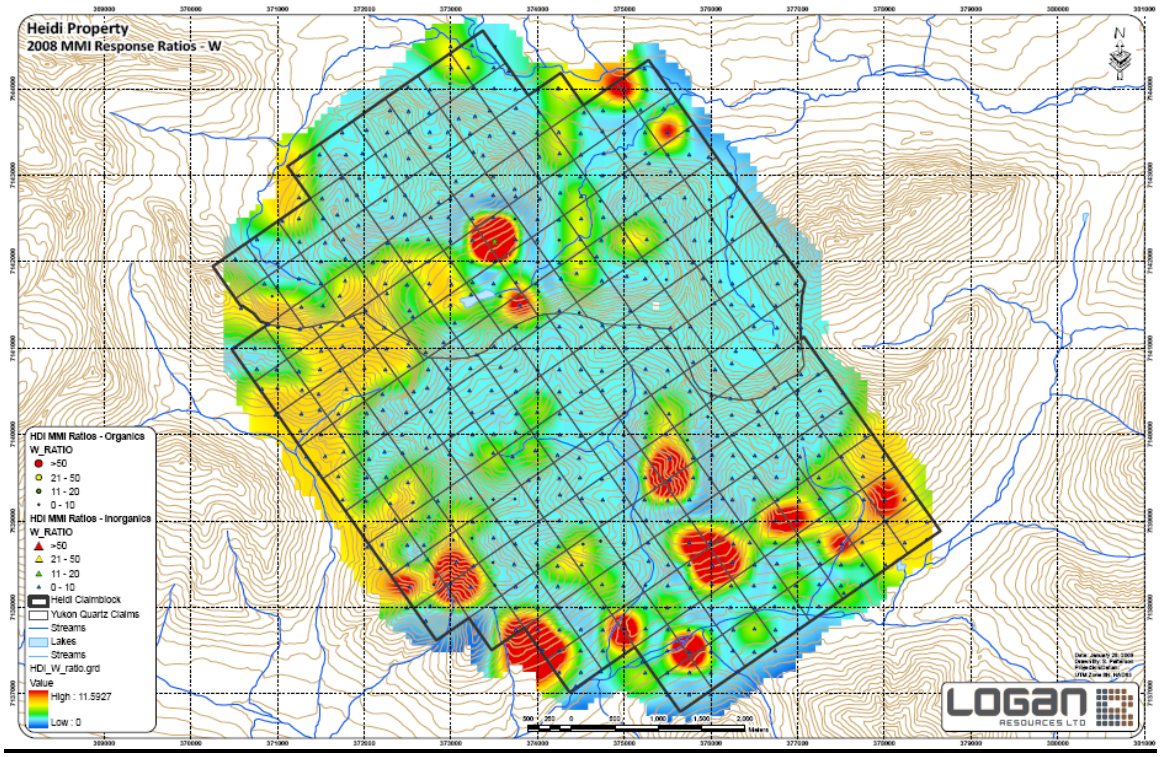
AsRR (1-274): The distribution patterns for the AsRR data closely mimic those for Ag and Au and with the possible exception of an anomaly documented from the southern portion of the claim group, are indicative of a significant area of precious and associated metal enrichment. This area is restricted to the northern 1/3 of the survey area. The strongly elevated As is likely indicative of bedrock-hosted arsenopyrite in association with the Au and Ag.



SbRR (1-454): Elevated Sb responses are confined to the northern 1/3 of the survey area/claim group and are strongly coincident with the Au-Ag-As anomalies documented from this area. The anomalies defined by this four element suite are ovoid to sinuous and defined by elevated responses for multiple samples. The maximum response for Sb is 454 times background and is a robust response. The anomalies appear to abut the northern limit of the claim group and as such are interpreted to be open/non-truncated to the northeast.

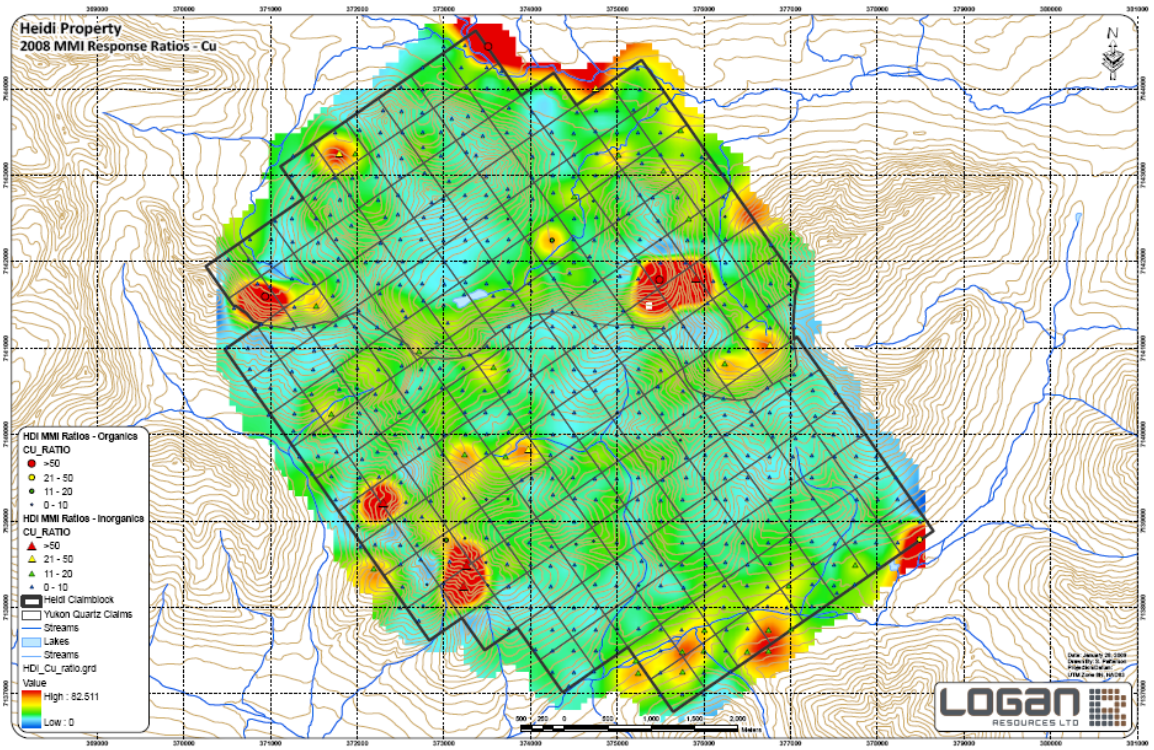


WRR (1-16): The WRR anomalous responses are low-contrast with maxima of 16 times background and form elevated responses in a pattern that is antipathetic to that for Au-Ag-As-Sb. The elevated W forms a cluster of elevated single sample, non-connected responses in the southern portion of the claim group. In form, these responses are similar to some of the base metal responses (see below) in the northern survey area. The northern 1/3 of the claim group is not devoid of WRR anomalies but they are less extensive than the precious metal responses in this area.

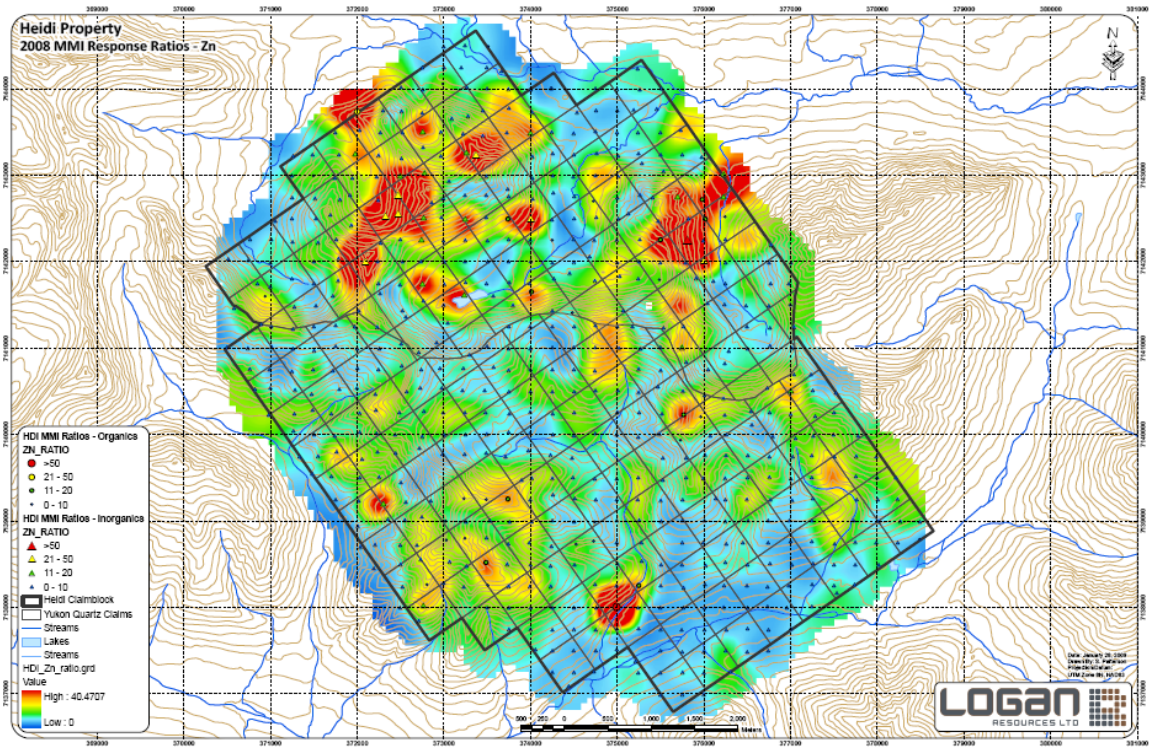


Base and Related Metal Responses (Cu, Pb, Zn, Bi)

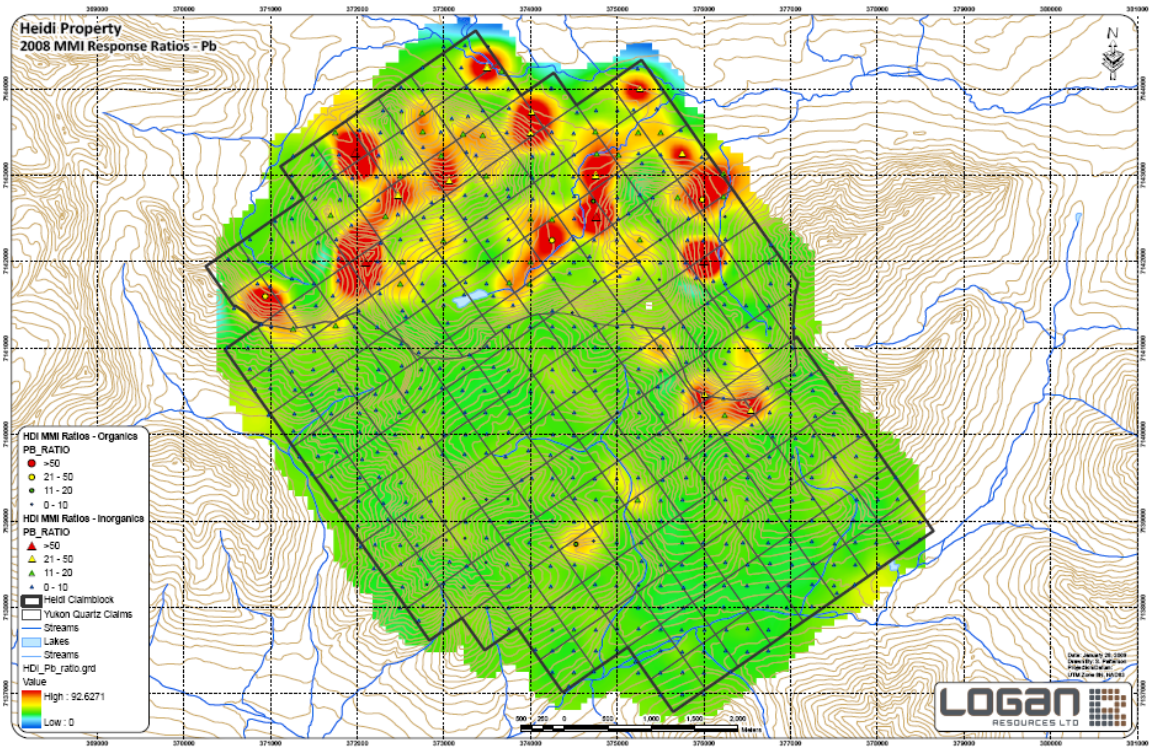
CuRR (1-149): Elevated Cu response ratios are present on the claim group as widely separated anomalies that are for the most part one and two sample responses. Similar to the anomalous responses for Au, Ag, As and Sb there is a high-contrast CuRR anomaly developed at the northern extremity of sampling suggesting the anomaly continues in this direction. The overall distribution of elevated Cu responses is non-focused and not indicative of a bona fide mineralized bedrock source region.



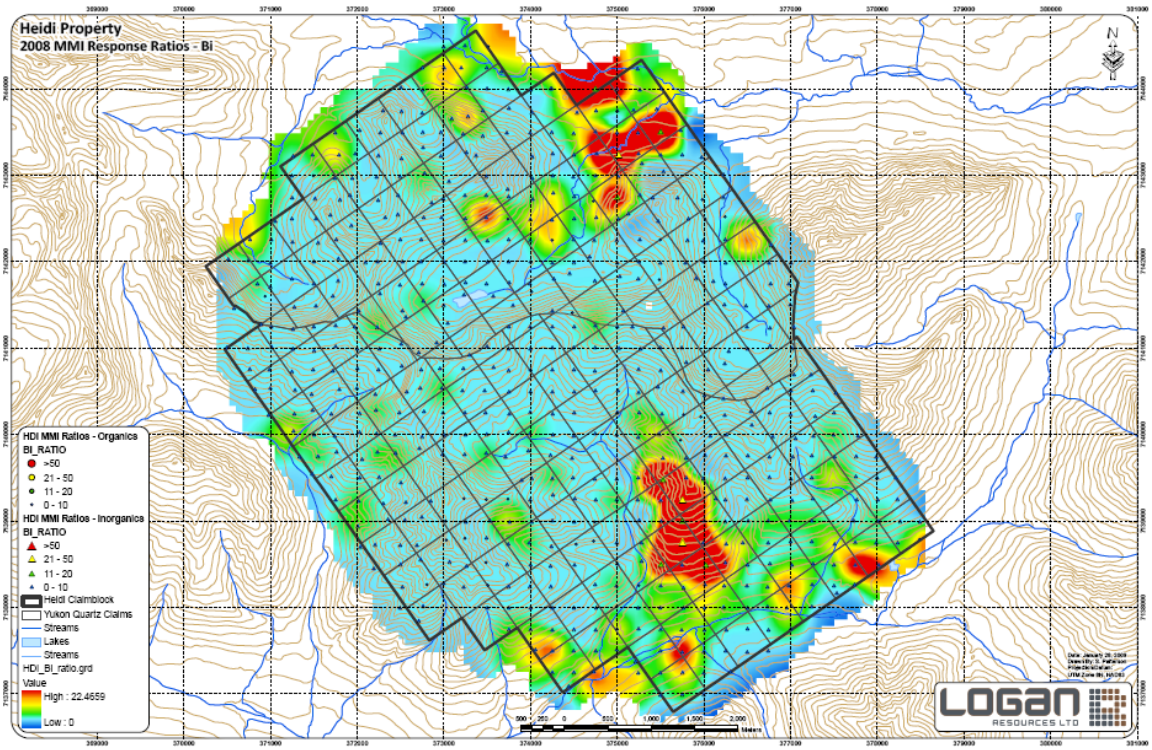
ZnRR (1-96): The anomalous Zn responses, like those for the precious metals Au and Ag and associated As and Sb, are restricted to the northern 1/3 of the survey area. These anomalies present as multi-sample high-contrast (>50RR or 50 times background) and some coincidence with the precious metal responses. This staggered response between the base and precious metals is likely an indication of metal zonation in the host rocks to the mineralization. There is no correspondence with the CuRR responses. Lesser elevated Zn responses are present from the southern portion of the claim group however these are independent or non-coincident with other precious and base metal anomalies.



PbRR (1-290): Elevated responses of up to 290 times background are present in the northern 1/3 of the survey area and are coincident with the precious metal and Zn anomalies from this area. The responses, however, tend to be single sample anomalous sites that are widely separated and do not present a cohesive anomalous response. The significance of these Pb-elevated sample sites is their association with the other precious and base metals in the northern claim group.



BiRR (1- 30): Moderate-contrast bismuth anomalies are documented from both the northern and southern survey areas. The northern anomalies tend to be coincident with Sb and As anomalies but not coincident with the Au-Ag and Zn-Pb anomalies



OBSERVATIONS and DISCUSSION

General Comments

This MMI-M survey at the Heidi property of Logan Resources has identified single and multi-sample and single and multi-element anomalous responses, primarily in the northern 1/3 of the survey area. The multiple anomalies defined for Au, Ag, As, Sb, Pb and Zn are indicative of individual mineralized zones in bedrock and as such are follow-up exploration targets.

Variability in the coincidence between anomalies is observed in the form of offset or not quite 100% overlap between the various anomaly-forming elements. This is a feature observed in many MMI-M surveys and is related to the distribution of

metals in the bedrock underpinning the survey areas. In effect, these patterns of distribution mimic the presence of a mineralized zone and its surrounding halo.

Soil Types

In the Heidi survey, soil samples were collected at a consistent depth of 10-25 cm below the active or non-humified organic layer. In the majority of cases this depth resulted in the collection of an inorganic soil sample. In some cases this resulted in the collection of an organic sample. Although there is no statistically significant difference in metal contents between organic and inorganic soil samples analyzed with MMI-M the results from the Heidi survey indicate that the inclusion of organic soil samples can result in some variance in the geochemical patterns observed in the survey results. This variance can be recognized by the nature of the response whereby a single elevated organic soil sample that is developed in isolation from adjacent organic and inorganic soil samples can likely be ignored. Further, if there is available geophysics or geology in the vicinity of the organic anomaly then the possibility of a *bona fide* anomaly can be reviewed in terms of additional information. This feature does not seem to place any restrictions of the *bona fide* nature of the anomalies at Heidi. Simply put the multi-element and multi-sample anomalies are based on both organic and inorganic soil samples and the results are not skewed by the inclusion of organic soils in the database. This possibility was avoided by extracting the organic soils from the database and calculating response ratios for them separately.

Data Quality

The Heidi survey was undertaken with a significant component of quality control sampling. Analytical duplicates were assessed and demonstrate the quality of data used for interpretation is excellent such that the data is not a hindrance to the recognition of *bona fide* anomalies.

This observation is of prime importance since improperly collected samples without a framework of "QC" provides no assurance that the data is genuinely reflecting the distribution of elements of interest in the survey area.

Follow-Up

This survey at the Heidi property has documented the presence of significant MMI-M geochemical responses. Some of these are localized at the northern limits of sampling and accordingly offer the possibility that the anomalies are larger and more numerous than have been identified by this survey. The multiple precious and base metal anomalies are important targets for additional exploration and should be assessed in a variety of ways. These are described in the recommendations portion of this report.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are evident from this MMI-M exploration survey on the Heidi property.

1. The survey has successfully demonstrated that MMI-M partial extractions on soil samples collected from the Heidi terrain can isolate MMI-M precious and base metal anomalies. This includes the commodity elements Au, Ag, Zn, Pb and associated element As, Sb and Bi.

2. The Heidi survey area is characterized by multiple high-contrast generally coincident and areally extensive precious metal and associated metal anomalies in the northern 1/3 of the survey area.

3. Significant base metal and some precious metal responses occur at the northern limit of sampling and indicate the anomalies may be open in this direction.

4. The magnitude of the responses including 738 times background for Au and 892 times background for Ag are indicative of a primarily precious metal target exists on the property with lesser base metal content.

5. Variability in analytical duplicate samples is present but is insignificant in terms of anomaly definition.

6. Sampling materials collected for MMI analysis are effective and appropriate sample media for an MMI survey.

7. The analyses generated by the MMI-M extraction are accurate and precise and are effective for the detection of low- to high-contrast anomalies.

The recommendations that flow from this survey are as follows:

1. The MMI process does not indicate the grade of mineralization responsible for the production of an MMI anomaly nor does it indicate the depth of the source region for the anomaly. Accordingly, it is strongly recommended that an attempt at modeling the geological setting of the target mineralization based on their geophysical responses with emphasis on depth to source be undertaken prior to a diamond drill program. This exercise can greatly assist the drilling when attempting to provide explanations for the geological context of geophysical and MMI anomalies. The attitude of the target can be effectively delineated in this manner.

2. Prior to diamond drill testing the MMI dataset should be integrated with all available geophysical surveys so that multivariate drill targets can be determined.

3. The inclusion of a soil sample to act as a standard in the future is an absolute necessity if the quality of analytical data is to be monitored with field duplicates. The necessary standards should have a significant range in concentration for the commodity elements of interest.

Mark Fedikow
Mount Morgan Resources Ltd.
Lac du Bonnet, Manitoba
February 9, 2009

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CERTIFICATE of AUTHOR

I, Mark A.F. Fedikow, HB.Sc., M.Sc., Ph.D., P.Eng., P.Geo., do hereby certify that:

1. I am currently a self-employed Consulting Geologist/Geochemist with a field office at:

   50 Dobals Road North,
   Lac du Bonnet, Manitoba, Canada R0E 1A0.

2. I graduated with a degree in Honors Geology (B.Sc.) from the University of Windsor (Windsor, Ont.) in 1975. In addition, I earned an M.Sc. in geophysics and geochemistry from the University of Windsor and a Doctor of Philosophy (Ph.D.) in exploration geochemistry from the School of Applied Geology, University of New South Wales (Sydney) in 1982.

3. I am a Member of the Association of Professional Engineers and Geoscientists of Manitoba. I am also a Fellow of the Association of Exploration (Applied) Geochemists, and a Member of the Prospectors and Developers Association of Canada. I am registered as a Professional Engineer (P.Eng.) and a Professional Geologist (P.Eng.) by the Association of Professional Engineers and Geoscientists of Manitoba (APEGM). I am registered as a Certified Professional Geologist (C.P.G.) by the American Association of Professional geologists (Westminster, Colorado, U.S.A.).

4. I have worked as a geologist for a total of thirty-three years since my graduation from university; as a graduate student, as an employee of major and junior mining companies, the Manitoba Geological Survey and as an independent consultant.

5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

6. I am responsible for the preparation of the technical report titled "Results Of A Mobile Metal Ions Process (MMI-M) Soil Geochemical Survey on The Heidi Property of Logan Resources Ltd., Ogilvie Mountains, Mayo Mining Division, Yukon”.

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.

10. I consent to the filing of the Technical Report with any stock exchanges or other regulatory authority and any publication by them, including electronic publication in the public company files on the web-sites accessible by the public, of the Technical Report.

Dated this 9th Day of February, 2009.

SIGNED BY MARK FEDIKOW

_____.
Signature of Qualified Person

"M.A.F. Fedikow" .
Print name of Qualified Person

APPENDIX 1

SOIL SAMPLING DATA

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
1	HDI_S1_08								
2	HDI_S2_08	HDIS_2_08	Steep	Well	Damp	B	3	Brown	Yes
3	HDI_S3_08	HDIS_3_08	Steep S, Cliff N	Well	Damp	B	2	Brown	Yes
4	HDI_S4_08								
5	HDI_S5_08	HDIS_5_08	Steep slope under cliff, facing NE, scree, thin soil	Well	Moist	B	1	Brown	
6	HDI_S6_08	HDIS_6_08	Moderate slope to S	Well	Damp	B	3	Brown	No
7	HDI_S7_08	HDIS_7_08	Steep	Well	Damp	B	2	Brown	Yes
8	HDI_S8_08	HDIS_8_08	Steep	Well	Damp	B	2	Brown	Yes
9	HDI_S9_08	HDIS_9_08	Steep S, Cliff N	Well	Damp	B	1	Brown	Yes
10	HDI_S10_08								
11	HDI_S11_08	HDIS_11_08	Gentle slope near bottom of cliff, scree, large boulders, thin gritty soil	Well	Moist	B	1	Brown	Yes, in cliff
12	HDI_S12_08	HDIS_12_08	Moderate slope facing NE, under cliff, scree and thin soil	Well	Moist	B	2	Brown	Yes, in cliff
13	HDI_S13_08	HDIS_13_08	Flat valley floor near stream	Well	Moist	B	2	Brown	Yes, 100m E
14	HDI_S14_08	HDIS_14_08	Gentle slope to S	Moderate	Damp	B	3	Brown	No
15	HDI_S15_08	HDIS_15_08	Moderate slope to S	Well	Damp	B	3	Grey	No
16	HDI_S16_08	HDIS_16_08	Steep	Well	Damp	B	2	Brown	Yes
17	HDI_S17_08	HDIS_17_08	Steep	Well	Damp	B	2	Brown	Yes
18	HDI_S18_08	HDIS_18_08	Steep S slope, N cliff	Well	Damp	B	2	Brown	Yes
19	HDI_S19_08	HDIS_19_08	Flat	Moderate	Damp	A	2	Brown	Yes
20	HDI_S20_08	HDIS_20_08	Boulder field, thin patchy soil	Well	Moist	B	2	Brown	Yes, in cliff
21	HDI_S21_08	HDIS_21_08	Gentle slope near creek facing NW	Well	Moist	B	3	Brown	Yes, nearby
22	HDI_S22_08	HDIS_22_08	Moderate slope facing W, grassy	Well	Moist	B	3	Brown	No
23	HDI_S23_08	HDIS_23_08	Gentle to W	Moderate	Damp	B	2	Greyish brown	No
24	HDI_S24_08	HDIS_24_08	Gentle slope S, bushes	Well	Damp	B	3	Brown	No
25	HDI_S25_08	HDIS_25_08	Moderate slope to S	Well	Dry	B	3	Orange brown	No
26	HDI_S26_08	HDIS_26_08	Moderate slope to S	Well	Damp	B	3	Brown	No
27	HDI_S27_08	HDIS_27_08	Gentle slope to S	Well	Damp	B	3	Brown	No
28	HDI_S28_08	HDIS_28_08	Steep	Well	Damp	B	2	Brown	Yes
29	HDI_S29_08	HDIS_29_08	Steep	Well	Damp	B	3	Brown	Yes
30	HDI_S30_08	HDIS_30_08	Steep S, Cliff N	Well	Damp	B	2	Brown	Yes
31	HDI_S31_08	HDIS_31_08	Moderate N slope	Well	Damp	B	2	Brown	Yes
32	HDI_S32_08	HDIS_32_08	Moderate slope near edge of scree	Well	Moist	B	2	Brown	Yes, nearby
33	HDI_S33_08	HDIS_33_08	Moderate slope facing W, grassy, some rocks	Well	Moist		2	Brown	Yes, uphill
34	HDI_S34_08	HDIS_34_08	Moderate slope, some scree	Well	Moist	B	3	Brown	Yes, nearby
35	HDI_S35_08	HDIS_35_08	Moderate to W	Moderate	Damp	B	1	Greyish brown	No
36	HDI_S36_08	HDIS_36_08	Moderate to W	Moderate	Damp	B	1	Greyish brown	Subcrop
37	HDI_S37_08	HDIS_37_08	Moderate to W	Moderate	Damp	B	2	Greyish brown	Yes

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
1									
2	Boulders	Tubs	WAYPOINT	HDIS2	64.37021521	-137.6838029	7141004	370500	12/07/08
3	Lots of shale, boulder field, on ridge	Archie	WAYPOINT	HDIS3-08	64.37435579	-137.682558	7141462.698	370579.3276	12-JUL-08 12:31:26PM
4									
5	Gritty	Aiden	WAYPOINT	Hdis5	64.3794845	-137.6844438	7142037.685	370512.5307	12-JUL-08 10:02:05AM
6		Thomas	WAYPOINT	Hdis 6	64.36604437	-137.6766928	7140525.184	370823.1525	12-JUL-08 11:23:13AM
7	Boulders	Tubs	WAYPOINT	HDIS7	64.36811839	-137.6782162	7140759	370759	12/07/08
8	Boulders	Tubs	WAYPOINT	HDIS8	64.37029115	-137.6788351	7141002	370740	12/07/08
9	On mtn. ridge, lots of shale in sample	Archie	WAYPOINT	HDIS9-08	64.37278921	-137.6759561	7141274.807	370890.3405	12-JUL-08 12:12:32PM
10									
11		Aiden	WAYPOINT	Hdis11	64.37706725	-137.6771873	7141753.723	370851.0532	12-JUL-08 10:31:31AM
12	Gritty	Aiden	WAYPOINT	Hdis12	64.37938199	-137.6796258	7142016.457	370744.347	12-JUL-08 9:41:01AM
13	Gritty	Aiden	WAYPOINT	Hdis13	64.38157445	-137.6794289	7142260.214	370764.143	12-JUL-08 1:08:38PM
14		Thomas	WAYPOINT	Hdis 14	64.36342251	-137.6732388	7140226.189	370977.4777	12-JUL-08 11:51:26AM
15		Thomas	WAYPOINT	Hdis 15	64.3661934	-137.6730447	7140534.368	370999.8315	12-JUL-08 11:06:53AM
16	Boulders	Tubs	WAYPOINT	HDIS16	64.36811537	-137.6735039	7140749	370987	12/07/08
17	Boulders galore	Tubs	WAYPOINT	HDIS17	64.37050397	-137.6731884	7141015	371013	12/07/08
18	On mtn. ridge, lots of shale in sample	Archie	WAYPOINT	HDIS18-08	64.37262056	-137.6734836	7141251.004	371008.7899	12-JUL-08 12:02:12PM
19	Found pure clay and soil on surface; runoff from mtn; 120m from station; bottom of cliff in boulders size of a house; moss growing, no clay, no soil, just shale	Archie	WAYPOINT	HDIS19-08	64.37568122	-137.6752093	7141595.351	370939.9257	12-JUL-08 12:50:05PM
20	Clay and grit	Aiden	WAYPOINT	Hdis20	64.37676005	-137.674101	7141713.241	370998.4309	12-JUL-08 10:51:28AM
21	Clay	Aiden	WAYPOINT	Hdis21	64.37927085	-137.6743268	7141993.309	370999.3148	12-JUL-08 11:07:46AM
22		Aiden	WAYPOINT	Hdis22	64.38160504	-137.674344	7142253.286	371009.4346	12-JUL-08 12:58:07PM
23	Taken 60m E of point, grassy hillside	Shane	WAYPOINT	HDIS23	64.38357169	-137.6736026	7142470.792	371054.3992	7/12/2008 9:40
24		Kevin	WAYPOINT	HDIS24	64.35927406	-137.6653934	7139748.297	371336.5739	12-JUL-08 9:20:03AM
25		Thomas	WAYPOINT	Hdis 25	64.36185334	-137.6670863	7140038.962	371266.954	12-JUL-08 2:57:15PM
26		Thomas	WAYPOINT	Hdis 26	64.36364807	-137.6670786	7140238.812	371275.7197	12-JUL-08 12:59:14PM
27		Thomas	WAYPOINT	Hdis 27	64.3661727	-137.667165	7140520.137	371283.3586	12-JUL-08 10:43:37AM
28	Boulders	Tubs	WAYPOINT	HDIS28	64.36806869	-137.6681153	7140733	371246	12/07/08
29	Boulders, cliffs	Tubs	WAYPOINT	HDIS29	64.37046876	-137.6680939	7141000	371259	12/07/08
30	Rock field, mtn. ridge, sandy texture	Archie	WAYPOINT	HDIS30-08	64.37250464	-137.6682991	7141227.578	371258.282	12-JUL-08 11:33:09AM
31	Sandy texture, bottom of OC, rock field	Archie	WAYPOINT	HDIS31-08	64.37473565	-137.6681526	7141475.733	371275.7876	12-JUL-08 1:42:37PM
32	Rocky, gritty soil	Aiden	WAYPOINT	Hdis32	64.37772724	-137.668988	7141810.578	371249.5034	12-JUL-08 11:23:00AM
33	Gritty	Aiden	WAYPOINT	Hdis33	64.37962373	-137.6691222	7142022.048	371251.9107	12-JUL-08 12:25:11PM
34		Aiden	WAYPOINT	Hdis34	64.38154821	-137.6692939	7142236.712	371252.6393	12-JUL-08 12:42:06PM
35	Overgrown talus	Shane	WAYPOINT	HDIS35	64.38392951	-137.6696273	7142502.576	371247.7177	7/12/2008 9:57
36	Overgrown talus	Shane	WAYPOINT	HDIS36	64.38612113	-137.669743	7142746.876	371252.4037	7/12/2008 10:17
37	Overgrown talus	Shane	WAYPOINT	HDIS37	64.38838164	-137.6700337	7142999.202	371248.9742	7/12/2008 10:29

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
38	HDI_S38_08	HDIS_38_08	Gentle to W	Moderate	Damp	B	4	Medium brown	Yes, to E
39	HDI_S39_08	HDIS_39_08	Flat, plateau, bushes	Well	Damp/dry	B	2.5	Reddish brown	No
40	HDI_S40_08	HDIS_40_08	Moderate slope S	Well	Dry	B	3	Brown	Yes
41	HDI_S41_08	HDIS_41_08	Moderate slope to S	Well	Damp	B	3	Brown	Yes, at 1m
42	HDI_S42_08	HDIS_42_08	Moderate slope to S	Well	Damp	B	3	Brown	No
43	HDI_S43_08	HDIS_43_08	Moderate slope to S	Well	Damp	B	3	Brown	No
44	HDI_S44_08	HDIS_44_08	Steep	Well	Damp	B	2	Brown	Yes
45	HDI_S45_08	HDIS_45_08	Steep	Well	Damp	B	2	Brown	Yes
46	HDI_S46_08	HDIS_46_08	Mtn. ridge, N cliff, S steep	Well	Damp	B	2	Brown	Yes
47	HDI_S47_08	HDIS_47_08	Steep N slope	Well	Damp	B	1	Brown	Yes
48	HDI_S48_08	HDIS_48_08	Moderate slope, hummocky and rocky, facing W, loose scree slope nearby	Well	Moist	B	3	Brown	Yes, nearby
49	HDI_S49_08	HDIS_49_08	Moderate slope facing S, grassy	Well	Moist	B	2	Brown	Yes, not much
50	HDI_S50_08	HDIS_50_08	Steep W, boulders	Well	Damp	B	3	Brown	Yes
51	HDI_S51_08	HDIS_51_08	Steep W, small boulders	Well	Damp	B	3	Brown	No
52	HDI_S52_08	HDIS_52_08	Steep NW. boulders	Well	Damp	B	2.5	Brown	Yes
53	HDI_S53_08	HDIS_53_08	Moderate slope NW	Well	Damp	A	3.5	Black	No
54	HDI_S54_08	HDIS_54_08	Gentle slope NW, boulders	Well	Damp	B	4	Brown	Yes
55	HDI_S55_08								
56	HDI_S56_08	HDIS_56_08	Flat, bushes	Well	Damp	B	3	Brown	No
57	HDI_S57_08	HDIS_57_08	Moderate slope S, bushes	Well	Damp	B	2.5	Brown	No
58	HDI_S58_08	HDIS_58_08	Moderate slope S	Well	Damp	B	3	Brown	Yes
59	HDI_S59_08	HDIS_59_08	Moderate slope S	Well	Damp	B	2.5	Reddish brown	No
60	HDI_S60_08	HDIS_60_08	Moderate slope to W	Well	Damp	B	2	Brown	Yes, at 15m
61	HDI_S61_08	HDIS_61_08	Moderate slope to SW	Well	Damp	B	3	Brown	Yes, at 2m
62	HDI_S62_08	HDIS_62_08	Steep	Well	Damp	B	2	Brown	Yes
63	HDI_S63_08	HDIS_63_08	Steep	Well	Damp	B	2	Brown	Yes
64	HDI_S64_08	HDIS_64_08	Steep S slope	Well	Damp	B	1	Brown	No
65	HDI_S65_08	HDIS_65_08	Steep N slope	Well	Damp	B	1	Dark brown	Yes
66	HDI_S66_08	HDIS_66_08	Gentle W slope	Well	Damp	B	2	Brown	Yes
67	HDI_S67_08	HDIS_67_08	Moderate slope SW	Well	Damp	B	2	Brown	No
68	HDI_S68_08	HDIS_68_08	Moderate slope SW	Well	Damp	B	3	Brown	No
69	HDI_S69_08	HDIS_69_08	Steep NE	Well	Damp	B	2.5	Grey	Yes
70	HDI_S70_08	HDIS_70_08	Steep NE	Well	Damp	B	2	Brown	Yes
71	HDI_S71_08	HDIS_71_08	Flat, ridge	Well	Damp	B	2.5	Dark brown	Yes
72	HDI_S72_08	HDIS_72_08	Moderate slope N	Well	Damp	B	2.5	Brown	Yes
73	HDI_S73_08	HDIS_73_08	Flat, base of mountain	Well	Damp	B	4	Brown	No
74	HDI_S74_08	HDIS_74_08	Steep W, bushes	Well	Damp	B	2	Brown	No
75	HDI_S75_08	HDIS_75_08	Moderate slope, W	Well	Damp/dry	B	2	Brown	Yes
76	HDI_S76_08	HDIS_76_08	Steep hillsaid facing NW into gully, low bush	Well	Moist	B	1	Brown	No
77	HDI_S77_08	HDIS_77_08	Moderate slope to S	Well	Damp	B	2	Brown	No
78	HDI_S78_08	HDIS_78_08	Flat, on a small ridge	Well	Damp	B	3	Brown	Yes, within 1m

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
38	Sample taken about 28m SE of wpt, very good soil here, grassy hillside	Shane	WAYPOINT	HDIS38	64.39040042	-137.6699406	7143223.831	371262.9164	7/12/2008 10:43
39		Kevin	WAYPOINT	HDIS39	64.35756356	-137.6622453	7139551.439	371480.4892	12-JUL-08 9:40:38AM
40		Kevin	WAYPOINT	HDIS40	64.35937758	-137.6610136	7139750.963	371548.3847	12-JUL-08 9:07:41AM
41		Thomas	WAYPOINT	Hdis 41	64.36163181	-137.6621734	7140004.346	371502.9466	12-JUL-08 2:21:01PM
42		Thomas	WAYPOINT	Hdis 42	64.36414763	-137.6627357	7140285.653	371487.5671	12-JUL-08 1:23:55PM
43		Thomas	WAYPOINT	Hdis 43	64.36580608	-137.6632105	7140471.303	371472.4052	12-JUL-08 10:23:19AM
44	Boulders	Tubs	WAYPOINT	HDIS44	64.36835091	-137.6629838	7140754	371495	12/07/08
45	Boulders	Tubs	WAYPOINT	HDIS45	64.37032216	-137.6629898	7140974	371504	12/07/08
46	Lots of debris, sandy texture to sample	Archie	WAYPOINT	HDIS46-08	64.372782	-137.6633399	7141248.425	371498.7438	12-JUL-08 11:09:23AM
47	Sandy texture, bottom of OC, rock field	Archie	WAYPOINT	HDIS47-08	64.37495283	-137.6629824	7141489.452	371526.1269	12-JUL-08 2:15:41PM
48		Aiden	WAYPOINT	Hdis48	64.37727956	-137.663757	7141750.131	371499.64	12-JUL-08 11:47:32AM
49	Some grit, boulders	Aiden	WAYPOINT	Hdis49	64.37953429	-137.6639936	7142001.704	371498.7647	12-JUL-08 12:07:33PM
50		Kevin	WAYPOINT	HDIS50	64.38152424	-137.663143	7142221.591	371549.0704	11-JUL-08 11:59:04AM
51		Kevin	WAYPOINT	HDIS51	64.38400839	-137.6639084	7142499.781	371523.778	11-JUL-08 12:13:49PM
52		Kevin	WAYPOINT	HDIS52	64.38611174	-137.6643271	7142734.864	371513.424	11-JUL-08 12:32:32PM
53		Kevin	WAYPOINT	HDIS53	64.38841752	-137.6649157	7142992.834	371495.8259	11-JUL-08 12:51:58PM
54		Kevin	WAYPOINT	HDIS54	64.39066236	-137.6653296	7143243.664	371486.3706	11-JUL-08 1:05:17PM
55									
56		Kevin	WAYPOINT	HDIS56	64.35490717	-137.6563445	7139243.692	371752.8504	12-JUL-08 10:20:03AM
57		Kevin	WAYPOINT	HDIS57	64.35735536	-137.6575972	7139518.859	371703.8067	12-JUL-08 10:04:18AM
58		Kevin	WAYPOINT	HDIS58	64.35989172	-137.6566033	7139799.31	371763.5788	12-JUL-08 8:46:59AM
59		Kevin	WAYPOINT	HDIS59	64.36161169	-137.6572701	7139992.198	371739.4213	12-JUL-08 8:34:03AM
60		Thomas	WAYPOINT	Hdis 60	64.36379987	-137.6583068	7140237.974	371699.6019	12-JUL-08 1:50:06PM
61		Thomas	WAYPOINT	Hdis 61	64.36644746	-137.6565669	7140529.306	371795.8777	12-JUL-08 9:59:38AM
62	Boulders	Tubs	WAYPOINT	HDIS62	64.36833758	-137.6582837	7140743	371722	12/07/08
63	Boulders	Tubs	WAYPOINT	HDIS63	64.37083379	-137.6578957	7141020	371752	12/07/08
64	Lots of shale in sample, boulder field	Archie	WAYPOINT	HDIS64-08	64.37300764	-137.6581293	7141263.024	371751.0873	12-JUL-08 10:50:26AM
65	Taken below OC, boulder field, shale in sample	Archie	WAYPOINT	HDIS65-08	64.37609327	-137.6590468	7141608.503	371721.2295	12-JUL-08 2:45:52PM
66	Rock field, sandy texture	Archie	WAYPOINT	HDIS66-08	64.37768667	-137.6579461	7141783.727	371781.7346	12-JUL-08 2:59:19PM
67		Kevin	WAYPOINT	HDIS67	64.37998071	-137.6581407	7142039.592	371783.0443	11-JUL-08 11:37:32AM
68		Kevin	WAYPOINT	HDIS68	64.38198583	-137.6588348	7142264.291	371758.9289	11-JUL-08 11:24:44AM
69		Kevin	WAYPOINT	HDIS69	64.38443553	-137.6604598	7142540.379	371692.0169	11-JUL-08 8:51:46AM
70		Kevin	WAYPOINT	HDIS70	64.38610562	-137.6583357	7142722.077	371802.201	11-JUL-08 9:34:06AM
71		Kevin	WAYPOINT	HDIS71	64.38825315	-137.6598641	7142964.319	371738.5434	11-JUL-08 9:49:10AM
72		Kevin	WAYPOINT	HDIS72	64.39077384	-137.6589833	7143243.254	371792.7566	11-JUL-08 10:32:52AM
73		Kevin	WAYPOINT	HDIS73	64.39306939	-137.6601359	7143501.222	371747.9135	11-JUL-08 10:56:47AM
74		Kevin	WAYPOINT	HDIS74	64.35015555	-137.6499781	7138701.7	372038.004	12-JUL-08 1:16:49PM
75		Kevin	WAYPOINT	HDIS75	64.35229378	-137.650819	7138941.514	372007.3558	12-JUL-08 1:35:29PM
76	Shale fragments in sample	Aiden	WAYPOINT	Hdis76	64.35495327	-137.6508796	7139237.807	372016.7888	12-JUL-08 1:42:39PM
77		Thomas	WAYPOINT	Hdis 77	64.35731873	-137.650911	7139501.296	372026.2712	10-JUL-08 3:29:03PM
78		Thomas	WAYPOINT	Hdis 78	64.35929527	-137.6504605	7139720.504	372057.1935	10-JUL-08 2:42:51PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
79	HDI_S79_08	HDIS_79_08	Moderate to SW	Well	Damp	B	2	Brown	Yes, at 10m
80	HDI_S80_08	HDIS_80_08	Moderate to SW	Well	Damp	B	2	Brown	Yes, at 20m
81	HDI_S81_08	HDIS_81_08	Moderate slope to SW	Well	Damp	B	3	Brown	No
82	HDI_S82_08	HDIS_82_08	Gentle slope to W	Well	Damp	B	3	Brown	No
83	HDI_S83_08	HDIS_83_08	Steep	Well	Damp	B	2	Brown	Yes
84	HDI_S84_08	HDIS_84_08	Steep S slope	Well	Damp	B	1	Brown	Yes
85	HDI_S85_08	HDIS_85_08	Mtn. ridge, N cliff, S steep	Well	Damp	B	2	Brown	Yes
86	HDI_S86_08								
87	HDI_S87_08	HDIS_87_08	Top of mtn. ridge, W slope cliff, E slope steep	Well	Damp	B	2	Sandy brown	Yes
88	HDI_S88_08								
89	HDI_S89_08	HDIS_89_08	Steep N	Well	Damp	B	2	Brown	Yes
90	HDI_S90_08	HDIS_90_08	Steep NE	Well	Damp	B	2	Brown	Yes
91	HDI_S91_08	HDIS_91_08	Moderate slope NE	Well	Damp	B	2	Dark brown	Yes
92	HDI_S92_08	HDIS_92_08	Flat, right next to small creek	Moderate	Damp	B	4	Light orange brown	No
93	HDI_S93_08	HDIS_93_08	Moderate slope to W	Moderate	Damp	B	3	Brown	No
94	HDI_S94_08	HDIS_94_08	Steep slope to NW	Well	Damp	A	1	Black	Yes, within a m
95	HDI_S95_08	HDIS_95_08	Moderate slope W	Well	Damp	B	3	Brown	Yes
96	HDI_S96_08	HDIS_96_08	Steep W	Well	Damp	B	3	Brown	Yes
97	HDI_S97_08	HDIS_97_08	Steep W, boulders	Well	Damp/dry	B	1.5	Brown	Yes
98	HDI_S98_08	HDIS_98_08	Steep N, boulders	Well	Damp/dry	B	2	Brown	Yes
99	HDI_S99_08	HDIS_99_08	Moderate to W	Well	Damp	B	1	Brown	No
100	HDI_S100_08	HDIS_100_08	Flat, on a small ridge	Well	Damp	B	3	Brown	Yes, at 40m
101	HDI_S101_08	HDIS_101_08	Steep slope to W	Well	Damp	B	3	Brown	No
102	HDI_S102_08	HDIS_102_08	Steep to W	Well	Damp	B	2	Grey brown	No
103	HDI_S103_08	HDIS_103_08	Steep to W	Well	Damp	B	1	Brown	Yes, at 5m
104	HDI_S104_08	HDIS_104_08	Flat	Well	Damp	B	3	Brown	No
105	HDI_S105_08	HDIS_105_08	Steep	Well	Damp	B	1	Brown	Yes
106	HDI_S106_08	HDIS_106_08	Mtn. top W cliif, S steep	Well	Wet	B	2	Brown	Yes
107	HDI_S107_08	HDIS_107_08	Steep	Well	Damp	B	2	Brown	Yes
108	HDI_S108_08	HDIS_108_08	Steep	Well	Damp	B	2	Brown	Yes
109	HDI_S109_08	HDIS_109_08	Steep	Well	Damp	B	2	Brown grey	Yes
110	HDI_S110_08	HDIS_110_08	N slope cliff, S slope steep	Well	Damp	B	2	Brown	Yes
111	HDI_S111_08	HDIS_111_08	Moderate slope to NW	Well	Damp	B	3	Grey brown	No
112	HDI_S112_08	HDIS_112_08	Moderate slope to NW	Well	Damp	B	3	Grey	No
113	HDI_S113_08	HDIS_113_08	Moderate slope to W	Well	Damp	B	3	Grey	No
114	HDI_S114_08	HDIS_114_08	Moderate slope to W	Well	Damp	B	2	Grey brown	Yes, at 40m
115	HDI_S115_08	HDIS_115_08	Steep slope to W	Well	Damp	B	3	Brown	No
116	HDI_S116_08	HDIS_116_08	Steep slope to NW	Well	Damp	B	2	Brown	Yes, at 1m
117	HDI_S117_08	HDIS_117_08	Moderate slope NW, right next to OC	Well	Damp	B	3	Dark brown	Yes
118	HDI_S118_08	HDIS_118_08	Steep W	Well	Damp	B	3	Brown	Yes
119	HDI_S119_08	HDIS_119_08	Steep NW, boulders and shales	Well	Damp/dry	B	1	Brown	Yes

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
79		Thomas	WAYPOINT	Hdis 79	64.3620825	-137.6513491	7140032.689	372027.2778	10-JUL-08 1:48:32PM
80		Thomas	WAYPOINT	Hdis 80	64.36403356	-137.6515163	7140250.303	372028.2856	10-JUL-08 1:24:43PM
81		Thomas	WAYPOINT	Hdis 81	64.36657134	-137.6523757	7140534.651	371998.6259	12-JUL-08 9:39:43AM
82		Thomas	WAYPOINT	Hdis 82	64.36866154	-137.6524913	7140767.657	372002.7732	12-JUL-08 9:20:52AM
83	Boulders	Tubs	WAYPOINT	HDIS83	64.37074495	-137.6527509	7141000	372000	12/07/08
84	Lots of shale in sample, avalanche area, boulder field	Archie	WAYPOINT	HDIS84-08	64.37300219	-137.6535189	7141253.118	371973.4094	12-JUL-08 10:32:25AM
85	Rocky area, shale in sample	Archie	WAYPOINT	HDIS85-08	64.3746401	-137.652766	7141434.005	372017.3373	12-JUL-08 10:04:42AM
86									
87	More sand than clay	Archie	WAYPOINT	HDI87-08			7141995	372096	04-JUL-08 8:48:43AM
88									
89		Kevin	WAYPOINT	HDIS89	64.38347907	-137.6553749	7142423.603	371932.6913	11-JUL-08 9:10:21AM
90		Kevin	WAYPOINT	HDIS90	64.38658456	-137.6560115	7142770.725	371916.468	11-JUL-08 10:05:36AM
91		Kevin	WAYPOINT	HDIS91	64.38840805	-137.6556091	7142972.985	371944.3587	11-JUL-08 10:17:52AM
92		Kevin	WAYPOINT	HDIS92	64.39092656	-137.6551382	7143252.506	371978.7808	11-JUL-08 10:44:50AM
93		Thomas	WAYPOINT	Hdis 93	64.39334826	-137.6543247	7143520.557	372029.2642	11-JUL-08 3:12:19PM
94		Thomas	WAYPOINT	Hdis 94	64.3952491	-137.6551141	7143733.832	372000.0748	11-JUL-08 2:49:09PM
95		Kevin	WAYPOINT	HDIS95	64.34792731	-137.6465659	7138446.687	372192.36	12-JUL-08 12:49:15PM
96		Kevin	WAYPOINT	HDIS96	64.35047021	-137.6465607	7138729.864	372204.4105	12-JUL-08 12:19:55PM
97		Kevin	WAYPOINT	HDIS97	64.35316902	-137.6437065	7139024.677	372354.6833	12-JUL-08 11:50:27AM
98		Kevin	WAYPOINT	HDIS98	64.35476434	-137.6449857	7139204.908	372300.3433	12-JUL-08 11:34:42AM
99	Very rocky sample	Thomas	WAYPOINT	Hdis 99	64.35749207	-137.6462705	7139511.262	372250.9983	10-JUL-08 3:04:13PM
100		Thomas	WAYPOINT	Hdis 100	64.3601244	-137.6468671	7139805.608	372234.4264	10-JUL-08 2:20:37PM
101		Thomas	WAYPOINT	Hdis 101	64.36195007	-137.6473018	7140009.796	372221.9284	10-JUL-08 11:27:11AM
102		Thomas	WAYPOINT	Hdis 102	64.36439498	-137.6476892	7140282.849	372214.5927	10-JUL-08 12:04:11PM
103		Thomas	WAYPOINT	Hdis 103	64.36609115	-137.6479471	7140472.26	372210.0266	10-JUL-08 12:31:08PM
104		Thomas	WAYPOINT	Hdis 104	64.36865182	-137.6474302	7140756.387	372246.8457	12-JUL-08 9:04:44AM
105	Boulders	Tubs	WAYPOINT	HDIS105	64.37079331	-137.6474619	7140995	372255	12/07/08
106	Shale in sample, mtn. ridge, vegetation visible	Archie	WAYPOINT	HDIS106-08	64.3730032	-137.6481906	7141242.503	372230.3803	12-JUL-08 9:40:39AM
107	Cliffs, boulders	Tubs	WAYPOINT	HDI107			7141638	372266	04-JUL-08 9:28:32AM
108	Loose boulders	Tubs	WAYPOINT	HDI108			7141746	372243	04-JUL-08 9:28:32AM
109	Loose boulders	Tubs	WAYPOINT	HDI109			7141997	372236	04-JUL-08 9:28:32AM
110	Sample taken on top of mtn. ridge	Archie	WAYPOINT	HDI110-08			7142214	372270	04-JUL-08 9:28:32AM
111		Thomas	WAYPOINT	Hdis 111	64.3844978	-137.6473418	7142520.882	372324.6813	11-JUL-08 11:56:35AM
112		Thomas	WAYPOINT	Hdis 112	64.38623546	-137.6492605	7142718.253	372240.2613	11-JUL-08 12:15:02PM
113		Thomas	WAYPOINT	Hdis 113	64.38858935	-137.6498445	7142981.567	372223.0518	11-JUL-08 12:49:21PM
114		Thomas	WAYPOINT	Hdis 114	64.39085799	-137.6496311	7143233.782	372243.8813	11-JUL-08 1:10:25PM
115		Thomas	WAYPOINT	Hdis 115	64.39325974	-137.6493943	7143500.775	372266.4545	11-JUL-08 1:43:06PM
116		Thomas	WAYPOINT	Hdis 116	64.39554867	-137.6489394	7143754.765	372299.0109	11-JUL-08 2:14:23PM
117		Kevin	WAYPOINT	HDIS117	64.34403853	-137.6399009	7138000.228	372496.0838	10-JUL-08 12:53:21PM
118		Kevin	WAYPOINT	HDIS118	64.34622151	-137.6396217	7138242.773	372519.6659	10-JUL-08 1:09:14PM
119		Kevin	WAYPOINT	HDIS119	64.34853726	-137.6401792	7138501.783	372503.474	10-JUL-08 1:37:59PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
120	HDI_S120_08	HDIS_120_08	Flat ridge/plateau, boulders and shales	Well	Damp	B	1.5	Brown	Yes
121	HDI_S121_08	HDIS_121_08	Steep W, boulders	Well	Damp	B	3	Dark brown	Yes
122	HDI_S122_08	HDIS_122_08	Steep W, boulders	Well	Damp	B	3	Brown	Yes
123	HDI_S123_08	HDIS_123_08	Moderate slope SW	Well	Damp	B	3	Brown	Yes
124	HDI_S124_08	HDIS_124_08	Steep slope to SW	Well	Damp	B	2	Brown	Yes, at 30m
125	HDI_S125_08	HDIS_125_08	Moderate slope to S	Well	Damp	B	2	Brown	No
126	HDI_S126_08	HDIS_126_08	Moderate slope to S, on ridge	Well	Damp	B	2	Brown	Yes, at 40m
127	HDI_S127_08	HDIS_127_08	Flat, on ridge	Well	Damp	B	2	Brown	Yes, at 5m
128	HDI_S128_08	HDIS_128_08	Moderate slope to SW	Well	Damp	B	2	Brown	Yes, at 10m
129	HDI_S129_08	HDIS_129_08	Steep	Well	Damp	B	2	Purple brown	Yes
130	HDI_S130_08	HDIS_130_08	Steep	Well	Damp	B	1	Brown	Yes
131	HDI_S131_08	HDIS_131_08	Steep	Well	Damp	B	2	Brown	Yes
132	HDI_S132_08	HDIS_132_08	Steep	Well	Damp	B	3	Brown	Yes
133	HDI_S133_08	HDIS_133_08	Steep	Well	Damp	B	2	Brown	Yes
134	HDI_S134_08	HDIS_134_08	Moderate S slope	Well	Damp	B	2	Brown	No
135	HDI_S135_08	HDIS_135_08	Steep slope to W	Well	Damp	B	2	Grey brown	Yes, at 25m
136	HDI_S136_08	HDIS_136_08	Steep slope to SW	Well	Damp	B	3	Grey	No
137	HDI_S137_08	HDIS_137_08	Moderate slope to W	Well	Damp	B	2	Grey brown	No
138	HDI_S138_08	HDIS_138_08	Gentle slope to S	Well	Damp	B	3	Brown	Yes, at 1m
139	HDI_S139_08	HDIS_139_08	Steep E slope	Well	Wet	B	2	Brown	Yes
140	HDI_S140_08	HDIS_140_08	Steep E and cliff N slope	Well	Damp	B	2	Brown	Yes
141	HDI_S141_08	HDIS_141_08	Steep	Well	Damp	B	2	Brown	Yes
142	HDI_S142_08	HDIS_142_08	Steep SE	Well	Damp	B	3	Brown	No
143	HDI_S143_08	HDIS_143_08	Steep SE	Well	Damp	B	2.5	Brown	Yes
144	HDI_S144_08	HDIS_144_08	Steep S	Well	Dry	A	1	Black	Yes
145	HDI_S145_08	HDIS_145_08	Steep SW	Well	Damp/dry	B	2	Brown	Yes
146	HDI_S146_08	HDIS_146_08	Steep W	Well	Dry	B	1.5	Brown	Yes
147	HDI_S147_08	HDIS_147_08	Steep S, shales	Well	Damp/dry	B	2	Brown	Yes
148	HDI_S148_08	HDIS_148_08	Steep W, shales	Well	Damp/dry	B	2	Brown	Yes
149	HDI_S149_08								
150	HDI_S150_08	HDIS_150_08	Ridge, flat	Well	Dry	B	3	Brown	Yes
151	HDI_S151_08	HDIS_151_08	Steep E, boulders	Well	Damp	B	2	Brown	Yes
152	HDI_S152_08	HDIS_152_08	Gentle slope SW	Well	Damp	B	3	Brown	No
153	HDI_S153_08	HDIS_153_08	Moderate slope SE, shales, boulders	Well	Damp	B	2.5	Brown	No
154	HDI_S154_08	HDIS_154_08	Moderate slope SE, shales	Well	Damp/dry	B	1	Grey	Yes
155	HDI_S155_08	HDIS_155_08	Steep cliffs, NE	Well	Dry	B	1	Red/purple	Yes
156	HDI_S156_08								
157	HDI_S157_08	HDIS_157_08	Steep	Well	Damp	B	2	Brown grey	Yes
158	HDI_S158_08	HDIS_158_08	Moderate	Well	Damp	B	2	Brown grey	Yes
159	HDI_S159_08	HDIS_159_08	Moderate	Well	Damp	B	3	Brown	Yes
160	HDI_S160_08	HDIS_160_08	Moderate mid slope S	Well	Damp	B	2	Brownish black	No

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
120		Kevin	WAYPOINT	HDIS120	64.35052888	-137.640515	7138724.252	372496.4867	10-JUL-08 2:02:42PM
121		Kevin	WAYPOINT	HDIS121	64.35314404	-137.6396251	7139013.702	372551.5433	12-JUL-08 10:39:46AM
122		Kevin	WAYPOINT	HDIS122	64.35502326	-137.639596	7139222.922	372561.6445	12-JUL-08 10:58:53AM
123		Kevin	WAYPOINT	HDIS123	64.35701723	-137.6409758	7139447.746	372504.294	12-JUL-08 11:11:23AM
124		Thomas	WAYPOINT	Hdis 124	64.36001837	-137.6424862	7139784.997	372445.3147	10-JUL-08 10:57:55AM
125		Thomas	WAYPOINT	Hdis 125	64.36192366	-137.6428609	7139997.931	372436.0629	10-JUL-08 10:36:26AM
126		Thomas	WAYPOINT	Hdis 126	64.36423279	-137.6420141	7140253.385	372487.6171	10-JUL-08 10:09:50AM
127		Thomas	WAYPOINT	Hdis 127	64.36650446	-137.6404392	7140503.209	372574.111	10-JUL-08 9:54:06AM
128		Thomas	WAYPOINT	Hdis 128	64.36910201	-137.6418783	7140795.37	372516.7263	12-JUL-08 8:47:07AM
129	Boulders	Tubs	WAYPOINT	HDIS129	64.37140443	-137.6422983	7141053	372507	12/07/08
130	Cliffs, scree	Tubs	WAYPOINT	HDI13			7141369	372559	7/4/2008
131	Scree slope	Tubs	WAYPOINT	HDI131			7141437	372524	7/4/2008
132	Boulders	Tubs	WAYPOINT	HDI132			7141739	372495	7/4/2008
133	Boulders	Tubs	WAYPOINT	HDI133			7142003	372520	04-JUL-08 9:48:21AM
134	Rock field, sample middle of hill or mid slope, veg. visible	Archie	WAYPOINT	HDI134-08			7142253	372498	04-JUL-08 9:48:21AM
135		Thomas	WAYPOINT	Hdis 135	64.38481933	-137.6443766	7142550.733	372469.1146	11-JUL-08 11:30:56AM
136		Thomas	WAYPOINT	Hdis 136	64.3868071	-137.6445373	7142772.422	372470.5882	11-JUL-08 11:12:50AM
137		Thomas	WAYPOINT	Hdis 137	64.38877802	-137.6442158	7142991.267	372495.2275	11-JUL-08 10:55:59AM
138		Thomas	WAYPOINT	Hdis 138	64.3906839	-137.6440328	7143203.147	372512.8856	11-JUL-08 10:34:42AM
139	Sample below outcrop, shale and debris in sample, below rock face	Archie	WAYPOINT	HDIS139-08	64.39328573	-137.6441033	7143493.04	372521.5549	11-JUL-08 1:24:16PM
140	Shale and debris in sample, below OC, boulder field	Archie	WAYPOINT	HDIS140-08	64.39552135	-137.6445026	7143742.81	372512.6817	11-JUL-08 1:48:23PM
141	Cliffs, boulders	Tubs	WAYPOINT	HDIS141	64.39804237	-137.6449245	7144024.409	372504.0488	11/07/08
142		Kevin	WAYPOINT	HDIS142	64.3427716	-137.6353538	7137850.021	372709.7582	10-JUL-08 12:15:20PM
143		Kevin	WAYPOINT	HDIS143	64.34431815	-137.6344566	7138020.455	372760.2147	10-JUL-08 11:50:26AM
144		Kevin	WAYPOINT	HDIS144	64.34649845	-137.6337192	7138261.786	372805.8844	10-JUL-08 11:29:33AM
145		Kevin	WAYPOINT	HDIS145	64.34914847	-137.6354999	7138560.47	372732.1672	10-JUL-08 11:12:13AM
146		Kevin	WAYPOINT	HDIS146	64.35058161	-137.6365153	7138722.105	372689.781	10-JUL-08 10:53:08AM
147		Kevin	WAYPOINT	HDIS147	64.3534975	-137.6356504	7139045.098	372745.0034	10-JUL-08 10:24:29AM
148		Kevin	WAYPOINT	HDIS148	64.35518168	-137.6336578	7139228.667	372848.948	10-JUL-08 9:58:36AM
149									
150		Kevin	WAYPOINT	HDIS150	64.36065422	-137.6368889	7139845	372718	08-JUL-08 8:51:49AM
151		Kevin	WAYPOINT	HDIS151	64.36187077	-137.6363552	7139979	372750	08-JUL-08 9:03:10AM
152		Kevin	WAYPOINT	HDIS152	64.36444066	-137.63615	7140265	372771	07-JUL-08 10:31:51AM
153		Kevin	WAYPOINT	HDIS153	64.36693034	-137.6372852	7140544	372728	07-JUL-08 9:23:10AM
154		Kevin	WAYPOINT	HDIS154	64.36883697	-137.6372255	7140757	372740	07-JUL-08 9:02:45AM
155	Really bad sample, nothing else to find	Kevin	WAYPOINT	HDIS155	64.37063196	-137.6379665	7140958	372712	07-JUL-08 1:32:32PM
156									
157	Boulders	Tubs	WAYPOINT	HDI157			7141548	372763	7/4/2008
158	Boulders	Tubs	WAYPOINT	HDI158			7141750	372751	7/4/2008
159	Boulders, vegetation	Tubs	WAYPOINT	HDI159			7142009	372736	7/4/2008
160	Vegetation thick, grass and moss	Archie	WAYPOINT	HDI160-08			7142262	372740	04-JUL-08 10:11:18AM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
161	HDI_S161_08	HDIS_161_08	Moderate slope SE	Well	Damp	B	3	Grey	Yes
162	HDI_S162_08	HDIS_162_08	Flat, on ridge	Well	Damp	B	3	Brown	Yes, at 2m
163	HDI_S163_08	HDIS_163_08	Flat, on ridge	Well	Damp	B	2	Brown	Yes, at 1m
164	HDI_S164_08	HDIS_164_08	Plateau, gentle NW slope	Well	Wet	B	3	Brown	Yes
165	HDI_S165_08	HDIS_165_08	Valley floor, gentle N slope	Moderate	Damp	B	2	Grey	No
166	HDI_S166_08	HDIS_166_08	Flat, beside stream	Moderate	Damp	B	4	Greyish brown	Yes
167	HDI_S167_08	HDIS_167_08	Moderate	Well	Damp	B	2	Grey brown	Yes
168	HDI_S168_08	HDIS_168_08	Flat	Well	Damp	B	3	Grey	Yes
169	HDI_S169_08								
170	HDI_S170_08								
171	HDI_S171_08	HDIS_171_08	Steep hillside facing S, rocky thin soil	Well	Moist	B	2	Brown	Yes, lots
172	HDI_S172_08	HDIS_172_08	Steep slope, some cliff facing SW	Well	Moist	B	1		Yes, shale OC, greyw
173	HDI_S173_08	HDIS_173_08	Peak of ridge, all shale	Well	Damp	A	1	Purple	Yes
174	HDI_S174_08	HDIS_174_08	top of ridge running SE/NW, on E side	Well	Damp	A	1	Dark brown to purple/wine	Yes
175	HDI_S175_08								
176	HDI_S176_08								
177	HDI_S177_08	HDIS_177_08	Steep, boulders NW	Well	Damp/dry	B	2	Brown	Yes
178	HDI_S178_08	HDIS_178_08	Gentle slope E	Well	Damp	B	3	Brown	No
179	HDI_S179_08	HDIS_179_08	Gentle slope SE	Well	Damp	B	2.5	Reddish brown	No
180	HDI_S180_08	HDIS_180_08	Gentle slope SE	Well	Damp	B	3	Brown	No
181	HDI_S181_08	HDIS_181_08	Gentle slope SW	Well	Damp	B	2.5	Brown	No
182	HDI_S182_08	HDIS_182_08	Steep cliffs, NE	Well	Damp	B	3	Grey/blue	Yes
183	HDI_S183_08	HDIS_183_08	Moderate slope NE, boulders	Well	Damp/dry	B	1	Reddish brown	Yes
184	HDI_S184_08	HDIS_184_08	Steep	Well	Damp	B	2	Brown	Yes
185	HDI_S185_08	HDIS_185_08	Moderate	Well	Damp	B	2	Brown	Yes
186	HDI_S186_08	HDIS_186_08	Moderate	Well	Damp	B	2	Brown	Yes
187	HDI_S187_08	HDIS_187_08	Moderate S slope	Well	Damp	B	2	Brown	No
188	HDI_S188_08	HDIS_188_08	Moderate slope SW, boulders	Well	Damp	B	3	Grey	Yes
189	HDI_S189_08	HDIS_189_08	Moderate slope SE, on ridge	Well	Damp	B	3	Dark brown	Yes
190	HDI_S190_08	HDIS_190_08	Moderate slope to NW	Well	Damp	B	2	Grey brown	Yes, at 7m
191	HDI_S191_08	HDIS_191_08	Moderate NW slope	Well	Damp	B	2	Brown	Yes
192	HDI_S192_08	HDIS_192_08	Steep W slope	Well	Damp	B	2	Brown	Yes
193	HDI_S193_08	HDIS_193_08	Mtn. ridge, W cliff, E steep	Well	Damp	B	2	Brown	Yes
194	HDI_S194_08	HDIS_194_08	Moderate	Well	Damp	A	1	Brown	Yes
195	HDI_S195_08	HDIS_195_08	Flat	Well	Damp	B	3	Brown	Yes
196	HDI_S196_08	HDIS_196B_08	Steep	Well	Damp	B	2	Brown	Yes
197	HDI_S197_08								

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
161		Kevin	WAYPOINT	HDI161			7142515	372767	04-JUL-08 9:01:29AM
162		Thomas	WAYPOINT	Hdis 162	64.38621014	-137.6364132	7142689.657	372859.4313	11-JUL-08 8:49:57AM
163		Thomas	WAYPOINT	Hdis 163	64.38922931	-137.6384231	7143029.91	372776.5178	11-JUL-08 10:04:44AM
164	Bottom od outcrops, lolts of boulders, veg visible, sandy texture to sample	Archie	WAYPOINT	HDIS164-08	64.39186131	-137.6389823	7143324.142	372761.7503	11-JUL-08 12:44:00PM
165	Below rock field, lots of sand and gravel in sample	Archie	WAYPOINT	HDIS165-08	64.39346074	-137.6392721	7143502.843	372755.1856	11-JUL-08 2:39:36PM
166	In a valley, very good smaple, grass and moss present	Archie	WAYPOINT	HDIS166-08	64.3954662	-137.6395932	7143726.824	372748.9999	11-JUL-08 2:17:15PM
167	Willows, boulders	Tubs	WAYPOINT	HDIS167	64.3978744	-137.6396886	7143995.203	372755.5499	11/07/08
168	Willows, boulders	Tubs	WAYPOINT	HDIS168	64.40017599	-137.6399693	7144252.082	372752.6868	11/07/08
169									
170									
171	Gritty clay	Aiden	WAYPOINT	Hdis171	64.34677807	-137.6297569	7138285.001	372998.4482	10-JUL-08 12:59:40PM
172	Gritty soil contains a lot of shale fragments	Aiden	WAYPOINT	Hdis172	64.34900497	-137.6286181	7138530.724	373063.6838	10-JUL-08 9:57:38AM
173	No soil, all crushed shale chips; bedding is 106/40W	Daithi	WAYPOINT	Hdis 173	64.35119441	-137.6295362	7138776.384	373029.4637	10-JUL-08 2:05:33PM
174	Area is a steep slope of weathered platey and brittle thinly bedded wine/purple shale. Areas have some silicieous filled fractures, bedding is variable, here 108/38W	Daithi	WAYPOINT	Hdis 174	64.35317379	-137.6299256	7138997.596	373019.7952	10-JUL-08 10:52:03AM
175									
176									
177		Kevin	WAYPOINT	HDIS177	64.36016313	-137.6313252	7139779	372985	08-JUL-08 9:27:35AM
178		Kevin	WAYPOINT	HDIS178	64.36215349	-137.6311864	7140000	373000	08-JUL-08 9:39:51AM
179	Sample is clay with some shales	Kevin	WAYPOINT	HDIS179	64.36447084	-137.6316331	7140259	372990	07-JUL-08 10:42:05AM
180		Kevin	WAYPOINT	HDIS180	64.36698575	-137.6320943	7140540	372979	07-JUL-08 10:15:02AM
181		Kevin	WAYPOINT	HDIS181	64.36905021	-137.632724	7140771	372958	07-JUL-08 9:40:06AM
182		Kevin	WAYPOINT	HDIS182	64.37165245	-137.633803	7141063	372918	07-JUL-08 2:30:08PM
183		Kevin	WAYPOINT	HDIS183	64.37373938	-137.6313666	7141291	373045	07-JUL-08 2:58:14PM
184	Boulder city	Tubs	WAYPOINT	HDI184			7141500	372999	7/4/2008
185	Boulders, vegetation	Tubs	WAYPOINT	HDI185			7141742	373005	7/4/2008
186	Boulders, vegetation	Tubs	WAYPOINT	HDI186			7141995	373002	7/4/2008
187	Vegetation thick, grass and moss, mid slope	Archie	WAYPOINT	HDI187-08			7142250	372995	04-JUL-08 10:43:22AM
188		Kevin	WAYPOINT	HDI188			7142513	372972	04-JUL-08 9:17:34AM
189		Kevin	WAYPOINT	HDI189			7142733	372996	04-JUL-08 8:43:38AM
190		Thomas	WAYPOINT	Hdis 190	64.38847326	-137.6324825	7142933.828	373059.3599	11-JUL-08 9:33:30AM
191	Shale in sample, avalanche area, boulder field	Archie	WAYPOINT	HDIS191-08	64.39108891	-137.6346273	7143229.407	372968.065	11-JUL-08 12:13:38PM
192	Sample taken below OC, shale and sandy texture to sample	Archie	WAYPOINT	HDIS192-08	64.39352796	-137.6349263	7143501.63	372964.928	11-JUL-08 3:13:33PM
193	Boulders and outcrops, veg visible	Archie	WAYPOINT	HDIS193-08	64.39498885	-137.6324772	7143659.426	373089.6991	11-JUL-08 3:49:12PM
194	Boulder city, cliffs	Tubs	WAYPOINT	HDIS194	64.39851142	-137.6348628	7144056.486	372991.0178	11/07/08
195	Willows, boulders	Tubs	WAYPOINT	HDIS195	64.40021354	-137.634797	7144245.911	373002.055	11/07/08
196		Tubs	WAYPOINT	HDIS196B	64.40242133	-137.6350854	7144492.359	372998.368	11/07/08
197									

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
198	HDI_S198_08	HDIS_198_08	Steep slope facing SW, rocky, some grass	Well	Moist	B	2	Rusty	Yes, nearby, some ru
199	HDI_S199_08	HDIS_199_08	Steep hillside facing S, thin patchy soil, rocky	Well	Moist	B	1		Yes, lots 50m W
200	HDI_S200_08	HDIS_200_08	V steep, shale scree	Well	Damp	A	2	Purple shale with some brown clay	
201	HDI_S201_08	HDIS_201_08	Steep scree slope, shale etc	Well	Damp	B	3	Dark winey brown	Yes
202	HDI_S202_08	HDIS_202_08	Steep rocky hillside facing E, patchy soil	Well	Moist	A	1	Black	Yes, maroon shale
203	HDI_S203_08								
204	HDI_S204_08	HDIS_204_08	Steep NW, boulders	Well	Damp	B	3	Brown	Yes
205	HDI_S205_08	HDIS_205_08	Flat, plateau	Well	Damp	B	4	Brown	No
206	HDI_S206_08	HDIS_206_08	Gentle slope SE	Well	Damp	B	2.5	Reddish brown	
207	HDI_S207_08	HDIS_207_08	Gentle slope/plateau, SW	Well	Damp	B	3	Brown	No
208	HDI_S208_08	HDIS_208_08	Gentle slope SE	Well	Damp	B	1.5	Reddish brown	No
209	HDI_S209_08	HDIS_209_08	Flat ridge, shales	Well	Damp	B	3	Brown	Yes
210	HDI_S210_08								
211	HDI_S211_08	HDIS_211_08	Moderate	Well	Damp	B	2	Brown grey	Yes
212	HDI_S212_08	HDIS_212_08	Moderate	Well	Damp	B	2	Brown	Yes
213	HDI_S213_08	HDIS_213_08	Moderate	Well	Damp	B	2	Brown	Yes
214	HDI_S214_08	HDIS_214_08	Moderate S slope	Moderate	Damp	B	2	Brown	Yes
215	HDI_S215_08	HDIS_215_08	Moderate slope SE, boulders	Well	Damp	B	2	Dark brown	No
216	HDI_S216_08	HDIS_216_08	Steep	Well	Damp	B	1	Brown	Yes
217	HDI_S217_08								
218	HDI_S218_08	HDIS_218_08	Steep W slope	Well	Damp	B	2	Brown	No
219	HDI_S219_08	HDIS_219_08	Moderate	Well	Damp	B	2	Brownish black	Yes
220	HDI_S220_08	HDIS_220_08	Steep, cliffs NE	Well	Dry	B	1	Grey blue	Yes
221	HDI_S221_08	HDIS_221_08	Flat	Well	Damp	B	3	Grey	Yes
222	HDI_S222_08	HDIS_222_08	Flat	Well	Damp	B	3	Brown	Yes
223	HDI_S223_08	HDIS_223_08	Flat	Well	Damp	B	2	Brown grey	No
224	HDI_S224_08								
225	HDI_S225_08								
226	HDI_S226_08	HDIS_226_08	Moderate to SW and creek	Well	Damp	B	2	Wine brown	Yes
227	HDI_S227_08	HDIS_227_08	Steep hillside facing S, scree shale, very little soil	Well	Dry	A	2	Black	Yes, some qtz vein b
228	HDI_S228_08	HDIS_228_08	Steep slope facing E scree, thin patchy soil	Well	Moist	A	4	Black	
229	HDI_S229_08	HDIS_229_08	Steep scree slope, shale etc	Well	Damp	B	2	Dark brown with lots of purple shale chips	Yes
230	HDI_S230_08	HDIS_230_08	Steep S facing grassy scree shale slope	Well	Damp	B	3	Dark brown/purple shale	No
231	HDI_S231_08	HDIS_231_08	Steep slope facing SE, thin patchy soil	Well	Moist	A	2	Black	Yes, shale
232	HDI_S232_08								

GRID_ID	Notes	Name	type	Ident	lat	long	y_proj	x_proj	Date
198	Gritty	Aiden	WAYPOINT	Hdis198	64.34649652	-137.624946	7138244.039	373229.3896	10-JUL-08 1:27:57PM
199	Gritty sample	Aiden	WAYPOINT	Hdis199	64.34862527	-137.6244994	7138480.217	373260.7478	10-JUL-08 10:17:00AM
200		Daithi	WAYPOINT	Hdis 200	64.35147168	-137.6251285	7138798.462	373243.4802	10-JUL-08 2:25:35PM
201	Good sample taken from sheltered crevice/lee side of rock, a little moss aroun. Structure here is 82/42 S	Daithi	WAYPOINT	Hdis 201	64.35325258	-137.6250967	7138996.729	373253.2108	10-JUL-08 11:14:16AM
202	Gritty sample	Aiden	WAYPOINT	Hdis202	64.35557378	-137.6257212	7139256.475	373233.7605	08-JUL-08 9:49:21AM
203									
204		Kevin	WAYPOINT	HDIS204	64.36022876	-137.6260658	7139776	373239	08-JUL-08 9:52:42AM
205		Kevin	WAYPOINT	HDIS205	64.36228098	-137.626035	7140004	373250	08-JUL-08 10:02:10AM
206	Sample is clay with some shales	Kevin	WAYPOINT	HDIS206	64.36450923	-137.6264055	7140253	373242	07-JUL-08 11:38:24AM
207		Kevin	WAYPOINT	HDIS207	64.3668145	-137.6271992	7140511	373214	07-JUL-08 10:54:36AM
208	Sample is shales with clay	Kevin	WAYPOINT	HDIS208	64.36912095	-137.6271707	7140768	373226	07-JUL-08 9:52:27AM
209		Kevin	WAYPOINT	HDIS209	64.37060195	-137.6258654	7140930	373296	07-JUL-08 12:31:32PM
210									
211	Took sample at edge of lake	Tubs	WAYPOINT	HDI211			7141619	373235	7/4/2008
212	Boulders, vegetation	Tubs	WAYPOINT	HDI212			7141759	373251	7/4/2008
213	Boulders	Tubs	WAYPOINT	HDI213			7142005	373244	7/4/2008
214	Grass and moss thick, boulders on ground	Archie	WAYPOINT	HDI214-08			7142252	373246	04-JUL-08 11:11:51AM
215		Kevin	WAYPOINT	HDI215			7142498	373247	04-JUL-08 9:31:25AM
216	Boulders	Tubs	WAYPOINT	HDIS216	64.38703953	-137.6285419	7142766.291	373242.6864	11/07/08
217									
218	Boulder field, veg visible	Archie	WAYPOINT	HDIS218-08	64.39149938	-137.6286164	7143263.112	373259.6569	11-JUL-08 10:55:44AM
219	Lots of shale, rock field	Archie	WAYPOINT	HDIS219-08	64.39340458	-137.6295982	7143477.245	373221.1237	11-JUL-08 11:18:07AM
220		Kevin	WAYPOINT	HDIS220	64.39532203	-137.6285957	7143688.782	373278.2793	11-JUL-08 2:36:47PM
221	Boulder field	Tubs	WAYPOINT	HDIS221	64.39830749	-137.629161	7144022.386	373264.8076	11/07/08
222	Willows	Tubs	WAYPOINT	HDIS222	64.40035326	-137.6307058	7144253.297	373199.8121	11/07/08
223	Willows, boulders	Tubs	WAYPOINT	HDIS223	64.40262401	-137.6300192	7144504.81	373243.3698	11/07/08
224									
225									
226	Open hillside	Shane	WAYPOINT	HDIS226	64.34439107	-137.6191589	7137998.033	373499.0881	10/07/08
227	organic soil and grit	Aiden	WAYPOINT	Hdis227	64.34668369	-137.6191914	7138253.416	373508.0502	10-JUL-08 2:06:11PM
228	Organic soil	Aiden	WAYPOINT	Hdis228	64.34904747	-137.6198601	7138517.99	373486.6233	10-JUL-08 10:41:22AM
229	Some grass, mainly bare	Daithi	WAYPOINT	Hdis 229	64.35164452	-137.620016	7138807.522	373491.0325	10-JUL-08 2:41:44PM
230	Lots of shale fragments	Daithi	WAYPOINT	Hdis 230	64.35343875	-137.619315	7139005.941	373533.1052	10-JUL-08 11:33:48AM
231	Gritty sample	Aiden	WAYPOINT	Hdis231	64.35558761	-137.6204163	7139247.442	373489.8284	08-JUL-08 10:08:46AM
232									

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
233	HDI_S233_08	HDIS_233_08	Flat, base of mountain, creek at 3m	Well	Damp	B	3	Brown	No
234	HDI_S234_08	HDIS_234_08	Moderate slope S	Well	Damp	B	3	Brown	No
235	HDI_S235_08	HDIS_235_08	Gentle slope SE	Well	Damp	B	3	Brown	No
236	HDI_S236_08	HDIS_236_08	Gentle slope/plateau, SE	Well	Damp	B	3	Brown	No
237	HDI_S237_08	HDIS_237_08	Moderate slope SE	Well	Damp	B	2.5	Brown	No
238	HDI_S238_08	HDIS_238_08	Moderate slope, ridge, SE	Well	Dry	B	3	Dark brown	No
239	HDI_S239_08								
240	HDI_S240_08	HDIS_240_08	Steep	Well	Damp	B	2	Grey	Yes
241	HDI_S241_08	HDIS_241_08	Flat	Well	Damp	B	2	Brown grey	Yes
242	HDI_S242_08	HDIS_242_08	Moderate	Well	Damp	B	2	Brown grey	Yes
243	HDI_S243_08	HDIS_243_08	Gentle S slope, bottom of mtn.	Well	Damp	B	2	Brown	No
244	HDI_S244_08	HDIS_244_08	Gentle slope SE	Well	Damp	B	3	Brown	No
245	HDI_S245_08	HDIS_245_08	Steep	Well	Damp	B	2	Brown	Yes
246	HDI_S246_08	HDIS_246_08	Steep E slope, cliff N slope	Well	Damp	B	2	Dark brown	Yes
247	HDI_S247_08	HDIS_247_08	Moderate NW slope, cliff N slope	Well	Damp	B	2	Dark brown	Yes
248	HDI_S248_08	HDIS_248_08	Steep NE	Well	Dry	B	3	Dark brown	Yes
249	HDI_S249_08	HDIS_249_08	Gentle slope NE, boulders	Well	Damp/dry	B	2	Grey	Yes
250	HDI_S250_08	HDIS_250_08	Moderate	Well	Damp	B	3	Grey	Yes
251	HDI_S251_08	HDIS_251_08	Flat	Well	Damp	B	3	Brown	Yes
252	HDI_S252_08	HDIS_252_08	Flat, swampy, bushes	Poor	Wet	A	3	Black	No
253	HDI_S253_08	HDIS_253_08	Gentle to S	Moderate	Damp	B	3	Greenish greyish brown	No
254	HDI_S254_08	HDIS_254_08	Moderate to SE	Well	Dry/damp	B	2	Light yellowish brown	No
255	HDI_S255_08	HDIS_255_08	Moderate slope facing SE, rocky, thin gritty soil	Well	Moist	B	2	Brown	No
256	HDI_S256_08	HDIS_256_08	Steep hillside facing NE, scree and thin patchy soil	Well	Moist	B	2	Brown	
257	HDI_S257_08	HDIS_257_08	Steep E facing slope, scree	Well	Damp	B	2	Med brown clay with lots of purple shale chips	No
258	HDI_S258_08	HDIS_258_08	Steep S facing grassy scree shale slope	Well	Damp	B	3	Light creamy brown to dark brown	No
259	HDI_S259_08	HDIS_259_08	Moderate slope near top of ridge, thin patchy soil	Well	Dry	A	1	Black	Yes, shale
260	HDI_S260_08	HDIS_260_08	Mtn. ridge, moderate	Well	Damp	B	2	Brown	Yes
261	HDI_S261_08	HDIS_261_08	Flat, base of mountain, boulders, creek 15m N	Well	Damp	B	4	Brown	No
262	HDI_S262_08	HDIS_262_08	Gentle slope SE, creek 80m, bushes	Well	Damp	B	2	Brown	No
263	HDI_S263_08	HDIS_263_08	Gentle slope SE, creek 80m, bushes	Well	Damp	B	3	Brown	No
264	HDI_S264_08	HDIS_264_08	Moderate to SE	Moderate	Damp	B	1	Brown	No
265	HDI_S265_08	HDIS_265_08	Moderate to SE	Moderate	Damp	B	1	Brown	No

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
233		Kevin	WAYPOINT	HDIS233	64.36041333	-137.6209299	7139786	373487	08-JUL-08 10:36:53AM
234		Kevin	WAYPOINT	HDIS234	64.36239565	-137.6209701	7140007	373494	08-JUL-08 10:25:35AM
235		Kevin	WAYPOINT	HDIS235	64.36466639	-137.6214919	7140261	373480	07-JUL-08 11:49:35AM
236		Kevin	WAYPOINT	HDIS236	64.36695121	-137.6219107	7140516	373470	07-JUL-08 11:26:49AM
237	Sample is clay with some shales	Kevin	WAYPOINT	HDIS237	64.36934835	-137.619996	7140779	373573	07-JUL-08 11:08:57AM
238		Kevin	WAYPOINT	HDIS238	64.37152974	-137.6216984	7141025	373501	07-JUL-08 12:20:12PM
239									
240	Scree slope	Tubs	WAYPOINT	HDI240			7141604	373571	7/4/2008
241	Boulders, vegetation	Tubs	WAYPOINT	HDI241			7141750	373492	7/4/2008
242	Boulders, vegetation	Tubs	WAYPOINT	HDI242			7142004	373505	7/4/2008
243	Grass and moss thick	Archie	WAYPOINT	HDI243-08			7142247	373502	04-JUL-08 11:24:39AM
244		Kevin	WAYPOINT	HDI244			7142519	373488	04-JUL-08 9:46:36AM
245	Boulders	Tubs	WAYPOINT	HDIS245	64.38712059	-137.6234443	7142765.156	373488.7787	11/07/08
246	Lots of shale in sample, rocks everywhere	Archie	WAYPOINT	HDIS246-08	64.38913677	-137.6236783	7142990.155	373486.7764	11-JUL-08 8:40:48AM
247	Lots of shale in sample, rocks everywhere	Archie	WAYPOINT	HDIS247-08	64.39127751	-137.6263202	7143233.824	373369.2971	11-JUL-08 10:29:45AM
248		Kevin	WAYPOINT	HDIS248	64.39334976	-137.6248693	7143461.71	373448.7644	11-JUL-08 2:05:47PM
249		Kevin	WAYPOINT	HDIS249	64.39597841	-137.6251258	7143754.962	373448.508	11-JUL-08 2:56:25PM
250	Willows, boulders	Tubs	WAYPOINT	HDIS250	64.39822644	-137.6242672	7144003.605	373500.2314	11/07/08
251	Willows, boulders	Tubs	WAYPOINT	HDIS251	64.40040917	-137.624584	7144247.317	373495.0139	11/07/08
252	Very deep horizon A here	Kevin	WAYPOINT	HDIS252	64.4025686	-137.6243862	7144487.409	373514.4857	11-JUL-08 3:30:10PM
253	Thick willows	Shane	WAYPOINT	HDIS253	64.34226156	-137.6137521	7137750.126	373750.3591	10/07/08
254	Light willow cover	Shane	WAYPOINT	HDIS254	64.34450297	-137.6139512	7138000.138	373751.0157	10/07/08
255		Aiden	WAYPOINT	Hdis255	64.34671202	-137.614282	7138246.807	373745.1733	10-JUL-08 2:16:57PM
256	Gritty clay	Aiden	WAYPOINT	Hdis256	64.348996	-137.6147925	7138502.178	373730.9988	10-JUL-08 10:52:22AM
257		Daithi	WAYPOINT	Hdis 257	64.35114638	-137.6147262	7138741.525	373744.0577	10-JUL-08 2:58:30PM
258	More vegetaion here than at 230	Daithi	WAYPOINT	Hdis 258	64.35337211	-137.6146702	7138989.283	373756.9685	10-JUL-08 11:43:58AM
259	Soil and grit	Aiden	WAYPOINT	Hdis259	64.3557322	-137.6152153	7139253.199	373741.4805	08-JUL-08 10:29:44AM
260	Steep E slope, cliff with slope	Archie	WAYPOINT	HDI-S260-8	64.35781376	-137.6121972	7139479.02	373896.6608	08-JUL-08 9:06:43AM
261		Kevin	WAYPOINT	HDIS261	64.36016824	-137.6162216	7139749	373713	08-JUL-08 10:46:38AM
262		Kevin	WAYPOINT	HDIS262	64.36270033	-137.6157239	7140030	373749	08-JUL-08 1:06:08PM
263		Kevin	WAYPOINT	HDIS263	64.36462993	-137.615791	7140245	373755	08-JUL-08 1:22:21PM
264	Overgrown talus (wine phyllite)	Shane	WAYPOINT	HDIS264	64.36693797	-137.6160929	7140502.881	373750.5355	7/7/2008
265	Grassy overgrown talus, a lot of wine phyllite in this sample	Shane	WAYPOINT	HDIS265	64.36913445	-137.6163301	7140747.965	373749.1705	7/7/2008

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
266	HDI_S266_08	HDIS_266_08	Steep talus slope to E	Well	Damp	B	2	Brown	No
267	HDI_S267_08	HDIS_267_08	Moderate to SE	Moderate	Damp	B	3	Brown	No
268	HDI_S268_08	HDIS_268_08	Flat, beside creek	Moderate	Wet	B	2	Brown	Yes
269	HDI_S269_08	HDIS_269_08	Flat, valley floor, beside stream	Moderate	Wet	B	4	Greyish black	No
270	HDI_S270_08	HDIS_270_08	Gentle S slope	Moderate	Wet	B	3	Brownish grey	No
271	HDI_S271_08	HDIS_271_08	Gentle S slope	Moderate	Wet	B	3	Greyish brown	No
272	HDI_S272_08	HDIS_272_08	Gentle slope SE	Well	Damp	A	3	Black	No
273	HDI_S273_08	HDIS_273_08	Steep	Well	Damp	B	2	Brown	Yes
274	HDI_S274_08	HDIS_274_08	Steep	Well	Damp	B	2	Brown grey	Yes
275	HDI_S275_08								
276	HDI_S276_08	HDIS_276_08	Steep	Well	Damp	B	2	Brown	Yes
277	HDI_S277_08	HDIS_277_08	Steep	Well	Damp	B	1	Grey	Yes
278	HDI_S278_08	HDIS_278_08	Moderate	Well	Damp	B	2	Brown grey	Yes
279	HDI_S279_08	HDIS_279_08	Flat, swampy	Poor	Damp/wet	B	4	Brown	No
280	HDI_S280_08	HDIS_280_08	Gentle to S	Moderate	Damp	B	2	Light yellowish brown	No
281	HDI_S281_08	HDIS_281_08	Moderate to S	Moderate	Damp/wet	B	2	Light greyish brown	No
282	HDI_S282_08	HDIS_282_08	Moderate to SE	Moderate	Damp	B	3	Light brown	No
283	HDI_S283_08	HDIS_283_08	Moderate slope facing SE, rocky thin soil	Well	Moist	B	1	Brown	Yes, qtzite nearby
284	HDI_S284_08	HDIS_284_08	Rocky slope facing NE, thin soil	Well	Moist	B	2	Brown	Yes, shale OC
285	HDI_S285_08	HDIS_285_08	Bottom of steep N facing slope near creek	Well	Damp	B	2	Medium brown clay with rock chips	No
286	HDI_S286_08	HDIS_286_08	Steep slope, purple shale and willow, heather	Well	Damp	B	2	Dark brown	No
287	HDI_S287_08	HDIS_287_08	Steep hillside facing NE to creek, grassy slope, thin soil	Well	Moist	B	3	Brown	No
288	HDI_S288_08	HDIS_288_08	Steep E slope	Well	Damp	B	2	Brown	Yes
289	HDI_S289_08	HDIS_289_08	Gentle slope N, cree 100m, sample taken at base of mountain	Well	Damp	B	4	Brown	Yes
290	HDI_S290_08	HDIS_290_08	Flat, plateau, creek 50m S	Well	Damp	B	2.5	Light brown	No
291	HDI_S291_08	HDIS_291_08	Gentle slope SE	Well	Damp	B	3	Brown	No
292	HDI_S292_08	HDIS_292_08	Gentle to E	Moderate	Damp	B	1	Brown	No
293	HDI_S293_08	HDIS_293_08	Moderate to E	Well	Damp	B	1	Brown	No
294	HDI_S294_08	HDIS_294_08	Gentle to E	Well	Damp	B	1	Brown	No
295	HDI_S295_08	HDIS_295_08	Gentle to S	Well	Damp	B	3	Brown	No
296	HDI_S296_08	HDIS_296_08	Moderate N slope	Well	Dry	A	1	Black	Yes
297	HDI_S297_08	HDIS_297_08	Gentle slope E	Moderate	Damp	B	3	Greyish brown	No
298	HDI_S298_08	HDIS_298_08	Gentle NE slope	Moderate	Wet	B	3	Greyish brown	No
299	HDI_S299_08	HDIS_299_08	Gentle S slope	Well	Wet	B	3	Greyish black	No

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
266		Shane	WAYPOINT	HDIS266	64.37138281	-137.6165843	7140998.861	373747.2292	7/7/2008
267	Grassy talus slope near ridge top	Shane	WAYPOINT	HDIS267	64.37365506	-137.6167226	7141252.186	373750.9862	7/7/2008
268	Bottom of mtn, S side of stream, rock field *no coord for y, used ideal	Archie	WAYPOINT	HDI268-08			7141500	373797	04-JUL-08 12:25:47PM
269	Vegetation thick	Archie	WAYPOINT	HDI269-08			7141758	373755	04-JUL-08 12:09:27PM
270	Good sample, no rocks, veg. thick	Archie	WAYPOINT	HDI270-08			7142003	373750	04-JUL-08 11:57:40AM
271	Grass and moss thick, bottom on mtn.	Archie	WAYPOINT	HDI271-08			7142258	373749	04-JUL-08 11:43:37AM
272	Deep horizon A here	Kevin	WAYPOINT	HDI272			7142493	373742	04-JUL-08 10:08:25AM
273	Boulders	Tubs	WAYPOINT	HDIS273	64.3871661	-137.6180552	7142759.502	373748.7552	11/07/08
274	Cliffs, boulders	Tubs	WAYPOINT	HDIS274	64.38793925	-137.6183582	7142846.207	373737.7004	11/07/08
275									
276	Cliffs, boulders	Tubs	WAYPOINT	HDIS276	64.39375947	-137.6191099	7143495.875	373728.2052	11/07/08
277	Boulder field	Tubs	WAYPOINT	HDIS277	64.39629047	-137.6188862	7143777.298	373750.6125	11/07/08
278	Willows, boulders	Tubs	WAYPOINT	HDIS278	64.39828914	-137.61922	7144000.545	373743.7079	11/07/08
279		Kevin	WAYPOINT	HDIS279	64.40007901	-137.6210319	7144203.478	373664.6373	11-JUL-08 3:16:09PM
280	Willows	Shane	WAYPOINT	HDIS280	64.34030774	-137.6072318	7137519.599	374056.2379	7/12/2008 11:42
281	Thick willows	Shane	WAYPOINT	HDIS281	64.34235494	-137.6085822	7137750.265	374000.396	10/07/08
282	Light to moderate willow cover	Shane	WAYPOINT	HDIS282	64.34462375	-137.6088269	7138003.418	373998.9604	10/07/08
283	Clay and grit	Aiden	WAYPOINT	Hdis283	64.34680715	-137.6091025	7138247.12	373995.6437	10-JUL-08 2:34:13PM
284	Gritty clay	Aiden	WAYPOINT	Hdis284	64.34903816	-137.6092376	7138495.847	373999.3276	10-JUL-08 11:13:32AM
285	Thin pebble conglomerate, lots of heather, boulders	Daithi	WAYPOINT	Hdis 285	64.3513312	-137.6097892	7138752.307	373983.1943	10-JUL-08 3:28:09PM
286	Lots of wine red shale fragments	Daithi	WAYPOINT	Hdis 286	64.35351058	-137.6093528	7138994.15	374014.2268	10-JUL-08 12:02:12PM
287		Aiden	WAYPOINT	Hdis287	64.35583035	-137.6099563	7139253.69	373995.7169	08-JUL-08 10:52:32AM
288	Rock field, very little flora, not many pebbles in sample, a little bit of sand	Archie	WAYPOINT	HDI-S288-8	64.35801594	-137.609747	7139496.675	374015.8227	08-JUL-08 9:34:32AM
289		Kevin	WAYPOINT	HDIS289	64.36092504	-137.6109099	7139823	373973	08-JUL-08 2:41:11PM
290		Kevin	WAYPOINT	HDIS290	64.3626513	-137.6106088	7140015	373995	08-JUL-08 12:27:14PM
291		Kevin	WAYPOINT	HDIS291	64.36488482	-137.6108153	7140264	373996	08-JUL-08 1:34:16PM
292		Shane	WAYPOINT	HDIS292	64.36699857	-137.6109331	7140499.387	373999.7139	7/7/2008
293	Grassy overgrown talus	Shane	WAYPOINT	HDIS293	64.36923109	-137.6111415	7140748.427	373999.8809	7/7/2008
294	Grassy talus slope	Shane	WAYPOINT	HDIS294	64.37147643	-137.6114403	7140999.074	373995.7547	7/7/2008
295	Sandy soil with good clay, grassy hillside	Shane	WAYPOINT	HDIS295	64.37372874	-137.6116038	7141250.229	373998.1831	7/7/2008
296	Lots of shale, vegetation visible, poor sample	Archie	WAYPOINT	HDI296-08			7141651	374013	04-JUL-08 1:03:56PM
297	Beside creek, vegetation visible	Archie	WAYPOINT	HDI297-08			7141749	373993	04-JUL-08 12:51:39PM
298	Valley, beside creek, vegetation thick, grass and moss	Archie	WAYPOINT	HDI298-08			7142001	373999	04-JUL-08 1:23:18PM
299	Vegetation thick, moss and grass, no brush	Archie	WAYPOINT	HDI299-08			7142252	373996	04-JUL-08 1:36:49PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
300	HDI_S300_08	HDIS_300_08	Moderate SE slope	Well	Dry	B	2	Brown	No
301	HDI_S301_08	HDIS_301_08	Moderate slope E, base of cliffs	Well	Damp/dry	B	2	Dark brown	Yes
302	HDI_S302_08	HDIS_302_08	Moderate slope E, base of cliffs	Well	Damp/dry	B	2	Grey	Yes
303	HDI_S303_08	HDIS_303_08	Steep E, boulders, base of cliffs	Well	Damp/dry	B	1	Grey	Yes
304	HDI_S304_08	HDIS_304_08	Moderate slope NE	Well	Damp	B	3	Grey	Yes
305	HDI_S305_08	HDIS_305_08	Gentle slope, flat NE, boulders	Well	Damp	B	3	Dark brown	No
306	HDI_S306_08	HDIS_306_08	Flat, bushes	Moderate	Wet	B	4	Brown	No
307	HDI_S307_08	HDIS_307_08	Gentle to S	Moderate	Wet/damp	B	2	Light brown	No
308	HDI_S308_08	HDIS_308_08	Gentle to S	Moderate	Damp	B	1	Yellowish brown	No
309	HDI_S309_08	HDIS_309_08	Moderate to S	Well	Damp	B	2	Brown	No
310	HDI_S310_08	HDIS_310_08	Moderate to S	Well	Damp	B	2	Light yellowish brown	No
311	HDI_S311_08	HDIS_311_08	Moderate slope facing SE, low vegetation, stony soil	Well	Moist	B	2	Brown	No
312	HDI_S312_08	HDIS_312_08	Steep rocky slope, facing N, thin soil	Well	Moist	B	2	Brown	No
313	HDI_S313_08	HDIS_313_08	Bottom of steep slope near stream	Well	Damp	B	3	Medium brown	Yes
314	HDI_S314_08	HDIS_314_08	Steep mossy purple shale scree slope, sSE facing	Well	Damp	B	3	Dark brown with lots of purple shale chips	No
315	HDI_S315_08	HDIS_315_08	Near creek in valley	Well	Moist	B	3	Brown	No
316	HDI_S316_08	HDIS_316_08	Moderate E slope	Well	Damp	B	1	Brown	No
317	HDI_S317_08	HDIS_317_08	Steep N, boulders	Well	Damp	B	2	Brown	Yes
318	HDI_S318_08	HDIS_318_08	Flat, bushes	Well	Damp	B	3	Brown	No
319	HDI_S319_08	HDIS_319_08	Gentle slope SW	Well	Damp	B	3	Brown	No
320	HDI_S320_08	HDIS_320_08	Steep to W and creek	Well	Damp	B	1	Brown	Yes, in creek
321	HDI_S321_08	HDIS_321_08	Moderate to W	Well	Damp	B	3	Brown	No
322	HDI_S322_08	HDIS_322_08	Gentle to W	Well	Damp	B	2	Brown	No
323	HDI_S323_08	HDIS_323_08	Moderate to SW	Well	Damp	B	1	Light brown	No
324	HDI_S324_08	HDIS_324_08	Mtn. top, gentle E slope	Well	Damp	B	2	Brown	Yes
325	HDI_S325_08	HDIS_325_08	Gentle N slope	Moderate	Damp	B	3	Greyish black	No
326	HDI_S326_08	HDIS_326_08	Gentle N slope, valley floor	Poor	Wet	B	3	Greyish black	No
327	HDI_S327_08	HDIS_327_08	Gentle NE slope	Poor	Wet	A	4	Greyish black	No
328	HDI_S328_08	HDIS_328_08	Flat, valley floor	Moderate	Wet	B	3	Brownish grey	No
329	HDI_S329_08	HDIS_329_08	Flat	Well	Damp	B	4	Brown	No
330	HDI_S330_08	HDIS_330_08	Gentle slope E, boulders 30m to S	Well	Damp	B	3	Grey	No
331	HDI_S331_08	HDIS_331_08	Gentle slope E	Well	Damp	B	3	Brown	No
332	HDI_S332_08	HDIS_332_08	Flat	Well	Damp	B	3	Brown	No
333	HDI_S333_08	HDIS_333_08	Flat, swampy	Moderate	Wet	B	3	Light brown	No
334	HDI_S334_08	HDIS_334_08	Flat, swampy	Moderate	Damp/wet	B	4	Brown	No
335	HDI_S335_08	HDIS_335_08	Gentle to SE and creek	Moderate	Damp	B	3	Greyish brown	Yes, to N

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
300	Lots of shale in sample, vegetaion present, moss and grass and shrubs	Archie	WAYPOINT	HDI300-08			7142495	374000	04-JUL-08 1:51:40PM
301		Kevin	WAYPOINT	HDI301			7142731	374025	04-JUL-08 10:40:54AM
302		Kevin	WAYPOINT	HDI302			7142970	374021	04-JUL-08 10:49:28AM
303		Kevin	WAYPOINT	HDI303			7143218	374020	04-JUL-08 11:16:34AM
304		Kevin	WAYPOINT	HDI304			7143489	373997	04-JUL-08 11:34:47AM
305		Kevin	WAYPOINT	HDI305			7143730	374013	04-JUL-08 11:43:15AM
306		Kevin	WAYPOINT	HDI306			7143989	374005	04-JUL-08 11:57:59AM
307	Willows	Shane	WAYPOINT	HDIS307	64.3379624	-137.6029813	7137249.991	374250.7691	7/12/2008 13:48
308	Willows, sandy soil	Shane	WAYPOINT	HDIS308	64.34021546	-137.603217	7137501.372	374249.6702	7/12/2008 11:54
309	Thick willows	Shane	WAYPOINT	HDIS309	64.34242979	-137.6034119	7137748.359	374250.3675	10/07/08
310	Thick willows	Shane	WAYPOINT	HDIS310	64.34468837	-137.6035621	7138000.185	374253.4255	10/07/08
311		Aiden	WAYPOINT	Hdis311	64.34689885	-137.6041821	7138247.585	374233.5897	10-JUL-08 2:55:55PM
312	Gritty soil	Aiden	WAYPOINT	Hdis312	64.34901134	-137.6044188	7138483.313	374231.8099	10-JUL-08 11:40:43AM
313	Clay and rock chips, possibly near shale/conglomerate contact	Daithi	WAYPOINT	Hdis 313	64.35106935	-137.6044723	7138712.612	374238.6227	10-JUL-08 3:44:12PM
314	All of above dips 40-55	Daithi	WAYPOINT	Hdis 314	64.35371761	-137.6044103	7139007.416	374253.7097	10-JUL-08 12:18:23PM
315	Clay sample	Aiden	WAYPOINT	Hdis315	64.35639429	-137.6045764	7139305.836	374257.9168	08-JUL-08 11:16:47AM
316	Lots of shale in sample, brush knee high	Archie	WAYPOINT	HDI-S316-8	64.35811518	-137.6048873	7139498.1	374250.7745	08-JUL-08 10:04:28AM
317		Kevin	WAYPOINT	HDIS317	64.36052833	-137.6055429	7139768	374230	08-JUL-08 11:36:10AM
318		Kevin	WAYPOINT	HDIS318	64.3626611	-137.605137	7140005	374259	08-JUL-08 12:12:49PM
319		Kevin	WAYPOINT	HDIS319	64.36475281	-137.6053939	7140238	374257	08-JUL-08 2:02:22PM
320	Overgrown talus, light willow cover	Shane	WAYPOINT	HDIS320	64.36710611	-137.6057738	7140501.141	374249.0818	7/7/2008
321		Shane	WAYPOINT	HDIS321	64.36934483	-137.6058988	7140750.707	374253.2797	7/7/2008
322	Grassy talus slope	Shane	WAYPOINT	HDIS322	64.37163083	-137.6061023	7141005.693	374253.915	7/7/2008
323	Open hillside	Shane	WAYPOINT	HDIS323	64.37383745	-137.6063408	7141251.908	374252.4956	7/7/2008
324	Shale in sample, N face cliff, S steep	Archie	WAYPOINT	HDIS-324-8	64.37546924	-137.6065155	7141434	374252	06-JUL-08 10:46:16AM
325	Shale in sample, rock pile, grass and moss present	Archie	WAYPOINT	HDI325-08			7141808	374268	04-JUL-08 2:55:59PM
326	Vegetation thick, grass is thin	Archie	WAYPOINT	HDI326-08			7141986	374252	04-JUL-08 2:40:41PM
327	Vegetation present	Archie	WAYPOINT	HDI327-08			7142246	374250	04-JUL-08 2:28:48PM
328	Vegetation thick, shrubs starting, shale in sample	Archie	WAYPOINT	HDI328-08			7142493	374248	04-JUL-08 2:15:16PM
329	Sample taken 50m W of actual waypoint because of boulders	Kevin	WAYPOINT	HDI329			7142803	374264	04-JUL-08 1:47:37PM
330		Kevin	WAYPOINT	HDI330			7143001	374256	04-JUL-08 1:32:59PM
331		Kevin	WAYPOINT	HDI331			7143251	374256	04-JUL-08 1:20:56PM
332		Kevin	WAYPOINT	HDI332			7143503	374244	04-JUL-08 1:02:59PM
333		Kevin	WAYPOINT	HDI333			7144009	374245	04-JUL-08 12:46:04PM
334		Kevin	WAYPOINT	HDI334			7144009	374236	04-JUL-08 12:34:08PM
335	Willows and woods	Shane	WAYPOINT	HDIS335	64.33660135	-137.5989922	7137090.528	374437.1998	7/12/2008 14:18

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
336	HDI_S336_08	HDIS_336_08	Moderate to S	Well	Dry/damp	B	2	Medium brown	No
337	HDI_S337_08	HDIS_337_08	Gentle to S	Moderate	Wet/damp	B	3	Yellowish brown	No
338	HDI_S338_08	HDIS_338_08	Gentle to S	Moderate	Damp	B	2	Greyish brown	Yes, to N
339	HDI_S339_08	HDIS_339_08	Gentle to SE	Well	Dry/damp	B	2	Light greyish brown	No
340	HDI_S340_08								
341	HDI_S341_08	HDIS_341_08	Steep slope facing N, rock and moss, little to no soil	Well	Moist	B	2	Brown	No
342	HDI_S342_08	HDIS_342_08	Very steep willow slope	Well	Damp	A	1	Light brown	No
343	HDI_S343_08	HDIS_343_08	Top of small hill, out of purple shale	Well	Damp	B	3	Creamy to light brown	No
344	HDI_S344_08	HDIS_344_08	Moderate slope facing N, near creek	Well	Moist	B	1	Brown	No
345	HDI_S345_08	HDIS_345_08	Moderate E slope	Well	Damp	B	2	Brown	Yes, N 75m
346	HDI_S346_08	HDIS_346_08	Steep N, boulders, creek 50m N	Well	Damp	B	1.5	Brown	No
347	HDI_S347_08	HDIS_347_08	Flat, bushes	Well	Damp	B	3	Brown	No
348	HDI_S348_08	HDIS_348_08	Moderate to S	Moderate	Damp	B	1	Yellowish green brown	No
349	HDI_S349_08	HDIS_349_08	Moderate to W	Moderate	Damp	B	2	Brown	Yes, subcrop
350	HDI_S350_08	HDIS_350_08	Gentle to W	Moderate	Damp/wet	B	2	Brown	No
351	HDI_S351_08	HDIS_351_08	Moderate to W	Well	Damp	B	1	Medium brown	No
352	HDI_S352_08	HDIS_352_08	Moderate to SW	Well	Damp	B	2	Medium brown	Yes, to E
353	HDI_S353_08	HDIS_353_08	Steep slope S, N cliff	Well	Damp	A	1	Black	Yes
354	HDI_S354_08	HDIS_354_08	Flat, boulders	Well	Damp/dry	B	4	Grey	Yes
355	HDI_S355_08	HDIS_355_08	Gentle slope, flat NW, boulders	Well	Damp	B	3	Dark brown	No
356	HDI_S356_08	HDIS_356_08	Flat	Well	Damp/wet	B	4	Brown	No
357	HDI_S357_08	HDIS_357_08	Flat, creek 200m NE	Well	Damp	B	4	Brown	No
358	HDI_S358_08	HDIS_358_08	Flat, swampy, right next to creek	Poor	Wet	B	4	Grey	No
359	HDI_S359_08	HDIS_359_08	Flat area near fuel cache	Well	Damp	B	4	Light creamy brown	Yes
360	HDI_S360_08	HDIS_360_08	Flat, clear area	Well	Damp	B	4	Grey	No
361	HDI_S361_08	HDIS_361_08	Flat. Swampy, clear area	Poor	Wet	B	4	Grey	No
362	HDI_S362_08	HDIS_362_08	Gentle slope N, bushes	Well	Damp	B	4	Grey	No
363	HDI_S363_08								
364	HDI_S364_08	HDIS_364_08	Flat by creek	Moderate	Damp	B	2	Reddish brown	No
365	HDI_S365_08	HDIS_365_08	Flat by creek	Moderate	Damp	B	3	Medium brown	No
366	HDI_S366_08	HDIS_366_08	Steep to SE and creek	Well	Dry/damp	B	2	Light green brown	Yes
367	HDI_S367_08	HDIS_367_08	Steep to SW abd creek	Well	Dry/damp	B	2	Light yellowish brown	Yes

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
336	Poplar stand amongst willows, very little soil, overgrown talus	Shane	WAYPOINT	HDIS336	64.33805611	-137.5978276	7137250.239	374500.069	7/12/2008 13:13
337	Willows	Shane	WAYPOINT	HDIS337	64.3403043	-137.5980716	7137501.094	374498.5274	7/12/2008 12:10
338	Thick willows	Shane	WAYPOINT	HDIS338	64.34254311	-137.5982387	7137750.752	374500.6555	10/07/08
339	Thick willows	Shane	WAYPOINT	HDIS339	64.34477739	-137.5984641	7138000.021	374499.9523	10/07/08
340									
341	Clay and grit	Aiden	WAYPOINT	Hdis341	64.3491799	-137.5987562	7138490.89	374505.9099	10-JUL-08 12:31:33PM
342	Clay and organic, all boulders and roots, difficult to get depth or quality	Daithi	WAYPOINT	Hdis 342	64.35132349	-137.5984971	7138729.102	374528.1826	10-JUL-08 1:21:35PM
343	Clay with lots of chips	Daithi	WAYPOINT	Hdis 343	64.35370035	-137.5992419	7138995.275	374503.0657	10-JUL-08 12:31:40PM
344	Gritty sample	Aiden	WAYPOINT	Hdis344	64.35609237	-137.5992675	7139261.717	374512.7342	08-JUL-08 11:34:31AM
345	Shale in sample, bush getting thick	Archie	WAYPOINT	HDI-S345-8	64.35829631	-137.6000002	7139508.609	374487.4251	08-JUL-08 10:37:52AM
346		Kevin	WAYPOINT	HDIS346	64.36033035	-137.6003716	7139736	374479	08-JUL-08 11:46:01AM
347		Kevin	WAYPOINT	HDIS347	64.36261198	-137.6002067	7139990	374497	08-JUL-08 11:59:12AM
348	Overgrown talus, moderate willow cover	Shane	WAYPOINT	HDIS348	64.36500452	-137.6002795	7140256.231	374504.5319	7/7/2008
349	Overgrown talus, light willow cover	Shane	WAYPOINT	HDIS349	64.3671932	-137.6005009	7140500.414	374503.834	7/7/2008
350	Overgrown talus	Shane	WAYPOINT	HDIS350	64.36944139	-137.6007637	7140751.306	374501.4121	7/7/2008
351	Overgrown talus	Shane	WAYPOINT	HDIS351	64.37172932	-137.601031	7141006.634	374498.9508	7/7/2008
352	Open hillside	Shane	WAYPOINT	HDIS352	64.37390886	-137.6011248	7141249.547	374504.3734	7/7/2008
353	Grass and moss covering ground, poor sample, shale in sample	Archie	WAYPOINT	HDIS353-08	64.37531727	-137.6017132	7141408	374482	06-JUL-08 11:13:07AM
354	Closest spot to waypoint with soil	Kevin	WAYPOINT	HDI354			7141869	374449	04-JUL-08 2:55:25PM
355		Kevin	WAYPOINT	HDI355			7141996	374501	04-JUL-08 2:36:55PM
356		Kevin	WAYPOINT	HDI356			7142256	374497	04-JUL-08 2:22:25PM
357		Kevin	WAYPOINT	HDI357			7142503	374503	04-JUL-08 2:09:23PM
358		Kevin	WAYPOINT	HDI358			7142759	374505	04-JUL-08 1:59:31PM
359	Silty clay, good sample!	Daithi	WAYPOINT	Hdis 359	64.38945159	-137.6028354	7142984	374493	08-JUL-08 1:50:48PM
360		Kevin	WAYPOINT	HDIS360	64.39178109	-137.6028935	7143243.412	374500.6618	06-JUL-08 3:44:56PM
361		Kevin	WAYPOINT	HDIS361	64.39397137	-137.6032003	7143487.942	374495.8779	06-JUL-08 3:30:38PM
362		Kevin	WAYPOINT	HDIS362	64.39616181	-137.6025957	7143730.69	374535.0128	06-JUL-08 12:12:38PM
363									
364	Wooded area with some willows, fine sand and clay soil	Shane	WAYPOINT	HDIS364	64.33817027	-137.593079	7137253.583	374729.895	7/12/2008 12:52
365	Wooded area by creek, fine sand and clay soil	Shane	WAYPOINT	HDIS365	64.34039558	-137.5928568	7137500.971	374750.7369	7/12/2008 12:35
366	Poplar stand in dense willows, powdery soil	Shane	WAYPOINT	HDIS366	64.34261318	-137.5930142	7137748.248	374753.2218	10/07/08
367	Thick willows, sandy powdery soil	Shane	WAYPOINT	HDIS367	64.34484503	-137.5931863	7137997.141	374755.0608	10/07/08

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
368	HDI_S368_08	HDIS_368_08	Moderate slope facing SE, low bush	Well	Moist	B	3	Brown	No
369	HDI_S369_08	HDIS_369_08	Steep rocky hillside facing N, very little soil	Well	Moist		1		No
370	HDI_S370_08	HDIS_370_08	Steep 45deg slope	Well	Damp	A	2	Light orangey brown	No
371	HDI_S371_08	HDIS_371_08	E slope of steep hill above stream	Well	Damp	A	3	Med dark chocolate crown	No
372	HDI_S372_08	HDIS_372_08	Moderate slope facing NE to creek	Well	Moist	B	2	Brown	No
373	HDI_S373_08	HDIS_373_08	Gentle E slope	Moderate	Damp	B	3	Brown	No
374	HDI_S374_08								
375	HDI_S375_08	HDIS_375_08	Moderate slope facing SE to creek, low vegetation	Well	Moist	B	3	Brown	
376	HDI_S376_08	HDIS_376_08	Moderate slope facing S, low vegetation	Well	Moist		3	Brown	Yes, shaley metagrey
377	HDI_S377_08	HDIS_377_08	Moderate slope facing SE, low vegetation	Well	Moist	B	3	Brown	No
378	HDI_S378_08	HDIS_378_08	Steep slope, hummocky ground facing S, thin soil, rocky	Well	Moist	B	2	Brown	
379	HDI_S379_08	HDIS_379_08	Moderate slope facing S, rocky, thin soil	Well	Moist	B	2	Brown and black	No
380	HDI_S380_08	HDIS_380_08	Moderate slope to S	Moderate	Damp	B	1	Grey	No
381	HDI_S381_08	No sample	Cliff! Eeek!						
382	HDI_S382_08	HDIS_382_08	Moderate W slope	Well	Damp	B	1	Brownish black	Yes
383	HDI_S383_08	HDIS_383_08	Bottom of hill	Well	Damp	B	3	Dark brown	No
384	HDI_S384_08	HDIS_384_08	Steep grassy slope	Well	Damp	B	4	Dark brown	Yes
385	HDI_S385_08	HDIS_385_08	Steep scree slope	Well	Damp	B	3	Light brown	No
386	HDI_S386_08	HDIS_386_08	Boulder field, mossy	Well	Damp	A	2	Dark brown	No
387	HDI_S387_08	HDIS_387_08	Flat, good soil	Well	Damp	B	4	Creamy brown/light brown/beige	Yes
388	HDI_S388_08	HDIS_388_08	Flat, bushes, creek S 5m	Well	Damp	B	3	Grey	No
389	HDI_S389_08	HDIS_389_08	Gentle slope N, bushes	Well	Damp	B	4	Grey	No
390	HDI_S390_08	HDIS_390_08	Flat, swampy	Well	Damp	B	4	Grey	No
391	HDI_S391_08	HDIS_391_08	Flat, swampy, bushes	Poor	Wet	B	4	Grey	No
392	HDI_S392_08	HDIS_392_08	Gentle slope S, low brush	Moderate	Moist	B	4	Brown	Yes, 150m N
393	HDI_S393_08	HDIS_393_08	Flat spot, low brush	Moderate	Moist	B	4	Brown	Yes, 100m NE
394	HDI_S394_08	HDIS_394_08	Steep slope facing SE into deep gully, densely wooded	Well	Moist	A	2	Black	
395	HDI_S395_08	HDIS_395_08	Steep slope facing SE into deep gully, dense bush	Well	Moist	B	2	Brown	No
396	HDI_S396_08	HDIS_396_08	Moderate slope NE to gully, rocky ground, very little soil			B		Brown	Yes, in gully, quartzit
397	HDI_S397_08	HDIS_397_08	Steep slope E into gully, dense low bush	Well	Moist	B	3	Brown	No
398	HDI_S398_08	HDIS_398_08	Moderate slope E into gully, dense bush	Well	Moist	B	3	Brown	Yes, in gully

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
368	Gritty clay	Aiden	WAYPOINT	Hdis368	64.34721434	-137.5935963	7138261.811	374746.0393	10-JUL-08 3:25:47PM
369		Aiden	WAYPOINT	Hdis369	64.34913749	-137.5941347	7138477.047	374728.7976	10-JUL-08 12:41:15PM
370	S slope of V-steep valley cut, look like stream is shale-conglomerate contact	Daithi	WAYPOINT	Hdis 370	64.35172305	-137.5943748	7138765.466	374728.9675	10-JUL-08 1:03:11PM
371	Lots of sand, qtz pebble conglomerate chips; must have crossed purple shale contact/now in well rounded pebble qtz conglomerate with some oxidation	Daithi	WAYPOINT	Hdis 371	64.35369817	-137.5943153	7138985.311	374740.8245	10-JUL-08 12:48:46PM
372	Some grit	Aiden	WAYPOINT	Hdis372	64.35603077	-137.594319	7139245.093	374751.2573	08-JUL-08 12:08:13PM
373	A little biot of shale in sample, vegetation thick	Archie	WAYPOINT	HDI-S373-8	64.35825566	-137.5947446	7139493.711	374740.8402	08-JUL-08 11:11:41AM
374									
375	Clay	Aiden	WAYPOINT	Hdis375	64.36293561	-137.5951194	7140015.641	374744	07-JUL-08 3:06:28PM
376	Soil with minor grit	Aiden	WAYPOINT	Hdis376	64.36524541	-137.5951818	7140272.999	374752	07-JUL-08 2:44:00PM
377		Aiden	WAYPOINT	Hdis377	64.36736402	-137.5954205	7140509.412	374750	07-JUL-08 12:52:13PM
378	Gritty clay	Aiden	WAYPOINT	Hdis378	64.36942656	-137.5957582	7140739.777	374743	07-JUL-08 12:32:32PM
379	Boulders, sample slight mixed A/B, mostly B	Aiden	WAYPOINT	Hdis379	64.37183736	-137.5959115	7141008.562	374746	07-JUL-08 10:12:43AM
380		Thomas	WAYPOINT	Hdis 380	64.37410718	-137.5960759	7141261.669	374748.7639	06-JUL-08 10:41:22AM
381									
382	Shale in sample, rock field	Archie	WAYPOINT	HDIS382-08	64.37878286	-137.5966876	7141784	374741	06-JUL-08 4:44:21PM
383	Clay, some grit; at end of big talus slope	Daithi	WAYPOINT	Hdis 383	64.3812634	-137.5981444	7142063	374682	08-JUL-08 12:51:51PM
384	Clay, some grit	Daithi	WAYPOINT	Hdis 384	64.38297297	-137.5972224	7142251	374734	08-JUL-08 1:06:37PM
385	Clay, lots of grit	Daithi	WAYPOINT	Hdis 385	64.3853396	-137.5968992	7142514	374760	08-JUL-08 1:20:17PM
386	Peaty/organic, from between boulders, not good sample	Daithi	WAYPOINT	Hdis 386	64.38697868	-137.5977672	7142698	374726	08-JUL-08 1:36:42PM
387	Clay with silty chips etc, mossy area	Daithi	WAYPOINT	Hdis 387	64.38967212	-137.5975368	7142998	374749	08-JUL-08 2:05:31PM
388		Kevin	WAYPOINT	HDIS388	64.39196348	-137.5975015	7143253.082	374761.3605	06-JUL-08 3:54:42PM
389		Kevin	WAYPOINT	HDIS389	64.39421603	-137.5979429	7143504.812	374750.3523	06-JUL-08 3:09:58PM
390		Kevin	WAYPOINT	HDIS390	64.39638519	-137.5979945	7143746.487	374757.749	06-JUL-08 12:25:39PM
391		Kevin	WAYPOINT	HDIS391	64.39866314	-137.5983621	7144000.9	374750.4202	06-JUL-08 11:51:32AM
392		Aiden	WAYPOINT	Hdis392	64.34057303	-137.5877991	7137510.774	374995.7566	08-JUL-08 3:35:39PM
393	Brown clay sample	Aiden	WAYPOINT	Hdis393	64.34277948	-137.5879956	7137756.886	374996.281	08-JUL-08 3:19:55PM
394	Thin organic soil sampled	Aiden	WAYPOINT	Hdis394	64.34499448	-137.5882448	7138004.054	374994.3013	08-JUL-08 2:47:47PM
395	Clay and some grit	Aiden	WAYPOINT	Hdis395	64.34721845	-137.5885648	7138252.361	374988.9452	08-JUL-08 2:16:38PM
396	Pebbly grit in sample	Aiden	WAYPOINT	Hdis396	64.3495456	-137.5885698	7138511.538	374999.2684	08-JUL-08 1:37:22PM
397	Clay with some grit, large boulders	Aiden	WAYPOINT	Hdis397	64.35171853	-137.5888425	7138754.067	374995.9668	08-JUL-08 1:08:30PM
398	Clay and grit sample	Aiden	WAYPOINT	Hdis398	64.35395055	-137.5890883	7139003.124	374994.2379	08-JUL-08 12:43:44PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
399	HDI_S399_08	HDIS_399_08	Gentle slope E into gully, willows, good soil	Well	Moist	B	3	Brown	No
400	HDI_S400_08	HDIS_400_08	Gentle E slope	Moderate	Damp	B	2	Brown	No
401	HDI_S401_08								
402	HDI_S402_08	HDIS_402_08	Moderate slope facing W to creek, low brush, rocky ground	Well	Moist	B	3	Brown	
403	HDI_S403_08	HDIS_403_08	Steep slope facing E, in gully near creek	Well	Moist	B	1	Brown	Yes, in gully
404	HDI_S404_08	HDIS_404_08	Moderate facing E into gully	Well	Moist	B	3	Brown	No
405	HDI_S405_08	HDIS_405_08	Steep slope facing SE, rock, scree with thin patchy soil	Well	Moist	B	2	Brown	No
406	HDI_S406_08	HDIS_406_08	Steep hill facing SE, thin patchy soil, some scree	Well	Moist	B	1	Brown	No
407	HDI_S407_08	HDIS_407_08	Moderate slope to SW	Moderate	Damp	B	2	Grey brown	No
408	HDI_S408_08	HDIS_408_08	Ledge, steep	Well	Damp	B	2	Brown	Yes
409	HDI_S409_08	HDIS_409_08	Flat	Well	Damp	B	2	Black	Yes
410	HDI_S410_08	HDIS_410_08	Moderate S slope	Well	Wet	B	3	Brown	No
411	HDI_S411_08	HDIS_411_08	Steep slope near ridge	Well	Wet	B	3	Creamy, light brown	Yes
412	HDI_S412_08	HDIS_412_08	Steep	Well	Damp	B	2	Grey	Yes
413	HDI_S413_08	HDIS_413_08	Steep	Well	Damp	B	1	Grey	Yes
414	HDI_S414_08	HDIS_414_08	Steep	Well	Damp	B	2	Brown/grey	Yes
415	HDI_S415_08	HDIS_415_08	Flat, boulders, base of mtn	Well	Damp	B	3	Brown	Yes
416	HDI_S416_08	HDIS_416_08	Flat, bushes	Well	Damp	B	4	Light brown	No
417	HDI_S417_08	HDIS_417_08	Flat, bushes	Well	Damp	B	4	Grey	No
418	HDI_S418_08	HDIS_418_08	Flat, bushes	Moderate	Wet	B	3	Grey	No
419	HDI_S419_08								
420	HDI_S420_08	HDIS_420_08	Gentle to N	Poor	Damp	B	3	Brown	No
421	HDI_S421_08	HDIS_421_08	Flat	Well	Damp	B	3	Brown grey	Yes
422	HDI_S422_08	HDIS_422_08	Moderate S slope	Well	Wet	B	3	Brown	No
423	HDI_S423_08	HDIS_423_08	Flat	Moderate	Wet	B	4	Greyish brown	Yes, 50m W
424	HDI_S424_08	HDIS_424_08	Moderate	Moderate	Wet	A	1	Black	Yes
425	HDI_S425_08	HDIS_425_08	Flat	Moderate	Damp	B	1	Blackish brown	Yes
426	HDI_S426_08	HDIS_426_08	Steep W	Well	Damp	B	2	Brown	Yes
427	HDI_S427_08	HDIS_427_08	Moderate W slope	Well	Damp	B	2	Brown	Yes
428	HDI_S428_08	HDIS_428_08	Moderate W slope	Well	Damp	B	2	Brownish black	Yes
429	HDI_S429_08	HDIS_429_08	Moderate E slope	Well	Damp	B	2	Brown	Yes
430	HDI_S430_08								
431	HDI_S431_08	HDIS_431_08	Moderate slope facing W to gully	Well	Moist	B	2	Brown	No
432	HDI_S432_08	HDIS_432_08	Steep hillside facing SW to gully, rocky, scree with some soil	Well	Moist	B	3	Brown	
433	HDI_S433_08	HDIS_433_08	Steep slope facing SE to gully, scree, thin patchy soil	Well	Moist	B	3	Brown	
434	HDI_S434_08	HDIS_434_08	Steep hillside facing S, scree, thin patchy soil	Well	Moist	B	2	Brown	No
435	HDI_S435_08	HDIS_435_08	Steep scree slope facing S, thin patchy soil	Well	Moist	B	2	Brown	

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
399		Aiden	WAYPOINT	Hdis399	64.35618315	-137.5893535	7139252.284	374991.5755	08-JUL-08 12:26:45PM
400	Shale in sample, bush	Archie	WAYPOINT	HDI-S400-8	64.35832975	-137.5895329	7139491.698	374992.6623	08-JUL-08 11:38:53AM
401									
402	Clay with some grit	Aiden	WAYPOINT	Hdis402	64.36287065	-137.5899373	7139998.2	374994	07-JUL-08 3:37:28PM
403	Stony soil, shallow sample	Aiden	WAYPOINT	Hdis403	64.36525413	-137.5899892	7140263.744	375002	07-JUL-08 2:16:23PM
404	Clay with some grit	Aiden	WAYPOINT	Hdis404	64.3674931	-137.590081	7140513.272	375008	07-JUL-08 1:07:47PM
405	Gritty clay	Aiden	WAYPOINT	Hdis405	64.36954633	-137.5903426	7140742.449	375005	07-JUL-08 12:10:49PM
406	Gritty clay	Aiden	WAYPOINT	Hdis406	64.37187575	-137.5902486	7141001.685	375020	07-JUL-08 10:38:44AM
407		Thomas	WAYPOINT	Hdis 407	64.37406988	-137.5908772	7141247.276	374999.3086	06-JUL-08 11:26:59AM
408	Shale in sample	Archie	WAYPOINT	HDIS408-08	64.3758248	-137.5896298	7141440	375067	06-JUL-08 11:56:27AM
409	Shale in sample, shale hill and boulder field	Archie	WAYPOINT	HDIS409-08	64.3793721	-137.5907447	7141838	375030	06-JUL-08 4:19:49PM
410	Grass and moss visible, near a stream, not too much sand or pebbles in sample	Archie	WAYPOINT	HDIS410-08	64.38070985	-137.5915038	7141988	374999	06-JUL-08 3:55:39PM
411	Clay, lots of grit	Daithi	WAYPOINT	Hdis 411	64.38306911	-137.591799	7142251	374996	08-JUL-08 12:31:27PM
412	Boulders	Tubs	WAYPOINT	HDIS412	64.38528336	-137.5916449	7142497.601	375013.2534	7/6/2008
413	Boulders	Tubs	WAYPOINT	HDIS413	64.38751018	-137.5921107	7142746.512	375000.9236	7/6/2008
414	Boulders	Tubs	WAYPOINT	HDIS414	64.38970783	-137.5920775	7142991.193	375012.5147	7/6/2008
415		Kevin	WAYPOINT	HDIS415	64.39186332	-137.5922567	7143231.597	375013.678	06-JUL-08 4:07:32PM
416		Kevin	WAYPOINT	HDIS416	64.39426993	-137.5928439	7143500.77	374996.3209	06-JUL-08 2:59:54PM
417		Kevin	WAYPOINT	HDIS417	64.3964887	-137.5929081	7143747.995	375003.3182	06-JUL-08 1:15:48PM
418		Kevin	WAYPOINT	HDIS418	64.39873899	-137.5932652	7143999.307	374996.3482	06-JUL-08 11:41:36AM
419									
420		Thomas	WAYPOINT	Hdis 420	64.33828024	-137.5824396	7137245	375244	09-JUL-08 3:32:58PM
421	Willows, trees, boulders	Tubs	WAYPOINT	HDIS421	64.33947081	-137.5831997	7137378.984	375212.8477	10/07/08
422	Bushy	Archie	WAYPOINT	HDI-S422-8	64.34283522	-137.5828379	7137752.958	375245.5556	08-JUL-08 3:29:42PM
423	Bushy, pure clay	Archie	WAYPOINT	HDI-S423-8	64.3450633	-137.5830862	7138001.581	375243.6552	08-JUL-08 3:11:19PM
424	Black dirt with clay, 10m N of creek, bush	Archie	WAYPOINT	HDI-S424-8	64.34731862	-137.5831621	7138252.899	375250.2074	08-JUL-08 2:42:54PM
425	Beside stream E side, bushy, lots of shale in sample	Archie	WAYPOINT	HDI-S425-8	64.34986948	-137.5827501	7138536.172	375281.6461	08-JUL-08 2:09:42PM
426	Sand and pebbly clay soil, sample on OC, bushy	Archie	WAYPOINT	HDI-S826	64.35173957	-137.5830295	7138744.988	375276.6309	08-JUL-08 1:41:19PM
427	Sandy texture, taken below OC	Archie	WAYPOINT	HDI-S427-8	64.35413796	-137.5837265	7139013.458	375253.8538	08-JUL-08 1:13:53PM
428	Shale in sample, bushy	Archie	WAYPOINT	HDI-S428-8	64.35623545	-137.5843159	7139248.207	375234.9161	08-JUL-08 12:59:32PM
429	Shale and sand in sample, bushy	Archie	WAYPOINT	HDI-S42908	64.35854835	-137.5843743	7139505.904	375242.5781	08-JUL-08 12:12:48PM
430									
431		Aiden	WAYPOINT	Hdis431	64.36269891	-137.5847423	7139968.863	375244	07-JUL-08 4:03:17PM
432	Clay	Aiden	WAYPOINT	Hdis432	64.36526896	-137.5847857	7140255.168	375253	07-JUL-08 1:51:04PM
433	Clay	Aiden	WAYPOINT	Hdis433	64.36737207	-137.5851279	7140490.058	375246	07-JUL-08 1:32:37PM
434	Gritty clay	Aiden	WAYPOINT	Hdis434	64.36977927	-137.585349	7140758.576	375246	07-JUL-08 11:30:09AM
435	Gritty clay	Aiden	WAYPOINT	Hdis435	64.37194297	-137.5850115	7140998.879	375273	07-JUL-08 11:09:26AM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
436	HDI_S436_08	HDIS_436_08	Flat, on ridge	Moderate	Damp	B	3	Grey	Yes, at 5m
437	HDI_S437_08	No sample	Cliff! Eek!						
438	HDI_S438_08	HDIS_438_08	Moderate W slope	Well	Damp	B	1	Brown	Yes
439	HDI_S439_08	HDIS_439_08	Moderate S slope	Well	Damp	B	3	Brown	Yes
440	HDI_S440_08	HDIS_440_08	Small hollow on steep grassy slope	Well	Damp	B	3	Light creamy brown	No
441	HDI_S441_08	HDIS_441_08	Steep	Well	Damp	B	2	Grey	Yes
442	HDI_S442_08	HDIS_442_08	Steep	Well	Damp	B	3	Brown/grey	Yes
443	HDI_S443_08	HDIS_443_08	Steep	Well	Damp	B	2	Grey	Yes
444	HDI_S444_08	HDIS_444_08	Bottom of cliff	Well	Damp	B	4	Beige/light brown	Yes
445	HDI_S445_08	HDIS_445_08	Flat, bushes	Well	Damp	B	4	Light brown	No
446	HDI_S446_08	HDIS_446_08	Flat, bushes	Well	Damp	B	4	Brown	No
447	HDI_S447_08	HDIS_447_08	Gentle slope N, bushes	Well	Damp	B	4	Brown	No
448	HDI_S448_08	HDIS_448_08	Flat, right next to creek	Moderate	Damp	B	3	Grey	No
449	HDI_S449_08	HDIS_449_08	Moderate to N	Well	Damp	B	1	Medium to dark brown	No
450	HDI_S450_08	HDIS_450_08	Gentle to N	Moderate to p	Wet/damp	B	3	Grey brown	No
451	HDI_S451_08	HDIS_451_08	Flat on S side of creek	Moderate	Damp	B	1	Greyish brown	No
452	HDI_S452_08	HDIS_452_08	Gentle to S	Moderate	Damp	B	2	Yellowish brown	No
453	HDI_S453_08	HDIS_453_08	Gentle to S	Moderate	Wet/damp	B	2	Light to medium brown	No
454	HDI_S454_08	HDIS_454_08	Gentle to S	Moderate	Damp	B	3	Brown with a hint of yellow	Yes, subcrop
455	HDI_S455_08	HDIS_455_08	Steep to W and creek	Well	Damp	B	2	Light to medium brown	Yes
456	HDI_S456_08	HDIS_456_08							
457	HDI_S457_08	HDIS_457_08	Gentle slope to W	Moderate	Damp	B	3	Brown	No
458	HDI_S458_08	HDIS_458_08	Moderate slope to W	Well	Damp	B	2	Brown	Yes, at 10m
459	HDI_S459_08	HDIS_459_08	Moderate slope to W	Well	Damp	B	2	Brown	Yes, at 30m
460	HDI_S460_08	HDIS_460_08	Moderate slope to W	Moderate	Damp	B	3	Grey brown	Yes, at 10m
461	HDI_S461_08	HDIS_461_08	Moderate slope to W	Well	Damp	B	3	Brown	Yes, at 7m
462	HDI_S462_08	HDIS_462_08	Moderate slope to W	Moderate	Damp	B	3	Brown	No
463	HDI_S463_08	HDIS_463_08	Moderate slope to W	Well	Damp	B	2	Brown	Yes, at 1m
464	HDI_S464_08	HDIS_464_08	Moderate slope to SW	Moderate	Damp	B	2	Brown	Yes, at 30m
465	HDI_S465_08	HDIS_465_08	Moderate slope to S	Moderate	Damp	B	3	Brown	No
466	HDI_S466_08	HDIS_466_08	Gentle slope to S, on ridge	Well	Damp	B	2	Brown	Yes, at 5m
467	HDI_S467_08	No sample	Cliff! Eek!						
468	HDI_S468_08	HDIS_468_08	Moderate W slope	Well	Damp	A	1	Brownish black	Yes
469	HDI_S469_08	HDIS_469_08	Steep W slope	Well	Damp	B	2	Brown	Yes
470	HDI_S470_08	HDIS_470_08	Steep grassy slope, lots of scree	Well	Damp	A	1	Dark brown	No

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
436		Thomas	WAYPOINT	Hdis 436	64.37421413	-137.5872588	7141256.226	375174.4645	06-JUL-08 11:50:38AM
437									
438	Sample mostly sand and shale, boulder field	Archie	WAYPOINT	HDIS438-08	64.3791188	-137.5863263	7141801	375242	06-JUL-08 1:37:35PM
439	A little bit of shale in sample	Archie	WAYPOINT	HDIS439-08	64.38090364	-137.5862791	7141999	375252	06-JUL-08 3:37:40PM
440	Clay, lots of shale chips and grit	Daithi	WAYPOINT	Hdis440	64.38321814	-137.5863683	7142257	375258	08-JUL-08 12:16:41PM
441	Boulders, cliffs, scree	Tubs	WAYPOINT	HDIS441	64.38590982	-137.589326	7142562.807	375127.8868	7/6/2008
442	Cliffs	Tubs	WAYPOINT	DHIS442	64.38789566	-137.5867338	7142778.873	375261.8546	7/6/2008
443	Boulders	Tubs	WAYPOINT	HDIS443	64.39118966	-137.5865385	7143145.334	375286.2119	7/6/2008
444	Clay with shaley grit, good sample	Daithi	WAYPOINT	Hdis 444	64.39211293	-137.5874866	7143250	375245	08-JUL-08 2:26:51PM
445		Kevin	WAYPOINT	HDIS445	64.3943488	-137.5877673	7143499.573	375241.3283	06-JUL-08 2:47:55PM
446		Kevin	WAYPOINT	HDIS446	64.39665014	-137.5890258	7143758.34	375191.1292	06-JUL-08 1:26:46PM
447		Kevin	WAYPOINT	HDIS447	64.39877973	-137.5877864	7143993.073	375260.52	06-JUL-08 11:25:38AM
448		Kevin	WAYPOINT	HDIS448	64.40095324	-137.5885359	7144236.603	375234.2753	06-JUL-08 10:42:27AM
449	Wine phyllite talus slope	Shane	WAYPOINT	HDIS449	64.33612693	-137.5769536	7136994	375499	08/07/08
450	Permafrost directly under thick moss blanket; sample taken from dry stream bed	Shane	WAYPOINT	HDIS450	64.33841008	-137.577186	7137249	375498	08/07/08
451	Sandy soil possibly subject to occasional flooding	Shane	WAYPOINT	HDIS451	64.3406866	-137.5773586	7137503	375500	08/07/08
452	Thick willows, some trees	Shane	WAYPOINT	HDIS452	64.3429094	-137.577538	7137751	375502	08/07/08
453	Thick willows	Shane	WAYPOINT	HDIS453	64.34514552	-137.5777864	7138000	375500	08/07/08
454	Thick willows	Shane	WAYPOINT	HDIS454	64.34741023	-137.5779753	7138253	375501	08/07/08
455	Moderate willow cover	Shane	WAYPOINT	HDIS455	64.34962087	-137.578108	7138499	375505	08/07/08
456									
457		Thomas	WAYPOINT	Hdis 457	64.35410595	-137.578496	7139000	375506	07-JUL-08 2:49:07PM
458		Thomas	WAYPOINT	Hdis 458	64.35626538	-137.5787623	7139241	375503	07-JUL-08 2:27:18PM
459		Thomas	WAYPOINT	Hdis 459	64.35841299	-137.5784744	7139479	375527	07-JUL-08 2:03:39PM
460		Thomas	WAYPOINT	Hdis 460	64.36069806	-137.5786672	7139734	375528	07-JUL-08 1:45:14PM
461		Thomas	WAYPOINT	Hdis 461	64.3631377	-137.5797519	7140008	375486	07-JUL-08 1:17:25PM
462		Thomas	WAYPOINT	Hdis 462	64.36523854	-137.579293	7140241	375518	07-JUL-08 12:54:21PM
463		Thomas	WAYPOINT	Hdis 463	64.36799954	-137.5805339	7140551	375471	07-JUL-08 12:11:47PM
464		Thomas	WAYPOINT	Hdis 464	64.36975664	-137.5800376	7140746	375503	07-JUL-08 11:42:47AM
465		Thomas	WAYPOINT	Hdis 465	64.3721443	-137.5803926	7141012	375496	07-JUL-08 11:10:45AM
466		Thomas	WAYPOINT	Hdis 466	64.37417708	-137.579802	7141237.47	375533.9105	06-JUL-08 12:26:45PM
467									
468	Bottom of outcrop, shale in sample	Archie	WAYPOINT	HDIS468-08	64.3791007	-137.5812121	7141789	375488	06-JUL-08 2:53:04PM
469	Shale in sample, grass and moss visible, sandy texture	Archie	WAYPOINT	HDIS469-08	64.38094086	-137.5811531	7141993	375499	06-JUL-08 3:06:46PM
470	Lots of mud(?) with rock chips, poor sample	Daithi	WAYPOINT	Hdis 470	64.38324387	-137.5813498	7142250	375500	08-JUL-08 12:05:06PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
471	HDI_S471_08	HDIS_471_08	Steep	Well	Damp	B	2	Brown/grey	Yes
472	HDI_S472_08	HDIS_472_08	Steep	Well	Damp	B	2	Brown/grey	Yes
473	HDI_S473_08	HDIS_473_08	Steep	Well	Damp	B	2	Grey	Yes
474	HDI_S474_08	HDIS_474_08	Bottom of cliff	Well	Damp	B	3	Beige/light brown	Yes
475	HDI_S475_08	HDIS_475_08	Flat, bushes	Moderate	Damp/wet	B	4	Grey	No
476	HDI_S476_08	HDIS_476_08	Flat, right next to river	Well	Damp	B	3	Grey	No
477	HDI_S477_08	HDIS_477_08	Flat, swampy, bushes	Poor	Damp	B	3	Grey	No
478	HDI_S478_08	HDIS_478_08	Gentle to N	Poor	Wet	B	2	Greyish brown	No
479	HDI_S479_08	HDIS_479_08	Gentle slope to N	Poor	Wet	B	2	Grey brown	No
480	HDI_S480_08	HDIS_480_08	Moderate	Well	Wet	B	3	Grey	Yes
481	HDI_S481_08	HDIS_481_08	Steep to creek		Damp	B	3	Brown grey	Yes
482	HDI_S482_08	HDIS_482_08	Steep	Well	Damp	B	2	Brown	Yes
483	HDI_S483_08	HDIS_483_08	Steep	Well	Damp	B	2	Brown	Yes
484	HDI_S484_08	HDIS_484_08	Gentle to S	Moderate	Damp	B	3	Greenish brown with mottled reddish brown	No
485	HDI_S485_08	HDIS_485_08	Gentle slope to S	Moderate	Damp	B	2	Greenish brown	No
486	HDI_S486_08	HDIS_486_08	Moderate to S	Moderate	Damp	B	2	Medium brown	No
487	HDI_S487_08	HDIS_487_08	Moderate	Well	Damp	B	2	Brown	Yes
488	HDI_S488_08	HDIS_488_08	Moderate to steep W slope, rocky area, mtn. ledge, S slope	Well	Damp	B	2	Brown	Yes
489	HDI_S489_08	HDIS_489_08	Gentle	Well	Wet	B	3	Greyish brown	Yes
490	HDI_S490_08	HDIS_490_08	Steep SW slope, rocky area, very little veg.	Well	Damp	A	1	Blackish brown	Yes
491	HDI_S491_08	HDIS_491_08	Steep S slope, rock field, vegetation present	Well	Damp	A	1	Black	Yes
492	HDI_S492_08	HDIS_492_08	Moderate slope to SW	Moderate	Damp	B	2	Brown	No
493	HDI_S493_08	HDIS_493_08	Steep slope to E, near cliff	Moderate	Damp	B	1	Brown	Yes, at 1m
494	HDI_S494_08	HDIS_494_08	Moderate slope to E	Well	Damp	B	2	Grey brown	Yes, at 7m
495	HDI_S495_08	HDIS_495_08	Moderate slope to E	Moderate	Damp	B	2	Brown	Yes, at 2m
496	HDI_S496_08								
497	HDI_S497_08	HDIS_497_08	Steep	Well	Damp	B	1	Brown	Yes
498	HDI_S498_08	HDIS_498_08	Steep	Well	Damp	B	2	Brown grey	Yes
499	HDI_S499_08	HDIS_499_08	Steep	Well	Damp	B	2	Grey	Yes
500	HDI_S500_08	HDIS_500_08	Steep	Well	Damp	B	2	Grey	Yes
501	HDI_S501_08	HDIS_501_08	Steep	Well	Damp	B	2	Grey brown	Yes
502	HDI_S502_08								
503	HDI_S503_08	HDIS_503_08	Bottom of cliff	Well	Damp	B	3	Light brown/grey	Yes
504	HDI_S504_08	HDIS_504_08	Gentle slope N, bushes	Well	Damp	B	4	Grey	No
505	HDI_S505_08								
506	HDI_S506_08	HDIS_506_08	Gentle to N	Moderate	Damp	B	1	Brown	No
507	HDI_S507_08	HDIS_507_08	Gentle to NE and creek	Moderate	Damp	B	2	Grey brown	No
508	HDI_S508_08	HDIS_508_08	Moderate	Well	Damp	B	2	Brown grey	Yes

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
471	Edge of mountain	Tubs	WAYPOINT	HDIS471	64.38519141	-137.5820861	7142468.588	375473.6363	7/6/2008
472	Cliffs	Tubs	WAYPOINT	HDIS472	64.38760045	-137.5836509	7142739.945	375409.1176	7/6/2008
473	Boulders	Tubs	WAYPOINT	HDIS473	64.39040478	-137.5813616	7143047.77	375532.1637	7/6/2008
474	Clay with shaley chips, looks like area has slumped	Daithi	WAYPOINT	Hdis 474	64.39212752	-137.5821757	7143241	375501	08-JUL-08 2:46:19PM
475		Kevin	WAYPOINT	HDIS475	64.39444746	-137.5824335	7143500.095	375498.813	06-JUL-08 2:37:03PM
476	Could not cross river so sample 50m short	Kevin	WAYPOINT	HDIS476	64.39687075	-137.5835414	7143772.144	375456.4068	06-JUL-08 1:46:41PM
477		Kevin	WAYPOINT	HDIS477	64.39898039	-137.5827667	7144005.571	375503.2925	06-JUL-08 10:58:34AM
478	Open grassy hillside, permafrost under moss layer	Shane	WAYPOINT	HDIS478	64.33624143	-137.5717746	7136997	375750	08/07/08
479		Thomas	WAYPOINT	Hdis 479	64.33852986	-137.5719538	7137252	375752	09-JUL-08 2:56:35PM
480	Big trees, boulders	Tubs	WAYPOINT	HDIS480	64.34065425	-137.5721929	7137489.213	375749.6765	09/07/08
481	Vegetation, trees	Tubs	WAYPOINT	HDIS481	64.34295827	-137.5724926	7137746.393	375745.5955	09/07/08
482	Willows, boulders	Tubs	WAYPOINT	HDIS482	64.34526312	-137.5722757	7138002.655	375766.4634	10/07/08
483	Willows	Tubs	WAYPOINT	HDIS483	64.34733856	-137.5725379	7138234.305	375763.1629	10/07/08
484	Thick willows	Shane	WAYPOINT	HDIS484	64.34971768	-137.5730642	7138500	375748	08/07/08
485	Thick willows	Shane	WAYPOINT	HDIS485	64.35197334	-137.5732357	7138752	375750	08/07/08
486	Hillside with moderate hillcover	Shane	WAYPOINT	HDIS486	64.35420779	-137.5734593	7139001	375750	08/07/08
487	Rocks and shale	Archie	WAYPOINT	HDIS487	64.35640091	-137.5735874	7139245.612	375753.3938	07-JUL-08 3:59:53PM
488	Sandy texture to sample	Archie	WAYPOINT	HDIS488-08	64.35875304	-137.5728877	7139506.196	375797.7724	07-JUL-08 3:28:02PM
489		Archie	WAYPOINT	HDIS489-08	64.36081423	-137.5731803	7139736.318	375792.9532	07-JUL-08 3:07:52PM
490	Shale in sample	Archie	WAYPOINT	HDIS490-08	64.362542	-137.5745901	7139931.493	375732.7331	07-JUL-08 2:42:32PM
491	Mostly dirt in sample	Archie	WAYPOINT	HDIS491-08	64.36520468	-137.5740861	7140227.045	375769.0685	07-JUL-08 1:41:09PM
492		Thomas	WAYPOINT	Hdis 492	64.36771221	-137.5745393	7140507	375759	07-JUL-08 10:13:51AM
493	Very rocky sample	Thomas	WAYPOINT	Hdis 493	64.37074059	-137.574044	7140843.486	375796.0873	06-JUL-08 2:33:56PM
494		Thomas	WAYPOINT	Hdis 494	64.37224271	-137.5752559	7141013.144	375744.4201	06-JUL-08 1:37:28PM
495		Thomas	WAYPOINT	Hdis 495	64.37440826	-137.5750414	7141253.897	375764.5448	06-JUL-08 12:54:51PM
496									
497	Cliffs, scree, loose boulders	Tubs	WAYPOINT	HDIS497	64.37947394	-137.5724967	7141813.079	375910	39637
498	Cliffs, loose boulders	Tubs	WAYPOINT	HDIS498	64.38103893	-137.5752183	7141992.688	375786	39637
499	Boulders, cliffs	Tubs	WAYPOINT	HDIS499	64.38336507	-137.5749575	7142251.237	375809	39637
500	Cliffs	Tubs	WAYPOINT	HDIS500	64.38562274	-137.5748732	7142502.504	375823	39637
501	Boulders, cliffs	Tubs	WAYPOINT	HDIS501	64.38777463	-137.5776967	7142747.679	375697	39637
502									
503	Gritty clay	Daithi	WAYPOINT	Hdis 503	64.39224746	-137.5769896	7143244	375751	08-JUL-08 3:02:33PM
504		Kevin	WAYPOINT	HDIS504	64.39472607	-137.5776432	7143521.743	375730.9233	06-JUL-08 2:13:01PM
505									
506	Very poor sample, lots of grit and sand	Shane	WAYPOINT	HDIS506	64.33634972	-137.5666084	7136999	376000	08/07/08
507	Willows and small trees in this drainage channel	Shane	WAYPOINT	HDIS507	64.33859666	-137.5668247	7137250	376000	08/07/08
508	Willows by creek	Tubs	WAYPOINT	HDIS508	64.34079079	-137.567072	7137494.417	375997.5531	09/07/08

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
509	HDI_S509_08	HDIS_509_08	Moderate	Well	Damp	B	2	Brown grey	Yes
510	HDI_S510_08	HDIS_510_08	Moderate	Well	Damp	B	2	Brown grey	No
511	HDI_S511_08	HDIS_511_08	Steep	Well	Damp	B	2	Brown	Yes
512	HDI_S512_08	HDIS_512_08	Moderate	Well	Damp	B	2	Brown	Yes
513	HDI_S513_08	HDIS_513_08	Moderate	Well	Damp	B	2	Brown	Yes
514	HDI_S514_08	HDIS_514_08	Steep	Well	Damp	B	2	Brown	Yes
515	HDI_S515_08	HDIS_515_08	Steep	Well	Damp	B	2	Brown grey	Yes
516	HDI_S516_08	HDIS_516_08	Steep	Well	Damp	B	2	Brown	Yes
517	HDI_S517_08	HDIS_517_08	Steep	Well	Damp	B	2	Brown grey	Yes
518	HDI_S518_08	HDIS_518_08	Very steep	Well	Damp	B	2	Brown	Yes
519	HDI_S519_08	HDIS_519_08	Steep S slope, rock field	Well	Damp	A	1	Blackish brown	Yes
520	HDI_S520_08	HDIS_520_08	Flat, on ridge	Well	Damp	B	3	Grey orange brown	Yes, at 3m
521	HDI_S521_08	HDIS_521_08	Steep slope to E, near cliff	Moderate	Damp	B	2	Grey brown	Yes, at .5m
522	HDI_S522_08								
523	HDI_S523_08								
524	HDI_S524_08	HDIS_524_08	Steep	Well	Damp	B	1	Brown	Yes
525	HDI_S525_08	HDIS_525_08	Moderate	Well	Damp	B	2	Grey brown	Yes
526	HDI_S526_08	HDIS_526_08	Steep	Well	Damp	B	2	Grey brown	Yes
527	HDI_S527_08	HDIS_527_08	Steep	Well	Damp	B	2	Brown grey	Yes
528	HDI_S528_08	HDIS_528_08	Steep slope	Well	Damp	A	1	Light to dark brown	Yes
529	HDI_S529_08	HDIS_529_08	Steep slope, rocky	Well	Damp	A	1	Grey	Yes
530	HDI_S530_08								
531	HDI_S531_08	HDIS_531_08	Bottom of hill near creek	Well	Damp	B	3	Light brown	Yes
532	HDI_S532_08	HDIS_532_08	Moderate slope to N	Well	Damp	B	3	Brown	No
533	HDI_S533_08	HDIS_533_08	Moderate	Well	Damp	B	2	Brown	Yes
534	HDI_S534_08	HDIS_534_08	Moderate	Well	Damp	B	2	Brown	Yes
535	HDI_S535_08	HDIS_535_08		Well	Damp	B	2	Brown	Yes
536	HDI_S536_08	HDIS_536_08	Steep	Well	Damp	B	3	Brown	Yes
537	HDI_S537_08	HDIS_537_08	Steep	Well	Damp	B	2	Brown	Yes
538	HDI_S538_08	HDIS_538_08	Moderate	Well	Damp	B	3	Brown grey	Yes
539	HDI_S539_08	HDIS_539_08	Moderate to SE	Well	Damp	B	3	Medium to dark brown	No
540	HDI_S540_08	HDIS_540_08	Steep to SE and creek	Well	Damp	B	1	Brown	Yes
541	HDI_S541_08	HDIS_541_08	Gentle near creek	Moderate	Damp	B	2	Greyish brown	Yes
542	HDI_S542_08	HDIS_542_08	Moderate to SW and creek	Moderate	Damp	B	3	Greyish brown	Yes, subcrop
543	HDI_S543_08	HDIS_543_08	Steep	Well	Damp	B	2	Brown	Yes
544	HDI_S544_08	HDIS_544_08	Steep SE slope, boulder field	Well	Damp	B	1	Brown	Yes
545	HDI_S545_08	HDIS_545_08	Gentle slope to S, on ridge	Well	Damp	B	3	Brown	Yes, at 0.3m
546	HDI_S546_08	HDIS_546_08	Flat	Moderate	Damp	B	1	Brown	No
547	HDI_S547_08	HDIS_547_08	Flat	Moderate	Damp	B	3	Brown	No
548	HDI_S548_08								

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
509	Willows, trees	Tubs	WAYPOINT	HDIS509	64.3430156	-137.5671255	7137742.294	376004.9847	10/07/08
510	Willows, trees, boulders	Tubs	WAYPOINT	HDIS510	64.34528559	-137.5672951	7137995.429	376007.0153	10/07/08
511	Willows	Tubs	WAYPOINT	HDIS511	64.34768088	-137.5674033	7138262.4	376012.5697	10/07/08
512	Willows	Tubs	WAYPOINT	HDIS512	64.34969002	-137.5673933	7138486.134	376022.099	10/07/08
513	Willows	Tubs	WAYPOINT	HDIS513	64.35208146	-137.5682753	7138754	375990	7/7/2008
514	Willows	Tubs	WAYPOINT	HDIS514	64.35437467	-137.5681506	7139009	376007	7/7/2008
515	Cliffs, loose boulders	Tubs	WAYPOINT	HDIS515	64.35671615	-137.5656891	7139265	376136	7/7/2008
516	Boulders	Tubs	WAYPOINT	HDIS516	64.3587486	-137.5687885	7139498	375996	7/7/2008
517	Boulders	Tubs	WAYPOINT	HDIS517	64.36115957	-137.5686505	7139766	376013	7/7/2008
518	Boulders	Tubs	WAYPOINT	HDIS518	64.36311389	-137.5675399	7139981	376075	7/7/2008
519	Shale in sample	Archie	WAYPOINT	HDIS519-08	64.36503209	-137.5699812	7140199.804	375966.3192	07-JUL-08 1:09:02PM
520		Thomas	WAYPOINT	Hdis 520	64.36737944	-137.5693757	7140460	376006	07-JUL-08 9:46:36AM
521		Thomas	WAYPOINT	Hdis 521	64.37003969	-137.5687409	7140755.071	376048.7106	06-JUL-08 3:09:06PM
522									
523									
524	Boulders	Tubs	WAYPOINT	HDIS524	64.37692408	-137.5695664	7141523.385	376040	39637
525	Boulder field	Tubs	WAYPOINT	HDIS525	64.37917823	-137.5683466	7141772.047	376109	39638
526	Boulders	Tubs	WAYPOINT	HDIS526	64.38122962	-137.5707912	7142005.276	376000	39638
527	Boulders, veg.	Tubs	WAYPOINT	HDIS527	64.3834069	-137.5711516	7142248.46	375993	39638
528	Organic and clay mix, boulder field, had to take sample between boulders	Daithi	WAYPOINT	Hdis 528	64.38559441	-137.5708661	7142492	376016	08-JUL-08 4:20:25PM
529	Mainly shale and sand, etc. Bad sample	Daithi	WAYPOINT	Hdis 529	64.38760431	-137.5717536	7142717	375983	08-JUL-08 4:05:06PM
530									
531	Clay	Daithi	WAYPOINT	Hdis 531	64.39200983	-137.5723052	7143209	375976	08-JUL-08 3:15:46PM
532		Thomas	WAYPOINT	Hdis 532	64.33874116	-137.560447	7137253	376308	09-JUL-08 2:20:24PM
533	Trees, willows	Tubs	WAYPOINT	HDIS533	64.34097067	-137.561814	7137504.2	376252.2438	09/07/08
534	Willows	Tubs	WAYPOINT	HDIS534	64.34314895	-137.56187	7137746.9	376259.3281	09/07/08
535	Willows	Tubs	WAYPOINT	HDIS535	64.34546965	-137.5627713	7138007.109	376226.2354	10/07/08
536	Big trees, willows	Tubs	WAYPOINT	HDIS536	64.34769052	-137.5628162	7138254.531	376234.05	10/07/08
537	Willows	Tubs	WAYPOINT	HDIS537	64.35006587	-137.5627715	7138518.983	376246.8804	10/07/08
538	Steep to E	Tubs	WAYPOINT	HDIS538	64.35200276	-137.5627189	7138734.588	376258.1241	10/07/08
539	Dense willow cover	Shane	WAYPOINT	HDIS539	64.35437492	-137.5631393	7139000	376248	08/07/08
540	Overgrown talus, willows and grass, poor soil	Shane	WAYPOINT	HDIS540	64.35660442	-137.5633482	7139248	376248	08/07/08
541	Overgrown talus	Shane	WAYPOINT	HDIS541	64.35883141	-137.5636627	7139497	376243	08/07/08
542	Grassy hillside	Shane	WAYPOINT	HDIS542	64.36119804	-137.5636799	7139761	376253	08/07/08
543	Boulders	Tubs	WAYPOINT	HDIS543	64.3633998	-137.563798	7140006	376257	7/7/2008
544	Lots of shale in sample	Archie	WAYPOINT	HDIS544-08	64.36537734	-137.5643312	7140227.236	376240.4429	07-JUL-08 12:42:26PM
545		Thomas	WAYPOINT	Hdis 545	64.367088	-137.564737	7140419	376229	07-JUL-08 9:15:18AM
546	Very rocky sample	Thomas	WAYPOINT	Hdis 546	64.37073003	-137.5648158	7140824.301	376241.1417	06-JUL-08 4:01:59PM
547		Thomas	WAYPOINT	Hdis 547	64.37201665	-137.5640366	7140966.073	376284.5091	06-JUL-08 4:38:17PM
548									

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
549	HDI_S549_08	HDIS_549_08	Moderate	Well	Damp	B	2	Grey brown	Yes
550	HDI_S550_08	HDIS_550_08	Flat	Well	Damp	B	3	Brown	Yes
551	HDI_S551_08	HDIS_551_08	Moderate	Well	Damp	B	1	Brown	Yes
552	HDI_S552_08	HDIS_552_08	Flat	Well	Damp	B	2	Brown grey	Yes
553	HDI_S553_08	HDIS_553_08	Bottom of steep slope	Well	Damp	A	4	Dark brown	Yes
554	HDI_S554_08	HDIS_554_08	Valley floor, broad near stream	Well	Damp	B	4	Beige/light brown/creamy	Yes
555	HDI_S555_08	HDIS_555_08	Flat slope, near river	Well	Damp	B	4	Beige/grey brown	Yes
556	HDI_S556_08	HDIS_556_08	Flat	Poor	Wet	B	3	Grey	No
557	HDI_S557_08	HDIS_557_08	Steep to creek	Well	Damp	B	2	Brown	Yes
558	HDI_S558_08	HDIS_558_08	Steep to creek	Well	Damp	B	3	Brown grey	Yes
559	HDI_S559_08	HDIS_559_08	Moderate	Well	Damp	B	2	Brown	Yes
560	HDI_S560_08	HDIS_560_08	Steep	Well	Damp	B	2	Brown	Yes
561	HDI_S561_08	HDIS_561_08	Moderate	Well	Damp	B	2	Brown	Yes
562	HDI_S562_08	HDIS_562_08	Moderate	Well	Damp	B	2	Grey	Yes
563	HDI_S563_08	HDIS_563_08	Steep	Well	Damp	B	2	Brown	Yes
564	HDI_S564_08	HDIS_564_08	Steep	Well	Damp	B	2	Brown	Yes
565	HDI_S565_08	HDIS_565_08	Steep	Well	Damp	B	2	Grey	Yes
566	HDI_S566_08	HDIS_566_08	Steep	Well	Damp	B	2	Brown	Yes
567	HDI_S567_08	HDIS_567_08	Moderate SW slope, rock field and shale	Well	Damp	B	2	Brown	Yes
568	HDI_S568_08								
569	HDI_S569_08								
570	HDI_S570_08	HDIS_570_08	Flat	Moderate	Damp	B	4	Brown	No
571	HDI_S571_08	HDIS_571_08	Flat	Poor	Damp	B	4	Brown	No
572	HDI_S572_08	HDIS_572_08	Flat	Well	Damp	B	2	Brown	Yes
573	HDI_S573_08								
574	HDI_S574_08								
575	HDI_S575_08								
576	HDI_S576_08								
577	HDI_S577_08	HDIS_577_08	Gentle slope to N	Moderate	Damp	B	3	Grey brown	No
578	HDI_S578_08	HDIS_578_08	Flat	Poor	Wet	B	4	Brown	No
579	HDI_S579_08	HDIS_579_08	Moderate	Well	Damp	B	3	Brown grey	Yes
580	HDI_S580_08	HDIS_580_08	Steep	Well	Damp	B	3	Brown grey	Yes
581	HDI_S581_08	HDIS_581_08	Steep to creek	Well	Damp	B	2	Brown grey	Yes
582	HDI_S582_08	HDIS_582_08	Moderate	Well	Damp	B	3	Brown	Yes
583	HDI_S583_08	HDIS_583_08	Steep	Well	Damp	B	2	Brown	Yes
584	HDI_S584_08	HDIS_584_08	Moderate	Well	Damp	B	2	Brown grey	Yes
585	HDI_S585_08	HDIS_585_08	Steep	Well	Damp	B	2	Brown grey	Yes
586	HDI_S586_08	HDIS_586_08	Flat	Well	Damp	B	2	Brown grey	Yes
587	HDI_S587_08	HDIS_587_08	Steep	Well	Damp	B	2	Brown	Yes
588	HDI_S588_08	HDIS_588_08	Steep	Well	Damp	B	2	Brown	Yes
589	HDI_S589_08	HDIS_589_08	Top of mtn, steep S slope, N slope cliff	Well	Damp	B	1	Brown	Yes

GRID_ID	Notes	Name	type	Ident	lat	long	y_proj	x_proj	Date
549	Loose boulders	Tubs	WAYPOINT	HDIS549	64.37681437	-137.565451	7141503.143	376238	
550	Boulders	Tubs	WAYPOINT	HDIS550	64.37904714	-137.5654264	7141751.756	376249	
551	Boulder field	Tubs	WAYPOINT	HDIS551	64.38113037	-137.5655893	7141984.079	376251	
552	Boulders	Tubs	WAYPOINT	HDIS552	64.38358217	-137.5658869	7142257.713	376247	
553	Organic clay, good sample	Daithi	WAYPOINT	Hdis 553	64.38590856	-137.5661155	7142517	376247	08-JUL-08 4:36:49PM
554	Clay, little grit	Daithi	WAYPOINT	Hdis 554	64.38799432	-137.5667491	7142751	376226	08-JUL-08 3:43:41PM
555	Clay with shaley chips, gritty	Daithi	WAYPOINT	Hdis 555	64.39038668	-137.5669018	7143017	376229	08-JUL-08 3:31:38PM
556		Thomas	WAYPOINT	Hdis 556	64.34094418	-137.5566904	7137491	376500	09-JUL-08 1:54:21PM
557	Willows	Tubs	WAYPOINT	HDIS557	64.34333663	-137.5568387	7137758.015	376503.0844	09/07/08
558	Willows, boulders	Tubs	WAYPOINT	HDIS558	64.34555029	-137.5570442	7138004.946	376503.0899	09/07/08
559	Willows	Tubs	WAYPOINT	HDIS559	64.34781482	-137.5573616	7138257.761	376497.9196	09/07/08
560	Willows	Tubs	WAYPOINT	HDIS560	64.34990267	-137.5574244	7138490.404	376504.2511	09/07/08
561	Steep E/W	Tubs	WAYPOINT	HDIS561	64.35218523	-137.558732	7138747.152	376451.3715	10/07/08
562	By creek, willows, boulders	Tubs	WAYPOINT	HDIS562	64.35451976	-137.5577498	7139005.236	376509.2473	10/07/08
563	Willows, boulders	Tubs	WAYPOINT	HDIS563	64.3567641	-137.5582527	7139256.163	376495.0433	10/07/08
564	Boulders, veg	Tubs	WAYPOINT	HDIS564	64.35903601	-137.5583358	7139509.344	376501.2269	10/07/08
565	Boulders	Tubs	WAYPOINT	HDIS565	64.36126124	-137.558399	7139757.288	376508.1601	10/07/08
566	Boulders	Tubs	WAYPOINT	HDIS566	64.36449649	-137.5577463	7140116	376554	7/7/2008
567	Shale in sample	Archie	WAYPOINT	HDIS567-08	64.36591311	-137.5581582	7140274.894	376540.647	07-JUL-08 11:32:36AM
568									
569									
570		Thomas	WAYPOINT	Hdis 570	64.37234446	-137.5595374	7140993.827	376502.9779	July 8 2008
571	10m from lake	Thomas	WAYPOINT	Hdis 571	64.37463666	-137.5599316	7141249.873	376494.2562	06-JUL-08 5:04:39PM
572	Boulders, by creek OC	Tubs	WAYPOINT	HDIS572	64.37682409	-137.5603035	7141494.208	376486	39638
573									
574									
575									
576									
577		Thomas	WAYPOINT	Hdis 577	64.34108131	-137.5516427	7137497	376744	09-JUL-08 1:38:12PM
578		Thomas	WAYPOINT	Hdis 578	64.34327963	-137.5517926	7137742	376746	09-JUL-08 1:20:45PM
579	Steep to creek, big trees	Tubs	WAYPOINT	HDIS579	64.34568683	-137.5522725	7138010.888	376734.0628	09/07/08
580	Willows	Tubs	WAYPOINT	HDIS580	64.34773226	-137.5524443	7138239.019	376734.9212	09/07/08
581	Trees, willows, boulders	Tubs	WAYPOINT	HDIS581	64.35017173	-137.5520758	7138509.985	376763.6283	09/07/08
582	Willows	Tubs	WAYPOINT	HDIS582	64.3522973	-137.5527618	7138748.038	376740.0267	09/07/08
583	Willows	Tubs	WAYPOINT	HDIS583	64.35458631	-137.5529902	7139003.406	376739.2535	09/07/08
584	Willows, boulders	Tubs	WAYPOINT	HDIS584	64.35679779	-137.5526432	7139249.024	376765.8952	09/07/08
585	Boulders	Tubs	WAYPOINT	HDIS585	64.35913475	-137.5530592	7139510.095	376756.2821	09/07/08
586	Steep E and W	Tubs	WAYPOINT	HDIS586	64.3612832	-137.5532962	7139749.826	376754.4676	09/07/08
587	Cliffs, boulders	Tubs	WAYPOINT	HDIS587	64.36334414	-137.5526721	7139978.141	376793.806	09/07/08
588	Boulders	Tubs	WAYPOINT	HDIS588	64.36579552	-137.5536129	7140253	376759	7/7/2008
589	Shale and sand in sample	Archie	WAYPOINT	HDIS589-08	64.36832182	-137.5544339	7140535.918	376731.104	07-JUL-08 10:29:04AM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
590	HDI_S590_08								
591	HDI_S591_08	HDIS_591_08	Steep slope to W	Well	Damp	B	1	Grey brown	Yes, at 1m
592	HDI_S592_08	HDIS_592_08	Steep slope to W	Well	Damp	B	3	Brown	Yes, at 5m
593	HDI_S593_08	HDIS_593_08	Moderate slope to W	Well	Damp	B	3	Brown	No
594	HDI_S594_08	HDIS_594_08	Moderate slope to NW	Moderate	Damp	B	3	Brown	Yes, at 1m
595	HDI_S595_08	HDIS_595_08	Moderate slope to W	Moderate	Damp	B	3	Dark brown	Yes, at 2m
596	HDI_S596_08	HDIS_596_08	Moderate slope to NW	Well	Damp	B	2	Brown	Yes, at 1m
597	HDI_S597_08	HDIS_597_08	Flat	Poor	Damp	B	4	Brown	No
598	HDI_S598_08	HDIS_598_08	Flat	Poor	Damp	B	4	Brown	No
599	HDI_S599_08	HDIS_599_08	Flat	Poor	Damp	B	4	Brown	No
600	HDI_S600_08	HDIS_600_08	Gentle slope to S	Moderate	Damp	B	4	Brown	No
601	HDI_S601_08	HDIS_601_08	Gentle slope to S	Moderate	Damp	B	3	Brown	No
602	HDI_S602_08	HDIS_602_08	Gentle slope to S	Moderate	Damp	B	3	Brown	No
603	HDI_S603_08	HDIS_603_08	Gentle slope to S	Moderate	Damp	B	3	Brown	No
604	HDI_S604_08	HDIS_604_08	Moderate slope to E	Well	Damp	B	1	Brown	Yes, at 50m
605	HDI_S605_08	HDIS_605_08	Moderate slope to E	Well	Damp	B	2	Brown	No
606	HDI_S606_08	HDIS_606_08	Moderate slope to SW	Moderate	Damp	B	3	Brown	No
607	HDI_S607_08	HDIS_607_08	Steep	Well	Damp	B	2	Brown	Yes
608	HDI_S608_08	HDIS_608_08	Steep	Well	Damp	B	2	Brown	Yes
609	HDI_S609_08	HDIS_609_08	Flat, on ridge	Moderate	Damp	B	2	Brown	Yes, at 1m
610	HDI_S610_08	HDIS_610_08	Steep slope to W	Well	Damp	B	2	Grey	Yes, at 2m
611	HDI_S611_08	HDIS_611_08	Flat on ridge	Well	Damp	B	1	Grey brown	Yes, at 1m
612	HDI_S612_08	HDIS_612_08	Steep slope to W	Well	Damp	B	2	Brown	Yes, at 20m
613	HDI_S613_08	HDIS_613_08	Moderate to W	Well	Damp	B	3	Brown	Yes, at 10m
614	HDI_S614_08	HDIS_614_08	Moderate to W	Well	Damp	B	2	Grey brown	Yes, at 10m
615	HDI_S615_08	HDIS_615_08	Flat	Moderate	Damp	B	3	Brown	No
616	HDI_S616_08	HDIS_616_08	Flat	Moderate	Damp	B	3	Brown	No
617	HDI_S617_08	HDIS_617_08	Gentle S slope	Well	Wet	B	4	Greyish brown	No
618	HDI_S618_08	HDIS_618_08	Gentle S slope	Well	Wet	B	3	Grey	No
619	HDI_S619_08	HDIS_619_08	Gentle S slope	Well	Damp	B	3	Brown	No
620	HDI_S620_08	HDIS_620_08	Gentle S slope	Well	Wet	B	3	Sandy brown	Yes, 50m N
621	HDI_S621_08	HDIS_621_08	Gentle to moderate S slope	Well	Damp	B	3	Sandy brown	Yes
622	HDI_S622_08	HDIS_622_08	Gentle S slope	Moderate	Dry	B	2	Sandy brown	Yes
623	HDI_S623_08	HDIS_623_08	Moderate E slope	Well	Damp	B	2	Brown	Yes
624	HDI_S624_08	HDIS_624_08	Moderate slope to SW	Well	Damp	B	3	Brown	Yes, at 10m
625	HDI_S625_08	HDIS_625_08	Moderate slope to S	Well	Damp	B	3	Brown	No
626	HDI_S626_08	HDIS_626_08	Flat, on ridge	Well	Damp	B	3	Brown	Yes, at 5m
627	HDI_S627_08								
628	HDI_S628_08	HDIS_628_08	Flat, plateau	Well	Damp	B	3	Brown	No
629	HDI_S629_08	HDIS_629_08	Gentle S slope	Well	Damp	B	2	Sandy brown	
630	HDI_S630_08	HDIS_630_08	Gentle S slope	Well	Damp	B	3	Greyish brown	No

GRID_ID	Notes	Name	type	Ident	lat	long	y_proj	x_proj	Date
590									
591		Thomas	WAYPOINT	Hdis 591	64.3727856	-137.5542102	7141032.611	376761.8857	July 8 2008
592		Thomas	WAYPOINT	Hdis 592	64.37463641	-137.5544096	7141239.121	376760.5599	July 8 2008
593		Thomas	WAYPOINT	Hdis 593	64.37693381	-137.5548824	7141495.898	376748.0552	July 8 2008
594		Thomas	WAYPOINT	Hdis 594	64.37919935	-137.5546662	7141747.79	376768.6298	July 8 2008
595		Thomas	WAYPOINT	Hdis 595	64.38137152	-137.5551908	7141990.721	376753.0673	July 8 2008
596		Thomas	WAYPOINT	Hdis 596	64.3832225	-137.5549706	7142196.436	376771.9823	July 8 2008
597		Thomas	WAYPOINT	Hdis 597	64.3434823	-137.5464858	7137754	377004	09-JUL-08 1:02:16PM
598		Thomas	WAYPOINT	Hdis 598	64.34570435	-137.5476694	7138004	376956	09-JUL-08 12:35:23PM
599		Thomas	WAYPOINT	Hdis 599	64.34790359	-137.5474265	7138248	376978	09-JUL-08 11:52:13AM
600		Thomas	WAYPOINT	Hdis 600	64.35017408	-137.5468854	7138500	377014	09-JUL-08 11:36:08AM
601		Thomas	WAYPOINT	Hdis 601	64.35253358	-137.5473645	7138764	377002	09-JUL-08 11:16:13AM
602		Thomas	WAYPOINT	Hdis 602	64.35470559	-137.5479065	7139007	376985	09-JUL-08 10:59:49AM
603		Thomas	WAYPOINT	Hdis 603	64.35681364	-137.5474252	7139241	377018	09-JUL-08 10:44:07AM
604		Thomas	WAYPOINT	Hdis 604	64.35905529	-137.5479008	7139491	377005	09-JUL-08 10:29:25AM
605		Thomas	WAYPOINT	Hdis 605	64.36131162	-137.5476928	7139742	377025	09-JUL-08 10:10:03AM
606		Thomas	WAYPOINT	Hdis 606	64.3632812	-137.5471974	7139961	377058	09-JUL-08 9:51:28AM
607	Boulders	Tubs	WAYPOINT	HDIS607	64.36572871	-137.5486348	7140235.886	376999.2482	09/07/08
608	Boulders	Tubs	WAYPOINT	HDIS608	64.36817623	-137.5487803	7140509	377003	7/7/2008
609		Thomas	WAYPOINT	Hdis 609	64.3699314	-137.5482168	7140703.128	377038.1937	July 8 2008
610		Thomas	WAYPOINT	Hdis 610	64.37260414	-137.548901	7141002.114	377017.1381	July 8 2008
611		Thomas	WAYPOINT	Hdis 611	64.37477144	-137.5486883	7141243.073	377037.0814	July 8 2008
612		Thomas	WAYPOINT	Hdis 612	64.37706867	-137.5497769	7141501.022	376994.8569	July 8 2008
613		Thomas	WAYPOINT	Hdis 613	64.37931058	-137.5503119	7141751.738	376979.0845	July 8 2008
614		Thomas	WAYPOINT	Hdis 614	64.3814307	-137.5500185	7141987.287	377002.712	July 8 2008
615	Tall forest in the valley	Archie	WAYPOINT	HDIS615-08	64.34587282	-137.5416768	7138011	377246	09-JUL-08 12:58:04PM
616	Tall forest in the valley	Archie	WAYPOINT	HDIS616-08	64.3481159	-137.5418436	7138261	377248	09-JUL-08 12:36:07PM
617	Beautiful feel to sample, thick brush	Archie	WAYPOINT	HDIS617-08	64.35034608	-137.5418227	7138510	377259	09-JUL-08 12:18:02PM
618	Thick bush, good sample	Archie	WAYPOINT	HDIS618-08	64.35259578	-137.5423221	7138761	377245	09-JUL-08 11:49:40AM
619	Bushy, rocky area	Archie	WAYPOINT	HDIS619-08	64.35482251	-137.5425408	7139009	377245	09-JUL-08 11:26:18AM
620	Vegetation getting thicker	Archie	WAYPOINT	HDIS620-08	64.35709141	-137.5425539	7139262	377254	09-JUL-08 11:04:32AM
621	Near mountain creek, vegetation good, sandy texture to soil	Archie	WAYPOINT	HDIS621-08	64.35923751	-137.5428862	7139502	377248	09-JUL-08 10:36:48AM
622	On a plateau, rocky area, vegetation good	Archie	WAYPOINT	HDIS-622-8	64.3616018	-137.5431402	7139766	377246	09-JUL-08 10:28:09AM
623	Sandy texture, beside mountain stream, boulder field, vegetation good	Archie	WAYPOINT	HDIS623-08	64.36363776	-137.5430053	7139992	377262	09-JUL-08 9:55:25AM
624		Thomas	WAYPOINT	Hdis 624	64.36567725	-137.5426953	7140219	377286	09-JUL-08 9:28:03AM
625		Thomas	WAYPOINT	Hdi 625	64.3683437	-137.543547	7140517	377256	09-JUL-08 9:10:02AM
626		Thomas	WAYPOINT	Hdis 626	64.3699951	-137.544177	7140702	377233	09-JUL-08 8:51:09AM
627									
628	Bushy, with rocks under moss	Archie	WAYPOINT	HDIS628-08	64.34743035	-137.5358947	7138173	377532	09-JUL-08 1:39:15PM
629	Bushy, sand in sample	Archie	WAYPOINT	HDIS629-08	64.34815454	-137.536578	7138255	377503	09-JUL-08 2:03:17PM
630	Bushy	Archie	WAYPOINT	HDIS630-08	64.35031598	-137.5368045	7138497	377501	09-JUL-08 2:22:34PM

GRID_ID	POINT_REF	FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop
631	HDI_S631_08	HDIS_631_08	Moderate S slope	Well	Damp	B	2	Brown	
632	HDI_S632_08								
633	HDI_S633_08								
634	HDI_S634_08								
635	HDI_S635_08	HDIS_635_08	Steep W slope	Well	Damp	B	3	Brown	Yes
636	HDI_S636_08	HDIS_636_08	Gentle SE slope	Well	Damp	B	2	Brown	No
637	HDI_S637_08	HDIS_637_08	Steep middle S slope	Well	Damp	B	2	Brown	Yes
638	HDI_S638_08	HDIS_638_08	Steep S slope	Well	Dry	B	2	Dark brown	Yes
639	HDI_S639_08	HDIS_639_08	Gentle S slope	Moderate		B	2		No
640	HDI_S640_08	HDIS_640_08	Flat	Moderate	Wet	B	3	Greyish brown	No
641	HDI_S641_08	HDIS_641_08	Gentle S slope	Well	Damp	B	2	Brown	No
642	HDI_S642_08	HDIS_642_08	Gentle	Well	Damp	B	2	Greyish black	Yes
643	HDI_S643_08	HDIS_643_08	Steep W slope	Well	Damp	B	2	Sandy brown	Yes
644	HDI_S644_08	HDIS_644_08	Steep W slope	Well	Dry	B	2	Brown	Yes
645	HDI_S645_08	HDIS_645_08	Moderate S slope	Well	Damp	B	2	Brownish black	No
646	HDI_S646_08	HDIS_646_08	Steep S slope	Well	Damp	B	3	Brown	Yes
647	HDI_S647_08								
648	HDI_S648_08	HDIS_648_08	Gentle S slope	Moderate	Damp	B	2	Brown	No
649	HDI_S649_08	HDIS_649_08	Moderate S slope	Moderate	Damp	B	2	Sandy brown	No
650	HDI_S650_08	HDIS_650_08	Moderate S slope	Well	Damp	B	2	Brown	No
651	HDI_S651_08	HDIS_651_08	Gentle S slope	Moderate	Damp	B	3	Greyish brown	No
652	HDI_S652_08	HDIS_652_08	Gentle S slope	Well	Dry	B	2	Sandy brown	No
653	HDI_S653_08	HDIS_653_08	Moderate S slope	Well	Dry	B	2	Sandy brown	No
654	HDI_S654_08								
655	HDI_S655_08	HDIS_655-08	Gentle S slope	Well	Wet	B	3	Greyish brown	No
656	HDI_S656_08	HDIS_656_08	Gentle S slope	Well	Damp	B	3	Brown	No
657	HDI_S657_08	HDIS_657_08	Moderate	Well	Damp	B	2	Sandy brown	No
658	HDI_S658_08	HDIS_658_08	Moderate SE slope	Well	Damp	B	2	Sandy brown	No
659	HDI_S659_08	HDIS_659_08	Gentle S slope	Moderate	Wet	A	4	Grey	No
660	HDI_S660_08	HDIS_660_08	Moderate S slope	Well	Damp	B	2	Greyish brown	No
661		HDIS_532A_08	Moderate to E and creek	Well	Damp	B	1	Light brown	Yes, above creek on

GRID_ID	Notes	Name	type	ident	lat	long	y_proj	x_proj	Date
631	Sandy texture, thick willows, big trees	Archie	WAYPOINT	HDIS631-08	64.35247617	-137.5368434	7138737	377509	09-JUL-08 2:57:41PM
632									
633									
634									
635	E of mtn. stream, vegetation	Archie	WAYPOINT	HDIS635-08	64.36149367	-137.5377116	7139743	377507	10-JUL-08 9:24:19AM
636	Shale in sample, vegetation good	Archie	WAYPOINT	HDIS636-08	64.36378302	-137.5381626	7139999	377496	09-JUL-08 9:37:05AM
637	Rock field, rocky texture to sample	Archie	WAYPOINT	HDIS637-08	64.36607371	-137.5382352	7140254	377502	09-JUL-08 9:14:46AM
638	Rock field, lots of shale in sample	Archie	WAYPOINT	HDIS638-08	64.36814253	-137.5380177	7140484	377522	09-JUL-08 8:46:57AM
639	Thick moss	Archie	WAYPOINT	HDIS639-08	64.34835722	-137.5316487	7138268	377742	09-JUL-08 3:37:28PM
640	Bush, moss is 7 inches thick	Archie	WAYPOINT	HDIS640-08	64.35039511	-137.5317514	7138496	377746	09-JUL-08 3:21:18PM
641	Very bushy	Archie	WAYPOINT	HDIS641-08	64.35274422	-137.5319602	7138758	377746	10-JUL-08 1:29:37PM
642	By creek, cliffs everywhere	Archie	WAYPOINT	HDIS642-08	64.35499066	-137.5324791	7139009	377731	10-JUL-08 1:05:08PM
643	E side of creek, lots of OC, bushy	Archie	WAYPOINT	HDIS643-08	64.3571231	-137.5320066	7139245	377763	10-JUL-08 12:43:26PM
644	Sandy texture, veg. thick, shrubs present	Archie	WAYPOINT	HDIS644-08	64.35952367	-137.5324467	7139514	377753	10-JUL-08 10:44:54AM
645	Boulder field, veg. good, sandy texture to sample	Archie	WAYPOINT	HDIS645-08	64.36166625	-137.5325525	7139752	377757	10-JUL-08 9:54:16AM
646	Boulder field, sample taken at OC	Archie	WAYPOINT	HDIS646-08	64.36382158	-137.5322699	7139992	377780	10-JUL-08 8:52:33AM
647									
648	More sand than clay, bushy	Archie	WAYPOINT	HDIS648-08	64.35052763	-137.5261573	7138500	378016	10-JUL-08 4:07:21PM
649	Boulders under moss, thick bush	Archie	WAYPOINT	HDIS649-08	64.3528236	-137.5269894	7138757	377986	10-JUL-08 1:50:35PM
650	Sandy texture, bushy	Archie	WAYPOINT	HDIS650-08	64.35500784	-137.5265622	7138999	378017	10-JUL-08 3:38:15PM
651	A little bit of sandy texture, bushy	Archie	WAYPOINT	HDIS851-08	64.3572137	-137.5269437	7139246	378008	10-JUL-08 12:19:31PM
652	Sandy texture, veg. good	Archie	WAYPOINT	HDIS652-08	64.35956122	-137.5273928	7139508	377997	10-JUL-08 11:06:44AM
653	Rock field, veg. thick, no tress, sandy texture to sample	Archie	WAYPOINT	HDIS653-08	64.36171931	-137.527729	7139749	377990	10-JUL-08 10:16:31AM
654									
655	Very bushy, rocks underneath bushes	Archie	WAYPOINT	HDIS655-08	64.35281379	-137.5217724	7138746	378238	10-JUL-08 2:16:49PM
656	Lots of sand, very bushy	Archie	WAYPOINT	HDIS656-08	64.3551023	-137.5214012	7139000	378266	10-JUL-08 3:17:08PM
657	Sandy texture, willow field	Archie	WAYPOINT	HDIS857-08	64.35737028	-137.5222416	7139254	378236	10-JUL-08 11:51:33AM
658	Boulders present	Archie	WAYPOINT	HDIS858-08	64.35956617	-137.5228599	7139500	378215	10-JUL-08 11:23:37AM
659	Bushy, 7ft tall	Archie	WAYPOINT	HDIS659-08	64.35325736	-137.5165816	7138785	378491	10-JUL-08 2:35:45PM
660	Bush, rocks under moss and bush	Archie	WAYPOINT	HDIS660-08	64.35507389	-137.5167476	7138988	378491	10-JUL-08 2:53:04PM
661	Light willow cover	Shane	WAYPOINT	HDIS532	64.33869682	-137.5617191	7137251	376247	08/07/08

APPENDIX 2

ANALYTICAL DATA
CALCULATIONS
QAQC

A Horizon

		Ag_ppb	As_ppb	Au_ppb	Bi_ppb	Cu_ppb	Pb_ppb	Sb_ppb	W_ppb	Zn_ppb
Percentile	Mean	5.758	19.091	0.188	0.697	649.394	816.667	3.273	0.576	1262.121
	Maximum	40.000	280.000	2.700	2.000	5710.000	5170.000	32.000	1.000	8260.000
	Std Dev	9.715	47.791	0.476	0.491	1291.457	1067.307	6.555	0.179	1517.639
	25	1.000	5.000	0.050	0.500	80.000	240.000	0.500	0.500	330.000

Background Value (Avg of <= 1st quartile)	0.785714286	5	0.05	0.5	50	127.77778	0.5	0.5	156.66667

B Horizon

		Ag_ppb	As_ppb	Au_ppb	Bi_ppb	Cu_ppb	Pb_ppb	Sb_ppb	W_ppb	Zn_ppb
Percentile	Mean	22.358	36.591	0.341	0.829	552.396	1051.452	7.861	0.698	604.213
	Maximum	704.000	1370.000	36.900	15.000	13000.000	38700.000	227.000	8.000	10800.000
	Std Dev	67.206	104.332	1.772	1.289	1075.594	2550.337	23.296	0.536	863.952
	25	3.000	5.000	0.050	0.500	150.000	270.000	0.500	0.500	180.000

Background Value (Avg of <= 1st quartile)	1.96039604	5	0.05	0.5	99.378125	133.72759	0.5	0.5	111.4966

Blank Horizon

		Ag_ppb	As_ppb	Au_ppb	Bi_ppb	Cu_ppb	Pb_ppb	Sb_ppb	W_ppb	Zn_ppb
Percentile	Mean	8.000	18.750	0.121	0.729	272.083	687.500	1.458	0.917	880.417
	Maximum	37.000	160.000	0.900	3.000	1430.000	3760.000	5.000	1.000	3160.000
	Std Dev	10.462	35.510	0.180	0.629	292.389	710.864	1.306	0.186	812.658
	25	1.000	5.000	0.050	0.500	105.000	330.000	0.500	1.000	427.500

Background Value (Avg of <= 1st quartile)	0.777777778	5	0.05	0.5	68.333333	214.28571	0.5	0.9166667	238.33333

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
161	TO101880	HDIS_161_08	HDIS_161_08	Kevin	3	Moderate slope SE		Damp	B	1.00	1	5.00	1
188	TO101880	HDIS_188_08	HDIS_188_08	Kevin	3	Moderate slope SW, b		Damp	B	4.00	2	5.00	1
189	TO101880	HDIS_189_08	HDIS_189_08	Kevin	3	Moderate slope SE, o		Damp	B	6.00	3	5.00	1
215	TO101880	HDIS_215_08	HDIS_215_08	Kevin	2	Moderate slope SE, b		Damp	B	5.00	3	10.00	2
243	TO101880	HDIS_243_08	HDIS_243_08	Archie	2	Gentle S slope, bott	Grass and moss thick	Damp	B	18.00	9	200.00	40
244	TO101880	HDIS_244_08	HDIS_244_08	Kevin	3	Gentle slope SE		Damp	B	2.00	1	230.00	46
268	TO101880	HDIS_268_08	HDIS_268_08	Archie	2	Flat, beside creek	Bottom of mtn, S side of stream, rock field *no coord for y, used ideal	Wet	B	8.00	4	5.00	1
269	TO101880	HDIS_269_08	HDIS_269_08	Archie	4	Flat, valley floor,	Vegetation thick	Wet	B	44.00	22	5.00	1
270	TO101880	HDIS_270_08	HDIS_270_08	Archie	3	Gentle S slope	Good sample, no rocks, veg. thick	Wet	B	7.00	4	380.00	76
271	TO101880	HDIS_271_08	HDIS_271_08	Archie	3	Gentle S slope	Grass and moss thick, bottom on mtn.	Wet	B	10.00	5	160.00	32
272	TO101880	HDIS_272_08	HDIS_272_08	Kevin	3	Gentle slope SE	Deep horizon A here	Damp	A	1.00	1	280.00	56
296	TO101880	HDIS_296_08	HDIS_296_08	Archie	1	Moderate N slope	Lots of shale, vegetation visible, poor sample	Dry	A	2.00	3	10.00	2
297	TO101880	HDIS_297_08	HDIS_297_08	Archie	3	Gentle slope E	Beside creek, vegetation visible	Damp	B	13.00	7	5.00	1
298	TO101880	HDIS_298_08	HDIS_298_08	Archie	3	Gentle NE slope	Valley, beside creek, vegetation thick, grass and moss	Wet	B	23.00	12	20.00	4
299	TO101880	HDIS_299_08	HDIS_299_08	Archie	3	Gentle S slope	Vegetation thick, moss and grass, no brush	Wet	B	57.00	29	40.00	8
300	TO101880	HDIS_300_08	HDIS_300_08	Archie	2	Moderate SE slope	Lots of shale in sample, vegetaion present, moss and grass and shrubs	Dry	B	78.00	40	110.00	22
301	TO101880	HDIS_301_08	HDIS_301_08	Kevin	2	Moderate slope E, ba		Damp/dry	B	10.00	5	20.00	4
302	TO101880	HDIS_302_08	HDIS_302_08	Kevin	2	Moderate slope E, ba		Damp/dry	B	14.00	7	5.00	1
303	TO101880	HDIS_303_08	HDIS_303_08	Kevin	1	Steep E, boulders, b		Damp/dry	B	33.00	17	5.00	1
304	TO101880	HDIS_304_08	HDIS_304_08	Kevin	3	Moderate slope NE		Damp	B	114.00	58	30.00	6
305	TO101880	HDIS_305_08	HDIS_305_08	Kevin	3	Gentle slope, flat N		Damp	B	47.00	24	100.00	20
325	TO101880	HDIS_325_08	HDIS_325_08	Archie	3	Gentle N slope	Shale in sample, rock pile, grass and moss present	Damp	B	4.00	2	5.00	1
326	TO101880	HDIS_326_08	HDIS_326_08	Archie	3	Gentle N slope, vall	Vegetation thick, grass is thin	Wet	B	5.00	3	5.00	1
327	TO101880	HDIS_327_08	HDIS_327_08	Archie	4	Gentle NE slope	Vegetation present	Wet	A	3.00	4	5.00	1
328	TO101880	HDIS_328_08	HDIS_328_08	Archie	3	Flat, valley floor	Vegetation thick, shrubs starting, shale in sample	Wet	B	19.00	10	60.00	12
107	TO101881	HDIS_107_08	HDIS_107_08	Tubs	2	Steep	Cliffs, boulders	Damp	B	46.00	23	5.00	1
108	TO101881	HDIS_108_08	HDIS_108_08	Tubs	2	Steep	Loose boulders	Damp	B	7.00	4	5.00	1
109	TO101881	HDIS_109_08	HDIS_109_08	Tubs	2	Steep	Loose boulders	Damp	B	5.00	3	5.00	1
130	TO101881	HDIS_130_08	HDIS_130_08	Tubs	1	Steep	Cliffs, scree	Damp	B	151.00	77	30.00	6
131	TO101881	HDIS_131_08	HDIS_131_08	Tubs	2	Steep	Scree slope	Damp	B	58.00	30	70.00	14
132	TO101881	HDIS_132_08	HDIS_132_08	Tubs	3	Steep	Boulders	Damp	B	10.00	5	5.00	1
133	TO101881	HDIS_133_08	HDIS_133_08	Tubs	2	Steep	Boulders	Damp	B	40.00	20	20.00	4
157	TO101881	HDIS_157_08	HDIS_157_08	Tubs	2	Steep	Boulders	Damp	B	10.00	5	110.00	22
158	TO101881	HDIS_158_08	HDIS_158_08	Tubs	2	Moderate	Boulders	Damp	B	1.00	1	140.00	28
159	TO101881	HDIS_159_08	HDIS_159_08	Tubs	3	Moderate	Boulders, vegetation	Damp	B	69.00	35	10.00	2
184	TO101881	HDIS_184_08	HDIS_184_08	Tubs	2	Steep	Boulder city	Damp	B	1.00	1	5.00	1
185	TO101881	HDIS_185_08	HDIS_185_08	Tubs	2	Moderate	Boulders, vegetation	Damp	B	4.00	2	40.00	8
186	TO101881	HDIS_186_08	HDIS_186_08	Tubs	2	Moderate	Boulders, vegetation	Damp	B	27.00	14	110.00	22
211	TO101881	HDIS_211_08	HDIS_211_08	Tubs	2	Moderate	Took sample at edge of lake	Damp	B	2.00	1	5.00	1
331	TO101881	HDIS_331_08	HDIS_331_08	Kevin	3	Gentle slope E		Damp	B	47.00	24	10.00	2
332	TO101881	HDIS_332_08	HDIS_332_08	Kevin	3	Flat		Damp	B	35.00	18	10.00	2
333	TO101881	HDIS_333_08	HDIS_333_08	Kevin	3	Flat, swampy		Wet	B	2.00	1	40.00	8
334	TO101881	HDIS_334_08	HDIS_334_08	Kevin	4	Flat, swampy		Damp/wet	B	3.00	2	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
161	0.05	1	0.50	1	50.00	0	600.00	2	2.00	4	0.50	1	2010.00	11	372767.00	7142515.00
188	0.05	1	0.50	1	110.00	0	1850.00	6	0.50	1	0.50	1	360.00	2	372972.00	7142513.00
189	0.05	1	0.50	1	90.00	0	40.00	0	0.50	1	0.50	1	50.00	0	372996.00	7142733.00
215	0.05	1	0.50	1	100.00	0	880.00	3	3.00	6	0.50	1	2750.00	15	373247.00	7142498.00
243	0.20	4	0.50	1	110.00	0	490.00	1	5.00	10	8.00	16	650.00	3	373502.00	7142247.00
244	0.30	6	4.00	8	220.00	1	700.00	2	6.00	12	0.50	1	360.00	2	373488.00	7142519.00
268	0.10	2	0.50	1	460.00	3	2170.00	8	3.00	6	2.00	4	630.00	3	373797.00	7141500.00
269	0.20	4	0.50	1	250.00	1	4480.00	16	4.00	8	1.00	2	460.00	2	373755.00	7141758.00
270	0.70	14	0.50	1	410.00	2	440.00	1	21.00	42	0.50	1	150.00	0	373750.00	7142003.00
271	0.40	8	0.50	1	180.00	1	1710.00	6	9.00	18	0.50	1	240.00	1	373749.00	7142258.00
272	0.90	18	0.50	1	150.00	3	800.00	6	14.00	28	0.50	1	1600.00	10	373742.00	7142493.00
296	0.05	1	0.50	1	430.00	8	330.00	3	1.00	2	0.50	1	2030.00	13	374013.00	7141651.00
297	1.10	22	0.50	1	1480.00	9	3350.00	12	1.00	2	0.50	1	320.00	1	373993.00	7141749.00
298	0.60	12	0.50	1	590.00	3	5020.00	18	7.00	14	0.50	1	1370.00	7	373999.00	7142001.00
299	1.40	28	0.50	1	310.00	2	580.00	2	4.00	8	0.50	1	50.00	0	373996.00	7142252.00
300	0.80	16	2.00	4	390.00	2	3760.00	13	33.00	66	0.50	1	3960.00	22	374000.00	7142495.00
301	0.05	1	0.50	1	360.00	2	1120.00	4	2.00	4	0.50	1	860.00	4	374025.00	7142731.00
302	0.20	4	0.50	1	340.00	2	70.00	0	0.50	1	0.50	1	330.00	1	374021.00	7142970.00
303	0.05	1	0.50	1	450.00	3	70.00	0	2.00	4	0.50	1	180.00	1	374020.00	7143218.00
304	2.50	50	0.50	1	270.00	1	9720.00	36	87.00	174	0.50	1	2500.00	13	373997.00	7143489.00
305	0.30	6	0.50	1	130.00	0	8070.00	29	74.00	148	0.50	1	490.00	2	374013.00	7143730.00
325	0.05	1	0.50	1	100.00	0	280.00	1	0.50	1	0.50	1	340.00	1	374268.00	7141808.00
326	0.05	1	0.50	1	100.00	0	960.00	3	5.00	10	0.50	1	310.00	1	374252.00	7141986.00
327	2.70	54	2.00	4	950.00	19	3480.00	27	19.00	38	0.50	1	130.00	1	374250.00	7142246.00
328	0.10	2	2.00	4	270.00	1	3170.00	11	6.00	12	0.50	1	140.00	0	374248.00	7142493.00
107	0.30	6	0.50	1	940.00	6	1970.00	7	0.50	1	1.00	2	140.00	0	372266.00	7141638.00
108	0.05	1	0.50	1	130.00	0	380.00	1	0.50	1	1.00	2	60.00	0	372243.00	7141746.00
109	0.20	4	0.50	1	70.00	0	420.00	1	2.00	4	1.00	2	950.00	5	372236.00	7141997.00
130	0.50	10	0.50	1	1190.00	7	230.00	0	2.00	4	0.50	1	280.00	1	372559.00	7141369.00
131	0.60	12	0.50	1	1270.00	8	150.00	0	3.00	6	0.50	1	220.00	1	372524.00	7141437.00
132	0.20	4	0.50	1	110.00	0	3380.00	12	3.00	6	0.50	1	10.00	0	372495.00	7141739.00
133	0.80	16	0.50	1	170.00	1	2880.00	10	8.00	16	1.00	2	830.00	4	372520.00	7142003.00
157	0.30	6	1.00	2	320.00	2	1610.00	5	18.00	36	1.00	2	510.00	2	372763.00	7141548.00
158	0.05	1	0.50	1	70.00	0	740.00	2	2.00	4	1.00	2	3370.00	18	372751.00	7141750.00
159	0.50	10	0.50	1	260.00	1	1680.00	6	5.00	10	1.00	2	290.00	1	372736.00	7142009.00
184	0.30	6	0.50	1	200.00	1	560.00	2	0.50	1	1.00	2	1570.00	8	372999.00	7141500.00
185	0.10	2	0.50	1	60.00	0	990.00	3	8.00	16	1.00	2	880.00	4	373005.00	7141742.00
186	0.20	4	0.50	1	110.00	0	1230.00	4	39.00	78	1.00	2	590.00	3	373002.00	7141995.00
211	0.05	1	0.50	1	240.00	1	950.00	3	2.00	4	1.00	2	3170.00	17	373235.00	7141619.00
331	0.20	4	0.50	1	210.00	1	1220.00	4	2.00	4	1.00	2	120.00	0	374256.00	7143251.00
332	0.20	4	0.50	1	140.00	0	2320.00	8	6.00	12	1.00	2	550.00	3	374244.00	7143503.00
333	0.80	16	0.50	1	160.00	1	510.00	1	71.00	142	1.00	2	100.00	0	374245.00	7144009.00
334	0.10	2	0.50	1	50.00	0	20.00	0	2.00	4	1.00	2	110.00	0	374236.00	7144009.00

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
354	TO101881	HDIS_354_08	HDIS_354_08	Kevin	4	Flat, boulders	Closest spot to waypoint with soil	Damp/dry	B	128.00	65	5.00	1
355	TO101881	HDIS_355_08	HDIS_355_08	Kevin	3	Gentle slope, flat N		Damp	B	0.50	0	5.00	1
356	TO101881	HDIS_356_08	HDIS_356_08	Kevin	4	Flat		Damp/wet	B	8.00	4	10.00	2
357	TO101881	HDIS_357_08	HDIS_357_08	Kevin	4	Flat, creek 200m NE		Damp	B	11.00	6	90.00	18
358	TO101881	HDIS_358_08	HDIS_358_08	Kevin	4	Flat, swampy, right		Wet	B	37.00	19	90.00	18
150	TO101887	HDIS_150_08	HDIS_150_08	Kevin	3	Ridge, flat		Dry	B	4.00	2	5.00	1
151	TO101887	HDIS_151_08	HDIS_151_08	Kevin	2	Steep E, boulders		Damp	B	6.00	3	5.00	1
177	TO101887	HDIS_177_08	HDIS_177_08	Kevin	2	Steep, boulders NW		Damp/dry	B	12.00	6	5.00	1
178	TO101887	HDIS_178_08	HDIS_178_08	Kevin	3	Gentle slope E		Damp	B	5.00	3	5.00	1
202	TO101887	HDIS_202_08	HDIS_202_08	Aiden	1	Steep rocky hillside	Gritty sample	Moist	A	1.00	1	5.00	1
204	TO101887	HDIS_204_08	HDIS_204_08	Kevin	3	Steep NW, boulders		Damp	B	15.00	8	5.00	1
205	TO101887	HDIS_205_08	HDIS_205_08	Kevin	4	Flat, plateau		Damp	B	4.00	2	5.00	1
231	TO101887	HDIS_231_08	HDIS_231_08	Aiden	2	Steep slope facing S	Gritty sample	Moist	A	1.00	1	5.00	1
233	TO101887	HDIS_233_08	HDIS_233_08	Kevin	3	Flat, base of mounta		Damp	B	6.00	3	30.00	6
234	TO101887	HDIS_234_08	HDIS_234_08	Kevin	3	Moderate slope S		Damp	B	3.00	2	5.00	1
259	TO101887	HDIS_259_08	HDIS_259_08	Aiden	1	Moderate slope near	Soil and grit	Dry	A	2.00	3	5.00	1
260	TO101887	HDIS_260_08	HDIS_260_08	Archie	2	Mtn. ridge, moderate	Steep E slope, cliff with slope	Damp	B	2.00	1	5.00	1
261	TO101887	HDIS_261_08	HDIS_261_08	Kevin	4	Flat, base of mounta		Damp	B	8.00	4	5.00	1
262	TO101887	HDIS_262_08	HDIS_262_08	Kevin	2	Gentle slope SE, cre		Damp	B	4.00	2	5.00	1
263	TO101887	HDIS_263_08	HDIS_263_08	Kevin	3	Gentle slope SE, cre		Damp	B	5.00	3	10.00	2
287	TO101887	HDIS_287_08	HDIS_287_08	Aiden	3	Steep hillside facin		Moist	B	3.00	2	5.00	1
288	TO101887	HDIS_288_08	HDIS_288_08	Archie	2	Steep E slope	Rock field, very little flora, not many pebbles in sample, a little bit of sand	Damp	B	3.00	2	5.00	1
289	TO101887	HDIS_289_08	HDIS_289_08	Kevin	4	Gentle slope N, cree		Damp	B	2.00	1	5.00	1
290	TO101887	HDIS_290_08	HDIS_290_08	Kevin	2	Flat, plateau, creek		Damp	B	5.00	3	30.00	6
291	TO101887	HDIS_291_08	HDIS_291_08	Kevin	3	Gentle slope SE		Damp	B	3.00	2	10.00	2
609	TO101887	HDIS_609_08	HDIS_609_08	Thomas	2	Flat, on ridge		Damp	B	3.00	2	20.00	4
610	TO101887	HDIS_610_08	HDIS_610_08	Thomas	2	Steep slope to W		Damp	B	8.00	4	5.00	1
611	TO101887	HDIS_611_08	HDIS_611_08	Thomas	1	Flat on ridge		Damp	B	3.00	2	5.00	1
612	TO101887	HDIS_612_08	HDIS_612_08	Thomas	2	Steep slope to W		Damp	B	12.00	6	5.00	1
613	TO101887	HDIS_613_08	HDIS_613_08	Thomas	3	Moderate to W		Damp	B	74.00	38	50.00	10
614	TO101887	HDIS_614_08	HDIS_614_08	Thomas	2	Moderate to W		Damp	B	7.00	4	5.00	1
615	TO101887	HDIS_615_08	HDIS_615_08	Archie	3	Flat	Tall forest in the valley	Damp	B	4.00	2	5.00	1
616	TO101887	HDIS_616_08	HDIS_616_08	Archie	3	Flat	Tall forest in the valley	Damp	B	7.00	4	30.00	6
617	TO101887	HDIS_617_08	HDIS_617_08	Archie	4	Gentle S slope	Beautiful feel to sample, thick brush	Wet	B	6.00	3	20.00	4
618	TO101887	HDIS_618_08	HDIS_618_08	Archie	3	Gentle S slope	Thick bush, good sample	Wet	B	4.00	2	5.00	1
619	TO101887	HDIS_619_08	HDIS_619_08	Archie	3	Gentle S slope	Bushy, rocky area	Damp	B	2.00	1	30.00	6
620	TO101887	HDIS_620_08	HDIS_620_08	Archie	3	Gentle S slope	Vegetation getting thicker	Wet	B	4.00	2	5.00	1
621	TO101887	HDIS_621_08	HDIS_621_08	Archie	3	Gentle to moderate S	Near mountain creek, vegetation good, sandy texture to soil	Damp	B	3.00	2	5.00	1
622	TO101887	HDIS_622_08	HDIS_622_08	Archie	2	Gentle S slope	On a plateau, rocky area, vegetation good	Dry	B	2.00	1	5.00	1
623	TO101887	HDIS_623_08	HDIS_623_08	Archie	2	Moderate E slope	Sandy texture, beside mountain stream, boulder field, vegetation good	Damp	B	10.00	5	5.00	1
624	TO101887	HDIS_624_08	HDIS_624_08	Thomas	3	Moderate slope to SW		Damp	B	7.00	4	5.00	1
625	TO101887	HDIS_625_08	HDIS_625_08	Thomas	3	Moderate slope to S		Damp	B	37.00	19	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
354	0.05	1	0.50	1	1170.00	7	830.00	3	0.50	1	1.00	2	470.00	2	374449.00	7141869.00
355	0.05	1	0.50	1	480.00	3	220.00	0	0.50	1	1.00	2	190.00	1	374501.00	7141996.00
356	0.20	4	0.50	1	210.00	1	1350.00	5	5.00	10	1.00	2	50.00	0	374497.00	7142256.00
357	0.40	8	0.50	1	370.00	2	2120.00	7	27.00	54	1.00	2	130.00	0	374503.00	7142503.00
358	0.80	16	0.50	1	1600.00	10	610.00	2	66.00	132	1.00	2	210.00	1	374505.00	7142759.00
150	0.05	1	0.50	1	150.00	1	1170.00	4	0.50	1	0.50	1	190.00	1	372718.32	7139844.58
151	0.05	1	0.50	1	90.00	0	1080.00	4	0.50	1	0.50	1	700.00	3	372749.69	7139978.99
177	0.05	1	0.50	1	510.00	3	150.00	0	0.50	1	0.50	1	100.00	0	372984.50	7139778.75
178	0.05	1	0.50	1	600.00	4	340.00	1	0.50	1	0.50	1	550.00	3	373000.37	7140000.13
202	0.05	1	0.50	1	470.00	9	430.00	3	0.50	1	0.50	1	1030.00	7	373233.76	7139256.47
204	0.20	4	0.50	1	3090.00	20	110.00	0	0.50	1	0.50	1	60.00	0	373238.56	7139775.56
205	0.05	1	0.50	1	270.00	1	440.00	1	0.50	1	0.50	1	180.00	1	373249.50	7140004.04
231	0.05	1	0.50	1	60.00	1	180.00	1	0.50	1	0.50	1	900.00	6	373489.82	7139247.44
233	0.20	4	1.00	2	550.00	3	830.00	3	1.00	2	1.00	2	500.00	2	373487.21	7139785.88
234	0.05	1	0.50	1	260.00	1	40.00	0	0.50	1	0.50	1	150.00	0	373494.39	7140006.72
259	0.05	1	0.50	1	260.00	5	110.00	1	0.50	1	0.50	1	1610.00	10	373741.48	7139253.19
260	0.05	1	0.50	1	60.00	0	310.00	1	0.50	1	0.50	1	1020.00	5	373896.66	7139479.02
261	0.05	1	0.50	1	1670.00	11	820.00	3	0.50	1	0.50	1	180.00	1	373713.26	7139749.22
262	0.05	1	0.50	1	240.00	1	560.00	2	0.50	1	0.50	1	460.00	2	373748.89	7140030.22
263	0.05	1	0.50	1	270.00	1	290.00	1	0.50	1	0.50	1	290.00	1	373754.51	7140245.24
287	0.05	1	0.50	1	270.00	1	560.00	2	0.50	1	0.50	1	870.00	4	373995.71	7139253.69
288	0.05	1	0.50	1	110.00	0	870.00	3	0.50	1	0.50	1	940.00	5	374015.82	7139496.67
289	0.05	1	0.50	1	3300.00	22	710.00	2	0.50	1	1.00	2	280.00	1	373973.02	7139822.95
290	0.10	2	1.00	2	150.00	1	600.00	2	3.00	6	0.50	1	110.00	0	373995.45	7140014.60
291	0.10	2	0.50	1	830.00	5	210.00	0	0.50	1	1.00	2	310.00	1	373995.71	7140263.75
609	0.20	4	0.50	1	300.00	2	480.00	1	4.00	8	0.50	1	840.00	4	377038.19	7140703.12
610	0.05	1	0.50	1	80.00	0	530.00	1	0.50	1	0.50	1	230.00	1	377017.13	7141002.11
611	0.05	1	0.50	1	60.00	0	1120.00	4	0.50	1	0.50	1	560.00	3	377037.08	7141243.07
612	0.05	1	0.50	1	50.00	0	620.00	2	0.50	1	0.50	1	870.00	4	376994.85	7141501.02
613	1.70	34	0.50	1	1030.00	6	560.00	2	7.00	14	0.50	1	460.00	2	376979.08	7141751.73
614	0.20	4	0.50	1	120.00	0	430.00	1	0.50	1	0.50	1	550.00	3	377002.71	7141987.28
615	0.05	1	0.50	1	160.00	1	700.00	2	0.50	1	0.50	1	420.00	2	377246.42	7138011.09
616	0.30	6	1.00	2	910.00	6	200.00	0	3.00	6	0.50	1	160.00	0	377248.36	7138261.22
617	0.20	4	1.00	2	760.00	5	20.00	0	1.00	2	0.50	1	10.00	0	377259.31	7138509.55
618	0.20	4	0.50	1	290.00	1	100.00	0	0.50	1	0.50	1	150.00	0	377245.23	7138761.06
619	0.05	1	1.00	2	200.00	1	610.00	2	3.00	6	1.00	2	400.00	2	377244.60	7139009.48
620	0.20	4	0.50	1	370.00	2	540.00	2	0.50	1	0.50	1	210.00	1	377254.09	7139262.19
621	0.05	1	0.50	1	180.00	1	460.00	1	0.50	1	1.00	2	490.00	2	377247.62	7139501.84
622	0.05	1	0.50	1	150.00	1	410.00	1	0.50	1	0.50	1	920.00	5	377245.91	7139765.64
623	0.05	1	0.50	1	170.00	1	530.00	1	0.50	1	0.50	1	400.00	2	377261.50	7139992.13
624	0.05	1	0.50	1	250.00	1	810.00	3	1.00	2	0.50	1	770.00	4	377285.55	7140218.66
625	0.10	2	0.50	1	360.00	2	200.00	0	1.00	2	0.50	1	170.00	0	377256.35	7140517.27

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
626	TO101887	HDIS_626_08	HDIS_626_08	Thomas	3	Flat, on ridge		Damp	B	3.00	2	5.00	1
628	TO101887	HDIS_628_08	HDIS_628_08	Archie	3	Flat, plateau	Bushy, with rocks under moss	Damp	B	6.00	3	30.00	6
629	TO101887	HDIS_629_08	HDIS_629_08	Archie	2	Gentle S slope	Bushy, sand in sample	Damp	B	5.00	3	5.00	1
630	TO101887	HDIS_630_08	HDIS_630_08	Archie	3	Gentle S slope	Bushy	Damp	B	2.00	1	5.00	1
631	TO101887	HDIS_631_08	HDIS_631_08	Archie	2	Moderate S slope	Sandy texture, thick willows, big trees	Damp	B	6.00	3	30.00	6
636	TO101887	HDIS_636_08	HDIS_636_08	Archie	2	Gentle SE slope	Shale in sample, vegetation good	Damp	B	8.00	4	10.00	2
637	TO101887	HDIS_637_08	HDIS_637_08	Archie	2	Steep middle S slope	Rock field, rocky texture to sample	Damp	B	7.00	4	5.00	1
638	TO101887	HDIS_638_08	HDIS_638_08	Archie	2	Steep S slope	Rock field, lots of shale in sample	Dry	B	6.00	3	5.00	1
639	TO101887	HDIS_639_08	HDIS_639_08	Archie	2	Gentle S slope	Thick moss		B	13.00	7	5.00	1
640	TO101887	HDIS_640_08	HDIS_640_08	Archie	3	Flat	Bush, moss is 7 inches thick	Wet	B	6.00	3	10.00	2
104	TO102014	HDIS_104_08	HDIS_104_08	Thomas	3	Flat		Damp	B	4.00	2	20.00	4
106	TO102014	HDIS_106_08	HDIS_106_08	Archie	2	Mtn. top W cliff, S	Shale in sample, mtn. ridge, vegetation visible	Wet	B	3.00	2	5.00	1
128	TO102014	HDIS_128_08	HDIS_128_08	Thomas	2	Moderate slope to SW		Damp	B	8.00	4	5.00	1
14	TO102014	HDIS_14_08	HDIS_14_08	Thomas	3	Gentle slope to S		Damp	B	8.00	4	10.00	2
15	TO102014	HDIS_15_08	HDIS_15_08	Thomas	3	Moderate slope to S		Damp	B	7.00	4	5.00	1
18	TO102014	HDIS_18_08	HDIS_18_08	Archie	2	Steep S slope, N cli	On mtn. ridge, lots of shale in sample	Damp	B	2.00	1	5.00	1
19	TO102014	HDIS_19_08	HDIS_19_08	Archie	2	Flat	Found pure clay and soil on surface; runoff from mtn; 120m from station; bottom of cliff in boulders size of a house; moss growing, no clay, no soil,	Damp	A	29.00	37	5.00	1
23	TO102014	HDIS_23_08	HDIS_23_08	Shane	2	Gentle to W	Taken 60m E of point, grassy hillside	Damp	B	22.00	11	5.00	1
25	TO102014	HDIS_25_08	HDIS_25_08	Thomas	3	Moderate slope to S		Dry	B	5.00	3	30.00	6
26	TO102014	HDIS_26_08	HDIS_26_08	Thomas	3	Moderate slope to S		Damp	B	2.00	1	5.00	1
27	TO102014	HDIS_27_08	HDIS_27_08	Thomas	3	Gentle slope to S		Damp	B	4.00	2	5.00	1
280	TO102014	HDIS_280_08	HDIS_280_08	Shane	2	Gentle to S	Willows	Damp	B	5.00	3	70.00	14
3	TO102014	HDIS_3_08	HDIS_3_08	Archie	2	Steep S, Cliff N	Lots of shale, boulder field, on ridge	Damp	B	4.00	2	10.00	2
30	TO102014	HDIS_30_08	HDIS_30_08	Archie	2	Steep S, Cliff N	Rock field, mtn. ridge, sandy texture	Damp	B	4.00	2	5.00	1
307	TO102014	HDIS_307_08	HDIS_307_08	Shane	2	Gentle to S	Willows	Wet/damp	B	2.00	1	10.00	2
31	TO102014	HDIS_31_08	HDIS_31_08	Archie	2	Moderate N slope	Sandy texture, bottom of OC, rock field	Damp	B	14.00	7	5.00	1
312	TO102014	HDIS_312_08	HDIS_312_08	Aiden	2	Steep rocky slope, f	Gritty soil	Moist	B	2.00	1	5.00	1
341	TO102014	HDIS_341_08	HDIS_341_08	Aiden	2	Steep slope facing N	Clay and grit	Moist	B	1.00	1	5.00	1
35	TO102014	HDIS_35_08	HDIS_35_08	Shane	1	Moderate to W	Overgrown talus	Damp	B	27.00	14	5.00	1
36	TO102014	HDIS_36_08	HDIS_36_08	Shane	1	Moderate to W	Overgrown talus	Damp	B	11.00	6	5.00	1
368	TO102014	HDIS_368_08	HDIS_368_08	Aiden	3	Moderate slope facin	Gritty clay	Moist	B	2.00	1	5.00	1
369	TO102014	HDIS_369_08	HDIS_369_08	Aiden	1	Steep rocky hillside		Moist		1.00	1	5.00	1
37	TO102014	HDIS_37_08	HDIS_37_08	Shane	2	Moderate to W	Overgrown talus	Damp	B	8.00	4	5.00	1
38	TO102014	HDIS_38_08	HDIS_38_08	Shane	4	Gentle to W	Sample taken about 28m SE of wpt, very good soil here, grassy hillside	Damp	B	15.00	8	5.00	1
41	TO102014	HDIS_41_08	HDIS_41_08	Thomas	3	Moderate slope to S		Damp	B	4.00	2	5.00	1
42	TO102014	HDIS_42_08	HDIS_42_08	Thomas	3	Moderate slope to S		Damp	B	10.00	5	5.00	1
43	TO102014	HDIS_43_08	HDIS_43_08	Thomas	3	Moderate slope to S		Damp	B	2.00	1	10.00	2
46	TO102014	HDIS_46_08	HDIS_46_08	Archie	2	Mtn. ridge, N cliff,	Lots of debris, sandy texture to sample	Damp	B	3.00	2	5.00	1
47	TO102014	HDIS_47_08	HDIS_47_08	Archie	1	Steep N slope	Sandy texture, bottom of OC, rock field	Damp	B	34.00	17	5.00	1
6	TO102014	HDIS_6_08	HDIS_6_08	Thomas	3	Moderate slope to S		Damp	B	4.00	2	5.00	1
60	TO102014	HDIS_60_08	HDIS_60_08	Thomas	2	Moderate slope to W		Damp	B	4.00	2	30.00	6
61	TO102014	HDIS_61_08	HDIS_61_08	Thomas	3	Moderate slope to SW		Damp	B	4.00	2	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
626	0.05	1	0.50	1	190.00	1	140.00	0	0.50	1	0.50	1	300.00	1	377233.33	7140702.40
628	0.20	4	0.50	1	900.00	6	740.00	2	3.00	6	1.00	2	540.00	3	377532.49	7138173.39
629	0.05	1	0.50	1	150.00	1	620.00	2	2.00	4	0.50	1	440.00	2	377502.72	7138255.36
630	0.05	1	0.50	1	90.00	0	550.00	2	0.50	1	0.50	1	310.00	1	377501.40	7138496.52
631	0.05	1	2.00	4	260.00	1	650.00	2	2.00	4	2.00	4	1090.00	6	377509.13	7138737.17
636	0.05	1	1.00	2	170.00	1	750.00	2	3.00	6	0.50	1	720.00	4	377495.78	7139998.96
637	0.10	2	0.50	1	60.00	0	70.00	0	0.50	1	0.50	1	600.00	3	377502.48	7140254.21
638	0.05	1	0.50	1	110.00	0	580.00	2	0.50	1	0.50	1	320.00	1	377522.17	7140484.20
639	0.05	1	0.50	1	670.00	4	1410.00	5	1.00	2	0.50	1	180.00	1	377741.57	7138268.44
640	0.10	2	4.00	8	1690.00	11	190.00	0	6.00	12	0.50	1	30.00	0	377745.66	7138495.60
104	0.20	4	0.50	1	920.00	6	220.00	0	0.50	1	1.00	2	190.00	1	372246.84	7140756.38
106	0.05	1	1.00	2	100.00	0	590.00	2	0.50	1	1.00	2	730.00	4	372230.38	7141242.50
128	0.05	1	0.50	1	320.00	2	550.00	2	0.50	1	1.00	2	420.00	2	372516.72	7140795.36
14	0.20	4	0.50	1	420.00	2	1510.00	5	0.50	1	1.00	2	940.00	5	370977.47	7140226.18
15	0.05	1	0.50	1	180.00	1	160.00	0	0.50	1	1.00	2	260.00	1	370999.83	7140534.36
18	0.05	1	0.50	1	120.00	0	2620.00	9	0.50	1	1.00	2	920.00	5	371008.78	7141251.00
19	0.05	1	0.50	1	4710.00	94	5170.00	40	0.50	1	1.00	2	1110.00	7	370939.92	7141595.35
23	0.05	1	0.50	1	230.00	1	480.00	1	0.50	1	1.00	2	50.00	0	371054.39	7142470.79
25	0.05	1	2.00	4	420.00	2	770.00	2	1.00	2	1.00	2	240.00	1	371266.95	7140038.96
26	0.05	1	0.50	1	130.00	0	310.00	1	0.50	1	1.00	2	970.00	5	371275.71	7140238.81
27	0.05	1	0.50	1	110.00	0	580.00	2	0.50	1	1.00	2	340.00	1	371283.35	7140520.13
280	0.30	6	2.00	4	400.00	2	690.00	2	5.00	10	3.00	6	390.00	2	374056.23	7137519.59
3	0.05	1	0.50	1	960.00	6	780.00	2	0.50	1	1.00	2	520.00	2	370579.32	7141462.69
30	0.05	1	0.50	1	130.00	0	3240.00	12	0.50	1	1.00	2	1120.00	6	371258.28	7141227.57
307	0.05	1	1.00	2	570.00	3	30.00	0	0.50	1	1.00	2	80.00	0	374250.76	7137249.99
31	0.05	1	0.50	1	410.00	2	260.00	0	0.50	1	1.00	2	450.00	2	371275.78	7141475.73
312	0.05	1	0.50	1	220.00	1	600.00	2	0.50	1	1.00	2	230.00	1	374231.80	7138483.31
341	0.05	1	0.50	1	80.00	0	390.00	1	0.50	1	1.00	2	620.00	3	374505.90	7138490.88
35	0.05	1	0.50	1	140.00	0	250.00	0	0.50	1	1.00	2	190.00	1	371247.71	7142502.57
36	0.05	1	0.50	1	220.00	1	440.00	1	0.50	1	1.00	2	320.00	1	371252.40	7142746.87
368	0.05	1	0.50	1	310.00	2	40.00	0	0.50	1	1.00	2	580.00	3	374746.03	7138261.81
369	0.05	1	0.50	1	250.00	4	470.00	2	0.50	1	1.00	1	530.00	2	374728.79	7138477.04
37	0.05	1	0.50	1	240.00	1	610.00	2	0.50	1	1.00	2	570.00	3	371248.97	7142999.20
38	0.10	2	0.50	1	310.00	2	400.00	1	0.50	1	1.00	2	90.00	0	371262.91	7143223.83
41	0.10	2	0.50	1	480.00	3	100.00	0	0.50	1	1.00	2	120.00	0	371502.94	7140004.34
42	0.05	1	0.50	1	900.00	6	280.00	1	0.50	1	1.00	2	920.00	5	371487.56	7140285.65
43	0.10	2	0.50	1	670.00	4	150.00	0	0.50	1	1.00	2	220.00	1	371472.40	7140471.30
46	0.05	1	0.50	1	80.00	0	620.00	2	0.50	1	1.00	2	160.00	0	371498.74	7141248.42
47	0.05	1	0.50	1	2750.00	18	170.00	0	0.50	1	0.50	1	200.00	1	371526.12	7141489.45
6	0.05	1	0.50	1	100.00	0	1320.00	4	0.50	1	1.00	2	630.00	3	370823.15	7140525.18
60	0.05	1	0.50	1	1710.00	11	500.00	1	1.00	2	1.00	2	790.00	4	371699.60	7140237.97
61	0.05	1	0.50	1	530.00	3	420.00	1	0.50	1	1.00	2	290.00	1	371795.87	7140529.30

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
635	TO102014	HDIS_635_08	HDIS_635_08	Archie	3	Steep W slope	E of mtn. stream, vegetation	Damp	B	1.00	1	5.00	1
64	TO102014	HDIS_64_08	HDIS_64_08	Archie	1	Steep S slope	Lots of shale in sample, boulder field	Damp	B	6.00	3	5.00	1
641	TO102014	HDIS_641_08	HDIS_641_08	Archie	2	Gentle S slope	Very bushy	Damp	B	2.00	1	5.00	1
642	TO102014	HDIS_642_08	HDIS_642_08	Archie	2	Gentle	By creek, cliffs everywhere	Damp	B	6.00	3	5.00	1
643	TO102014	HDIS_643_08	HDIS_643_08	Archie	2	Steep W slope	E side of creek, lots of OC, bushy	Damp	B	5.00	3	20.00	4
644	TO102014	HDIS_644_08	HDIS_644_08	Archie	2	Steep W slope	Sandy texture, veg. thick, shrubs present	Dry	B	5.00	3	10.00	2
645	TO102014	HDIS_645_08	HDIS_645_08	Archie	2	Moderate S slope	Boulder field, veg. good, sandy texture to sample	Damp	B	4.00	2	5.00	1
646	TO102014	HDIS_646_08	HDIS_646_08	Archie	3	Steep S slope	Boulder field, sample taken at OC	Damp	B	3.00	2	5.00	1
648	TO102014	HDIS_648_08	HDIS_648_08	Archie	2	Gentle S slope	More sand than clay, bushy	Damp	B	4.00	2	40.00	8
649	TO102014	HDIS_649_08	HDIS_649_08	Archie	2	Moderate S slope	Boulders under moss, thick bush	Damp	B	4.00	2	5.00	1
65	TO102014	HDIS_65_08	HDIS_65_08	Archie	1	Steep N slope	Taken below OC, boulder field, shale in sample	Damp	B	12.00	6	5.00	1
650	TO102014	HDIS_650_08	HDIS_650_08	Archie	2	Moderate S slope	Sandy texture, bushy	Damp	B	1.00	1	30.00	6
651	TO102014	HDIS_651_08	HDIS_651_08	Archie	3	Gentle S slope	A little bit of sandy texture, bushy	Damp	B	5.00	3	5.00	1
652	TO102014	HDIS_652_08	HDIS_652_08	Archie	2	Gentle S slope	Sandy texture, veg. good	Dry	B	3.00	2	5.00	1
653	TO102014	HDIS_653_08	HDIS_653_08	Archie	2	Moderate S slope	Rock field, veg. thick, no tress, sandy texture to sample	Dry	B	3.00	2	5.00	1
655	TO102014	HDIS_655_08	HDIS_655-08	Archie	3	Gentle S slope	Very bushy, rocks underneath bushes	Wet	B	8.00	4	5.00	1
656	TO102014	HDIS_656_08	HDIS_656_08	Archie	3	Gentle S slope	Lots of sand, very bushy	Damp	B	6.00	3	20.00	4
657	TO102014	HDIS_657_08	HDIS_657_08	Archie	2	Moderate	Sandy texture, willow field	Damp	B	1.00	1	5.00	1
658	TO102014	HDIS_658_08	HDIS_658_08	Archie	2	Moderate SE slope	Boulders present	Damp	B	2.00	1	5.00	1
659	TO102014	HDIS_659_08	HDIS_659_08	Archie	4	Gentle S slope	Bushy, 7ft tall	Wet	A	4.00	5	70.00	14
66	TO102014	HDIS_66_08	HDIS_66_08	Archie	2	Gentle W slope	Rock field, sandy texture	Damp	B	340.00	173	20.00	4
660	TO102014	HDIS_660_08	HDIS_660_08	Archie	2	Moderate S slope	Bush, rocks under moss and bush	Damp	B	16.00	8	10.00	2
81	TO102014	HDIS_81_08	HDIS_81_08	Thomas	3	Moderate slope to SW		Damp	B	7.00	4	5.00	1
82	TO102014	HDIS_82_08	HDIS_82_08	Thomas	3	Gentle slope to W		Damp	B	7.00	4	5.00	1
84	TO102014	HDIS_84_08	HDIS_84_08	Archie	1	Steep S slope	Lots of shale in sample, avalanche area, boulder field	Damp	B	5.00	3	5.00	1
85	TO102014	HDIS_85_08	HDIS_85_08	Archie	2	Mtn. ridge, N cliff,	Rocky area, shale in sample	Damp	B	1.00	1	5.00	1
9	TO102014	HDIS_9_08	HDIS_9_08	Archie	1	Steep S, Cliff N	On mtn. ridge, lots of shale in sample	Damp	B	2.00	1	5.00	1
11	TO102015	HDIS_11_08	HDIS_11_08	Aiden	1	Gentle slope near bo		Moist	B	0.50	0	5.00	1
12	TO102015	HDIS_12_08	HDIS_12_08	Aiden	2	Moderate slope facin	Gritty	Moist	B	13.00	7	5.00	1
13	TO102015	HDIS_13_08	HDIS_13_08	Aiden	2	Flat valley floor ne	Gritty	Moist	B	3.00	2	10.00	2
16	TO102015	HDIS_16_08	HDIS_16_08	Tubs	2	Steep	Boulders	Damp	B	4.00	2	5.00	1
17	TO102015	HDIS_17_08	HDIS_17_08	Tubs	2	Steep	Boulders galore	Damp	B	2.00	1	5.00	1
2	TO102015	HDIS_2_08	HDIS_2_08	Tubs	3	Steep	Boulders	Damp	B	1.00	1	5.00	1
20	TO102015	HDIS_20_08	HDIS_20_08	Aiden	2	Boulder field, thin	Clay and grit	Moist	B	1.00	1	5.00	1
21	TO102015	HDIS_21_08	HDIS_21_08	Aiden	3	Gentle slope near cr	Clay	Moist	B	5.00	3	5.00	1
22	TO102015	HDIS_22_08	HDIS_22_08	Aiden	3	Moderate slope facin		Moist	B	15.00	8	5.00	1
28	TO102015	HDIS_28_08	HDIS_28_08	Tubs	2	Steep	Boulders	Damp	B	1.00	1	5.00	1
308	TO102015	HDIS_308_08	HDIS_308_08	Shane	1	Gentle to S	Willows, sandy soil	Damp	B	3.00	2	30.00	6
32	TO102015	HDIS_32_08	HDIS_32_08	Aiden	2	Moderate slope near	Rocky, gritty soil	Moist	B	8.00	4	5.00	1
33	TO102015	HDIS_33_08	HDIS_33_08	Aiden	2	Moderate slope facin	Gritty	Moist		0.50	1	40.00	8
335	TO102015	HDIS_335_08	HDIS_335_08	Shane	3	Gentle to SE and cre	Willows and woods	Damp	B	0.50	0	5.00	1
336	TO102015	HDIS_336_08	HDIS_336_08	Shane	2	Moderate to S	Poplar stand amongst willows, very little soil, overgrown talus	Dry/damp	B	6.00	3	5.00	1
337	TO102015	HDIS_337_08	HDIS_337_08	Shane	3	Gentle to S	Willows	Wet/damp	B	2.00	1	5.00	1
34	TO102015	HDIS_34_08	HDIS_34_08	Aiden	3	Moderate slope, some		Moist	B	9.00	5	20.00	4

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
635	0.05	1	0.50	1	190.00	1	850.00	3	0.50	1	1.00	2	1210.00	6	377507.35	7139743.12
64	0.05	1	0.50	1	260.00	1	2910.00	10	0.50	1	1.00	2	240.00	1	371751.08	7141263.02
641	0.05	1	0.50	1	130.00	0	150.00	0	0.50	1	1.00	2	220.00	1	377746.01	7138757.62
642	0.05	1	0.50	1	180.00	1	250.00	0	0.50	1	1.00	2	680.00	3	377730.94	7139008.80
643	0.10	2	0.50	1	290.00	1	200.00	0	1.00	2	1.00	2	990.00	5	377763.21	7139245.39
644	0.05	1	0.50	1	90.00	0	840.00	3	0.50	1	1.00	2	470.00	2	377752.63	7139513.58
645	0.05	1	0.50	1	170.00	1	820.00	3	0.50	1	1.00	2	540.00	3	377757.05	7139752.41
646	0.60	12	0.50	1	90.00	0	1060.00	3	0.50	1	1.00	2	460.00	2	377780.25	7139991.90
648	0.05	1	3.00	6	420.00	2	1370.00	5	4.00	8	1.00	2	710.00	3	378016.27	7138499.60
649	0.05	1	0.50	1	150.00	1	620.00	2	0.50	1	1.00	2	650.00	3	377986.28	7138756.91
65	0.05	1	0.50	1	330.00	2	1100.00	4	0.50	1	1.00	2	210.00	1	371721.22	7141608.50
650	0.20	4	1.00	2	650.00	4	60.00	0	1.00	2	1.00	2	70.00	0	378016.58	7138999.35
651	0.20	4	0.50	1	490.00	3	240.00	0	1.00	2	2.00	4	180.00	1	378007.94	7139245.75
652	0.05	1	0.50	1	80.00	0	560.00	2	0.50	1	1.00	2	590.00	3	377996.67	7139508.05
653	0.05	1	0.50	1	110.00	0	570.00	2	0.50	1	1.00	2	900.00	5	377990.01	7139749.05
655	0.20	4	0.50	1	700.00	4	10.00	0	0.50	1	1.00	2	140.00	0	378238.03	7138745.81
656	0.10	2	0.50	1	250.00	1	550.00	2	1.00	2	1.00	2	840.00	4	378266.07	7138999.97
657	0.05	1	0.50	1	100.00	0	550.00	2	0.50	1	1.00	2	710.00	3	378235.54	7139254.16
658	0.05	1	0.50	1	240.00	1	490.00	1	0.50	1	1.00	2	1010.00	5	378215.42	7139499.91
659	0.40	8	2.00	4	2240.00	44	80.00	1	5.00	10	1.00	2	70.00	0	378490.53	7138785.27
66	0.30	6	0.50	1	350.00	2	2670.00	9	13.00	26	1.00	2	880.00	4	371781.73	7141783.72
660	0.20	4	0.50	1	630.00	4	1240.00	4	2.00	4	1.00	2	430.00	2	378490.53	7138987.90
81	0.05	1	0.50	1	290.00	1	390.00	1	0.50	1	1.00	2	270.00	1	371998.62	7140534.65
82	0.10	2	0.50	1	1410.00	9	960.00	3	0.50	1	1.00	2	210.00	1	372002.77	7140767.65
84	0.20	4	0.50	1	350.00	2	590.00	2	0.50	1	1.00	2	200.00	1	371973.40	7141253.11
85	0.05	1	0.50	1	60.00	0	510.00	1	0.50	1	1.00	2	1590.00	8	372017.33	7141434.00
9	0.05	1	0.50	1	180.00	1	600.00	2	0.50	1	1.00	2	1000.00	5	370890.34	7141274.80
11	0.05	1	1.00	2	530.00	3	590.00	2	0.50	1	0.50	1	540.00	3	370851.05	7141753.72
12	0.10	2	0.50	1	800.00	5	540.00	2	0.50	1	0.50	1	230.00	1	370744.34	7142016.45
13	0.05	1	2.00	4	1210.00	8	290.00	1	2.00	4	0.50	1	50.00	0	370764.14	7142260.21
16	0.05	1	0.50	1	100.00	0	410.00	1	0.50	1	0.50	1	80.00	0	370986.68	7140749.33
17	0.05	1	0.50	1	150.00	1	940.00	3	0.50	1	0.50	1	100.00	0	371013.10	7141014.69
2	0.05	1	0.50	1	280.00	1	320.00	1	0.50	1	0.50	1	140.00	0	370499.80	7141004.13
20	0.05	1	0.50	1	1020.00	6	2040.00	7	0.50	1	0.50	1	440.00	2	370998.43	7141713.24
21	0.60	12	0.50	1	100.00	0	480.00	1	0.50	1	0.50	1	430.00	2	370999.31	7141993.30
22	0.05	1	0.50	1	120.00	0	690.00	2	0.50	1	0.50	1	360.00	2	371009.43	7142253.28
28	0.05	1	0.50	1	100.00	0	660.00	2	0.50	1	0.50	1	150.00	0	371246.39	7140733.20
308	0.10	2	3.00	6	180.00	1	440.00	1	2.00	4	2.00	4	210.00	1	374249.67	7137501.37
32	0.05	1	0.50	1	270.00	1	230.00	0	0.50	1	0.50	1	180.00	1	371249.50	7141810.57
33	0.90	18	0.50	1	120.00	2	690.00	3	4.00	8	0.50	1	580.00	2	371251.91	7142022.04
335	0.05	1	0.50	1	150.00	1	690.00	2	0.50	1	0.50	1	290.00	1	374437.19	7137090.52
336	0.05	1	0.50	1	110.00	0	600.00	2	0.50	1	0.50	1	250.00	1	374500.06	7137250.23
337	0.20	4	0.50	1	340.00	2	90.00	0	0.50	1	0.50	1	100.00	0	374498.52	7137501.09
34	0.05	1	0.50	1	140.00	0	1110.00	4	3.00	6	0.50	1	200.00	1	371252.63	7142236.71

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
364	TO102015	HDIS_364_08	HDIS_364_08	Shane	2	Flat by creek	Wooded area with some willows, fine sand and clay soil	Damp	B	0.50	0	20.00	4
365	TO102015	HDIS_365_08	HDIS_365_08	Shane	3	Flat by creek	Wooded area by creek, fine sand and clay soil	Damp	B	5.00	3	20.00	4
48	TO102015	HDIS_48_08	HDIS_48_08	Aiden	3	Moderate slope, humm		Moist	B	3.00	2	30.00	6
49	TO102015	HDIS_49_08	HDIS_49_08	Aiden	2	Moderate slope facin	Some grit, boulders	Moist	B	2.00	1	5.00	1
5	TO102015	HDIS_5_08	HDIS_5_08	Aiden	1	Steep slope under cl	Gritty	Moist	B	3.00	2	5.00	1
7	TO102015	HDIS_7_08	HDIS_7_08	Tubs	2	Steep	Boulders	Damp	B	2.00	1	5.00	1
76	TO102015	HDIS_76_08	HDIS_76_08	Aiden	1	Steep hillsaid facin	Shale fragments in sample	Moist	B	0.50	0	5.00	1
8	TO102015	HDIS_8_08	HDIS_8_08	Tubs	2	Steep	Boulders	Damp	B	1.00	1	5.00	1
87	TO101879	HDIS_87_08	HDIS_87_08	Archie	2	Top of mtn. ridge, W	More sand than clay	Damp	B	470.00	240	50.00	10
110	TO101879	HDIS_110_08	HDIS_110_08	Archie	2	N slope cliff, S slo	Sample taken on top of mtn. ridge	Damp	B	25.00	13	5.00	1
134	TO101879	HDIS_134_08	HDIS_134_08	Archie	2	Moderate S slope	Rock field, sample middle of hill or mid slope, veg. visible	Damp	B	5.00	3	5.00	1
160	TO101879	HDIS_160_08	HDIS_160_08	Archie	2	Moderate mid slope S	Vegetation thick, grass and moss	Damp	B	3.00	2	5.00	1
187	TO101879	HDIS_187_08	HDIS_187_08	Archie	2	Moderate S slope	Vegetation thick, grass and moss, mid slope	Damp	B	5.00	3	20.00	4
214	TO101879	HDIS_214_08	HDIS_214_08	Archie	2	Moderate S slope	Grass and moss thick, boulders on ground	Damp	B	4.00	2	50.00	10
330	TO101879	HDIS_330_08	HDIS_330_08	Kevin	3	Gentle slope E, boul		Damp	B	3.00	2	5.00	1
152	TO101885	HDIS_152_08	HDIS_152_08	Kevin	3	Gentle slope SW		Damp	B	2.00	1	5.00	1
153	TO101885	HDIS_153_08	HDIS_153_08	Kevin	2	Moderate slope SE, s		Damp	B	3.00	2	5.00	1
154	TO101885	HDIS_154_08	HDIS_154_08	Kevin	1	Moderate slope SE, s		Damp/dry	B	4.00	2	5.00	1
155	TO101885	HDIS_155_08	HDIS_155_08	Kevin	1	Steep cliffs, NE	Really bad sample, nothing else to find	Dry	B	3.00	2	5.00	1
179	TO101885	HDIS_179_08	HDIS_179_08	Kevin	2	Gentle slope SE	Sample is clay with some shales	Damp	B	1.00	1	10.00	2
180	TO101885	HDIS_180_08	HDIS_180_08	Kevin	3	Gentle slope SE		Damp	B	0.50	0	10.00	2
181	TO101885	HDIS_181_08	HDIS_181_08	Kevin	2	Gentle slope SW		Damp	B	3.00	2	30.00	6
182	TO101885	HDIS_182_08	HDIS_182_08	Kevin	3	Steep cliffs, NE		Damp	B	1.00	1	5.00	1
183	TO101885	HDIS_183_08	HDIS_183_08	Kevin	1	Moderate slope NE, b		Damp/dry	B	17.00	9	5.00	1
206	TO101885	HDIS_206_08	HDIS_206_08	Kevin	2	Gentle slope SE	Sample is clay with some shales	Damp	B	0.50	0	5.00	1
207	TO101885	HDIS_207_08	HDIS_207_08	Kevin	3	Gentle slope/plateau		Damp	B	0.50	0	5.00	1
208	TO101885	HDIS_208_08	HDIS_208_08	Kevin	1	Gentle slope SE	Sample is shales with clay	Damp	B	3.00	2	20.00	4
209	TO101885	HDIS_209_08	HDIS_209_08	Kevin	3	Flat ridge, shales		Damp	B	1.00	1	10.00	2
235	TO101885	HDIS_235_08	HDIS_235_08	Kevin	3	Gentle slope SE		Damp	B	2.00	1	5.00	1
236	TO101885	HDIS_236_08	HDIS_236_08	Kevin	3	Gentle slope/plateau		Damp	B	4.00	2	20.00	4
237	TO101885	HDIS_237_08	HDIS_237_08	Kevin	2	Moderate slope SE	Sample is clay with some shales	Damp	B	5.00	3	5.00	1
238	TO101885	HDIS_238_08	HDIS_238_08	Kevin	3	Moderate slope, ridg		Dry	B	5.00	3	5.00	1
400	TO101885	HDIS_400_08	HDIS_400_08	Archie	2	Gentle E slope	Shale in sample, bush	Damp	B	15.00	8	20.00	4
411	TO101885	HDIS_411_08	HDIS_411_08	Daithi	3	Steep slope near rid	Clay, lots of grit	Wet	B	21.00	11	50.00	10
492	TO101885	HDIS_492_08	HDIS_492_08	Thomas	2	Moderate slope to SW		Damp	B	12.00	6	5.00	1
497	TO101885	HDIS_497_08	HDIS_497_08	Tubs	1	Steep	Cliffs, scree, loose boulders	Damp	B	20.00	10	5.00	1
498	TO101885	HDIS_498_08	HDIS_498_08	Tubs	2	Steep	Cliffs, loose boulders	Damp	B	19.00	10	5.00	1
499	TO101885	HDIS_499_08	HDIS_499_08	Tubs	2	Steep	Boulders, cliffs	Damp	B	189.00	96	140.00	28
500	TO101885	HDIS_500_08	HDIS_500_08	Tubs	2	Steep	Cliffs	Damp	B	34.00	17	5.00	1
501	TO101885	HDIS_501_08	HDIS_501_08	Tubs	2	Steep	Boulders, cliffs	Damp	B	104.00	53	20.00	4
503	TO101885	HDIS_503_08	HDIS_503_08	Daithi	3	Bottom of cliff	Gritty clay	Damp	B	44.00	22	150.00	30
506	TO101885	HDIS_506_08	HDIS_506_08	Shane	1	Gentle to N	Very poor sample, lots of grit and sand	Damp	B	5.00	3	5.00	1
507	TO101885	HDIS_507_08	HDIS_507_08	Shane	2	Gentle to NE and cre	Willows and small trees in this drainage channel	Damp	B	1.00	1	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
364	0.05	1	3.00	6	70.00	0	210.00	0	0.50	1	0.50	1	130.00	0	374729.89	7137253.58
365	0.05	1	0.50	1	530.00	3	1000.00	3	2.00	4	0.50	1	150.00	0	374750.73	7137500.97
48	0.60	12	0.50	1	910.00	6	470.00	1	30.00	60	0.50	1	150.00	0	371499.63	7141750.13
49	0.05	1	0.50	1	150.00	1	720.00	2	0.50	1	0.50	1	930.00	5	371498.76	7142001.70
5	0.05	1	0.50	1	170.00	1	270.00	1	0.50	1	0.50	1	280.00	1	370512.53	7142037.68
7	0.05	1	0.50	1	60.00	0	390.00	1	0.50	1	0.50	1	770.00	4	370759.40	7140759.24
76	0.05	1	1.00	2	220.00	1	340.00	1	0.50	1	0.50	1	420.00	2	372016.78	7139237.80
8	0.05	1	0.50	1	100.00	0	340.00	1	0.50	1	0.50	1	50.00	0	370739.76	7141002.47
87	4.10	82	0.50	1	680.00	4	38700.00	143	30.00	60	0.50	1	7870.00	43	372096.00	7141995.00
110	0.20	4	0.50	1	160.00	1	730.00	2	2.00	4	0.50	1	330.00	1	372270.00	7142214.00
134	0.05	1	0.50	1	190.00	1	910.00	3	2.00	4	0.50	1	430.00	2	372498.00	7142253.00
160	0.05	1	0.50	1	50.00	0	1130.00	4	2.00	4	0.50	1	1840.00	10	372740.00	7142262.00
187	0.20	4	0.50	1	90.00	0	3190.00	11	8.00	16	0.50	1	1160.00	6	372995.00	7142250.00
214	0.10	2	0.50	1	100.00	0	1220.00	4	6.00	12	0.50	1	1280.00	7	373246.00	7142252.00
330	0.05	1	0.50	1	180.00	1	1420.00	5	0.50	1	0.50	1	920.00	5	374256.00	7143001.00
152	0.05	1	0.50	1	460.00	3	650.00	2	0.50	1	0.50	1	440.00	2	372771.00	7140265.00
153	0.05	1	0.50	1	220.00	1	420.00	1	0.50	1	0.50	1	120.00	0	372728.00	7140544.00
154	0.05	1	0.50	1	190.00	1	510.00	1	0.50	1	0.50	1	220.00	1	372740.00	7140757.00
155	0.05	1	0.50	1	2270.00	15	690.00	2	0.50	1	0.50	1	660.00	3	372712.00	7140958.00
179	0.05	1	0.50	1	1130.00	7	310.00	1	0.50	1	0.50	1	1080.00	6	372990.00	7140259.00
180	0.05	1	1.00	2	690.00	4	260.00	0	0.50	1	0.50	1	460.00	2	372979.00	7140540.00
181	0.05	1	0.50	1	180.00	1	320.00	1	1.00	2	0.50	1	230.00	1	372958.00	7140771.00
182	0.05	1	0.50	1	100.00	0	0.50	0	0.50	1	0.50	1	50.00	0	372918.00	7141063.00
183	0.05	1	0.50	1	1460.00	9	460.00	1	1.00	2	0.50	1	180.00	1	373045.00	7141291.00
206	0.05	1	0.50	1	460.00	3	200.00	0	0.50	1	0.50	1	1190.00	6	373242.00	7140253.00
207	0.05	1	0.50	1	570.00	3	40.00	0	0.50	1	0.50	1	100.00	0	373214.00	7140511.00
208	0.05	1	0.50	1	410.00	2	290.00	1	0.50	1	0.50	1	670.00	3	373226.00	7140768.00
209	0.05	1	0.50	1	1330.00	8	320.00	1	0.50	1	0.50	1	280.00	1	373296.00	7140930.00
235	0.05	1	0.50	1	170.00	1	320.00	1	0.50	1	0.50	1	570.00	3	373480.00	7140261.00
236	0.05	1	0.50	1	640.00	4	170.00	0	0.50	1	0.50	1	350.00	1	373470.00	7140516.00
237	0.05	1	0.50	1	1960.00	13	140.00	0	0.50	1	0.50	1	220.00	1	373573.00	7140779.00
238	0.05	1	0.50	1	180.00	1	20.00	0	0.50	1	0.50	1	50.00	0	373501.00	7141025.00
400	0.10	2	0.50	1	250.00	1	2160.00	8	4.00	8	0.50	1	240.00	1	374992.66	7139491.69
411	0.20	4	0.50	1	380.00	2	1560.00	5	25.00	50	1.00	2	710.00	3	374995.76	7142251.30
492	0.50	10	0.50	1	960.00	6	310.00	1	2.00	4	0.50	1	390.00	2	375759.00	7140507.00
497	0.05	1	0.50	1	11700.00	78	230.00	0	2.00	4	0.50	1	160.00	0	375910.11	7141813.07
498	0.05	1	0.50	1	1160.00	7	860.00	3	0.50	1	0.50	1	260.00	1	375785.95	7141992.68
499	1.60	32	0.50	1	430.00	2	1940.00	7	60.00	120	0.50	1	10800.00	60	375809.03	7142251.23
500	0.05	1	0.50	1	1540.00	10	680.00	2	2.00	4	0.50	1	380.00	2	375823.29	7142502.50
501	0.40	8	0.50	1	240.00	1	3310.00	12	41.00	82	0.50	1	3020.00	16	375696.91	7142747.67
503	0.50	10	0.50	1	980.00	6	6630.00	24	13.00	26	0.50	1	470.00	2	375751.21	7143244.42
506	0.05	1	0.50	1	150.00	1	720.00	2	0.50	1	0.50	1	220.00	1	375999.95	7136998.91
507	0.05	1	0.50	1	340.00	2	300.00	1	0.50	1	0.50	1	270.00	1	375999.61	7137249.57

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
508	TO101885	HDIS_508_08	HDIS_508_08	Tubs	2	Moderate	Willows by creek	Damp	B	14.00	7	5.00	1
524	TO101885	HDIS_524_08	HDIS_524_08	Tubs	1	Steep	Boulders	Damp	B	35.00	18	5.00	1
525	TO101885	HDIS_525_08	HDIS_525_08	Tubs	2	Moderate	Boulder field	Damp	B	0.50	0	5.00	1
526	TO101885	HDIS_526_08	HDIS_526_08	Tubs	2	Steep	Boulders	Damp	B	37.00	19	90.00	18
527	TO101885	HDIS_527_08	HDIS_527_08	Tubs	2	Steep	Boulders, veg.	Damp	B	127.00	65	20.00	4
528	TO101885	HDIS_528_08	HDIS_528_08	Daithi	1	Steep slope	Organic and clay mix, boulder field, had to take sample between boulders	Damp	A	15.00	19	20.00	4
529	TO101885	HDIS_529_08	HDIS_529_08	Daithi	1	Steep slope, rocky	Mainly shale and sand, etc. Bad sample	Damp	A	18.00	23	30.00	6
531	TO101885	HDIS_531_08	HDIS_531_08	Daithi	3	Bottom of hill near	Clay	Damp	B	13.00	7	5.00	1
532	TO101885	HDIS_532_08	HDIS_532_08	Thomas	3	Moderate slope to N		Damp	B	9.00	5	10.00	2
533	TO101885	HDIS_533_08	HDIS_533_08	Tubs	2	Moderate	Trees, willows	Damp	B	4.00	2	5.00	1
534	TO101885	HDIS_534_08	HDIS_534_08	Tubs	2	Moderate	Willows	Damp	B	5.00	3	10.00	2
539	TO101885	HDIS_539_08	HDIS_539_08	Shane	3	Moderate to SE	Dense willow cover	Damp	B	1.00	1	20.00	4
540	TO101885	HDIS_540_08	HDIS_540_08	Shane	1	Steep to SE and cree	Overgrown talus, willows and grass, poor soil	Damp	B	18.00	9	5.00	1
541	TO101885	HDIS_541_08	HDIS_541_08	Shane	2	Gentle near creek	Overgrown talus	Damp	B	31.00	16	5.00	1
542	TO101885	HDIS_542_08	HDIS_542_08	Shane	3	Moderate to SW and c	Grassy hillside	Damp	B	3.00	2	5.00	1
546	TO101885	HDIS_546_08	HDIS_546_08	Thomas	1	Flat	Very rocky sample	Damp	B	2.00	1	20.00	4
547	TO101885	HDIS_547_08	HDIS_547_08	Thomas	3	Flat		Damp	B	6.00	3	5.00	1
549	TO101885	HDIS_549_08	HDIS_549_08	Tubs	2	Moderate	Loose boulders	Damp	B	65.00	33	5.00	1
550	TO101885	HDIS_550_08	HDIS_550_08	Tubs	3	Flat	Boulders	Damp	B	6.00	3	20.00	4
551	TO101885	HDIS_551_08	HDIS_551_08	Tubs	1	Moderate	Boulder field	Damp	B	0.50	0	5.00	1
552	TO101885	HDIS_552_08	HDIS_552_08	Tubs	2	Flat	Boulders	Damp	B	4.00	2	410.00	82
553	TO101885	HDIS_553_08	HDIS_553_08	Daithi	4	Bottom of steep slop	Organic clay, good sample	Damp	A	32.00	41	5.00	1
554	TO101885	HDIS_554_08	HDIS_554_08	Daithi	4	Valley floor, broad	Clay, little grit	Damp	B	21.00	11	30.00	6
555	TO101885	HDIS_555_08	HDIS_555_08	Daithi	4	Flat slope, near riv	Clay with shaley chips, gritty	Damp	B	83.00	42	5.00	1
556	TO101885	HDIS_556_08	HDIS_556_08	Thomas	3	Flat		Wet	B	15.00	8	5.00	1
557	TO101885	HDIS_557_08	HDIS_557_08	Tubs	2	Steep to creek	Willows	Damp	B	33.00	17	10.00	2
558	TO101885	HDIS_558_08	HDIS_558_08	Tubs	3	Steep to creek	Willows, boulders	Damp	B	2.00	1	40.00	8
559	TO101885	HDIS_559_08	HDIS_559_08	Tubs	2	Moderate	Willows	Damp	B	4.00	2	40.00	8
560	TO101885	HDIS_560_08	HDIS_560_08	Tubs	2	Steep	Willows	Damp	B	1.00	1	10.00	2
570	TO101885	HDIS_570_08	HDIS_570_08	Thomas	4	Flat		Damp	B	8.00	4	5.00	1
571	TO101885	HDIS_571_08	HDIS_571_08	Thomas	4	Flat	10m from lake	Damp	B	1.00	1	5.00	1
572	TO101885	HDIS_572_08	HDIS_572_08	Tubs	2	Flat	Boulders, by creek OC	Damp	B	7.00	4	10.00	2
577	TO101885	HDIS_577_08	HDIS_577_08	Thomas	3	Gentle slope to N		Damp	B	16.00	8	5.00	1
578	TO101885	HDIS_578_08	HDIS_578_08	Thomas	4	Flat		Wet	B	7.00	4	5.00	1
579	TO101885	HDIS_579_08	HDIS_579_08	Tubs	3	Moderate	Steep to creek, big trees	Damp	B	1.00	1	30.00	6
580	TO101885	HDIS_580_08	HDIS_580_08	Tubs	3	Steep	Willows	Damp	B	2.00	1	30.00	6
581	TO101885	HDIS_581_08	HDIS_581_08	Tubs	2	Steep to creek	Trees, willows, boulders	Damp	B	6.00	3	20.00	4
582	TO101885	HDIS_582_08	HDIS_582_08	Tubs	3	Moderate	Willows	Damp	B	0.50	0	30.00	6
583	TO101885	HDIS_583_08	HDIS_583_08	Tubs	2	Steep	Willows	Damp	B	3.00	2	60.00	12
584	TO101885	HDIS_584_08	HDIS_584_08	Tubs	2	Moderate	Willows, boulders	Damp	B	3.00	2	20.00	4
585	TO101885	HDIS_585_08	HDIS_585_08	Tubs	2	Steep	Boulders	Damp	B	0.50	0	5.00	1
586	TO101885	HDIS_586_08	HDIS_586_08	Tubs	2	Flat	Steep E and W	Damp	B	3.00	2	5.00	1
587	TO101885	HDIS_587_08	HDIS_587_08	Tubs	2	Steep	Cliffs, boulders	Damp	B	11.00	6	10.00	2
591	TO101885	HDIS_591_08	HDIS_591_08	Thomas	1	Steep slope to W		Damp	B	19.00	10	10.00	2

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
508	0.40	8	0.50	1	2030.00	13	190.00	0	2.00	4	0.50	1	160.00	0	375997.55	7137494.41
524	0.05	1	0.50	1	910.00	6	460.00	1	1.00	2	0.50	1	250.00	1	376039.91	7141523.38
525	0.05	1	0.50	1	440.00	2	100.00	0	1.00	2	0.50	1	140.00	0	376108.89	7141772.04
526	0.90	18	0.50	1	540.00	3	22900.00	84	227.00	454	0.50	1	4040.00	22	376000.26	7142005.27
527	0.50	10	0.50	1	550.00	3	1050.00	3	23.00	46	0.50	1	730.00	4	375992.71	7142248.45
528	0.05	1	0.50	1	170.00	3	1030.00	8	2.00	4	0.50	1	2050.00	13	376016.33	7142491.52
529	0.20	4	0.50	1	410.00	8	2790.00	22	32.00	64	0.50	1	1530.00	10	375982.62	7142717.09
531	0.05	1	0.50	1	450.00	3	920.00	3	1.00	2	0.50	1	130.00	0	375975.90	7143208.80
532	0.05	1	0.50	1	190.00	1	380.00	1	1.00	2	0.50	1	750.00	4	376308.24	7137253.24
533	0.05	1	0.50	1	510.00	3	190.00	0	3.00	6	0.50	1	860.00	4	376252.24	7137504.19
534	0.20	4	0.50	1	590.00	3	460.00	1	1.00	2	0.50	1	170.00	0	376259.32	7137746.90
539	0.05	1	0.50	1	130.00	0	850.00	3	2.00	4	0.50	1	520.00	2	376248.49	7138999.59
540	0.05	1	0.50	1	190.00	1	820.00	3	0.50	1	0.50	1	90.00	0	376248.43	7139248.29
541	0.05	1	0.50	1	250.00	1	660.00	2	4.00	8	0.50	1	190.00	1	376243.26	7139496.92
542	0.05	1	0.50	1	230.00	1	400.00	1	4.00	8	0.50	1	750.00	4	376253.07	7139760.52
546	0.10	2	0.50	1	2710.00	18	790.00	2	3.00	6	0.50	1	330.00	1	376241.14	7140824.30
547	0.05	1	0.50	1	170.00	1	780.00	2	0.50	1	0.50	1	330.00	1	376284.50	7140966.07
549	0.05	1	0.50	1	690.00	4	290.00	1	2.00	4	0.50	1	150.00	0	376237.87	7141503.14
550	0.20	4	0.50	1	1210.00	8	570.00	2	2.00	4	0.50	1	150.00	0	376249.10	7141751.75
551	0.05	1	0.50	1	140.00	0	380.00	1	0.50	1	0.50	1	230.00	1	376250.63	7141984.07
552	0.80	16	0.50	1	570.00	3	590.00	2	21.00	42	0.50	1	1070.00	5	376247.31	7142257.71
553	0.10	2	0.50	1	220.00	4	100.00	1	2.00	4	0.50	1	130.00	1	376246.76	7142517.24
554	1.10	22	0.50	1	900.00	6	3440.00	12	65.00	130	0.50	1	3170.00	17	376225.60	7142750.76
555	0.30	6	0.50	1	190.00	1	4720.00	17	7.00	14	0.50	1	2400.00	13	376229.02	7143017.49
556	0.20	4	0.50	1	2500.00	16	100.00	0	2.00	4	0.50	1	140.00	0	376499.52	7137491.28
557	0.30	6	0.50	1	810.00	5	560.00	2	1.00	2	1.00	2	210.00	1	376503.08	7137758.01
558	0.10	2	1.00	2	1190.00	7	20.00	0	1.00	2	0.50	1	30.00	0	376503.08	7138004.94
559	0.20	4	0.50	1	680.00	4	50.00	0	2.00	4	0.50	1	90.00	0	376497.91	7138257.76
560	0.05	1	0.50	1	150.00	1	530.00	1	0.50	1	0.50	1	500.00	2	376504.25	7138490.40
570	0.05	1	0.50	1	850.00	5	2990.00	11	0.50	1	0.50	1	400.00	2	376502.97	7140993.82
571	0.20	4	0.50	1	1460.00	9	300.00	1	3.00	6	0.50	1	180.00	1	376494.25	7141249.87
572	0.20	4	0.50	1	810.00	5	150.00	0	2.00	4	0.50	1	190.00	1	376486.14	7141494.20
577	0.05	1	0.50	1	3080.00	20	50.00	0	2.00	4	0.50	1	140.00	0	376743.86	7137496.75
578	0.20	4	0.50	1	2720.00	18	40.00	0	0.50	1	0.50	1	100.00	0	376746.46	7137741.86
579	0.10	2	0.50	1	1460.00	9	20.00	0	1.00	2	0.50	1	30.00	0	376734.06	7138010.88
580	0.10	2	1.00	2	1160.00	7	30.00	0	1.00	2	0.50	1	60.00	0	376734.92	7138239.01
581	0.10	2	0.50	1	370.00	2	80.00	0	0.50	1	0.50	1	260.00	1	376763.62	7138509.98
582	0.20	4	0.50	1	730.00	4	30.00	0	2.00	4	0.50	1	60.00	0	376740.02	7138748.03
583	0.40	8	1.00	2	440.00	2	430.00	1	4.00	8	2.00	4	260.00	1	376739.25	7139003.40
584	0.05	1	0.50	1	180.00	1	440.00	1	1.00	2	0.50	1	290.00	1	376765.89	7139249.02
585	0.05	1	0.50	1	60.00	0	490.00	1	0.50	1	0.50	1	1430.00	7	376756.28	7139510.09
586	0.05	1	0.50	1	100.00	0	350.00	1	0.50	1	0.50	1	350.00	1	376754.46	7139749.82
587	0.20	4	0.50	1	310.00	2	110.00	0	0.50	1	0.50	1	170.00	0	376793.80	7139978.14
591	0.05	1	0.50	1	3460.00	23	270.00	1	4.00	8	0.50	1	150.00	0	376761.88	7141032.61

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
592	TO101885	HDIS_592_08	HDIS_592_08	Thomas	3	Steep slope to W		Damp	B	20.00	10	5.00	1
593	TO101885	HDIS_593_08	HDIS_593_08	Thomas	3	Moderate slope to W		Damp	B	3.00	2	40.00	8
594	TO101885	HDIS_594_08	HDIS_594_08	Thomas	3	Moderate slope to NW		Damp	B	5.00	3	5.00	1
595	TO101885	HDIS_595_08	HDIS_595_08	Thomas	3	Moderate slope to W		Damp	B	11.00	6	5.00	1
596	TO101885	HDIS_596_08	HDIS_596_08	Thomas	2	Moderate slope to NW		Damp	B	0.50	0	5.00	1
597	TO101885	HDIS_597_08	HDIS_597_08	Thomas	4	Flat		Damp	B	0.50	0	30.00	6
598	TO101885	HDIS_598_08	HDIS_598_08	Thomas	4	Flat		Damp	B	0.50	0	80.00	16
599	TO101885	HDIS_599_08	HDIS_599_08	Thomas	4	Flat		Damp	B	0.50	0	80.00	16
105	TO102016	HDIS_105_08	HDIS_105_08	Tubs	1	Steep	Boulders	Damp	B	6.00	3	5.00	1
121	TO102016	HDIS_121_08	HDIS_121_08	Kevin	3	Steep W, boulders		Damp	B	4.00	2	5.00	1
122	TO102016	HDIS_122_08	HDIS_122_08	Kevin	3	Steep W, boulders		Damp	B	13.00	7	5.00	1
123	TO102016	HDIS_123_08	HDIS_123_08	Kevin	3	Moderate slope SW		Damp	B	2.00	1	5.00	1
129	TO102016	HDIS_129_08	HDIS_129_08	Tubs	2	Steep	Boulders	Damp	B	2.00	1	5.00	1
169	TO102016	HDIS_169_08			0					3.00	4	5.00	1
170	TO102016	HDIS_170_08			0					1.00	1	5.00	1
196	TO102016	HDIS_196_08	HDIS_196B_08	Tubs	2	Steep		Damp	B	2.00	1	5.00	1
197	TO102016	HDIS_197_08			0					5.00	6	5.00	1
217	TO102016	HDIS_217_08			0					2.00	3	5.00	1
224	TO102016	HDIS_224_08			0					6.00	8	5.00	1
225	TO102016	HDIS_225_08			0					1.00	1	5.00	1
24	TO102016	HDIS_24_08	HDIS_24_08	Kevin	3	Gentle slope S, bush		Damp	B	2.00	1	10.00	2
29	TO102016	HDIS_29_08	HDIS_29_08	Tubs	3	Steep	Boulders, cliffs	Damp	B	7.00	4	5.00	1
340	TO102016	HDIS_340_08			0					0.50	1	5.00	1
374	TO102016	HDIS_374_08			0					11.00	14	20.00	4
39	TO102016	HDIS_39_08	HDIS_39_08	Kevin	2	Flat, plateau, bushe		Damp/dry	B	5.00	3	10.00	2
40	TO102016	HDIS_40_08	HDIS_40_08	Kevin	3	Moderate slope S		Dry	B	2.00	1	20.00	4
401	TO102016	HDIS_401_08			0					21.00	27	10.00	2
430	TO102016	HDIS_430_08			0					37.00	48	5.00	1
44	TO102016	HDIS_44_08	HDIS_44_08	Tubs	2	Steep	Boulders	Damp	B	0.50	0	5.00	1
45	TO102016	HDIS_45_08	HDIS_45_08	Tubs	2	Steep	Boulders	Damp	B	1.00	1	5.00	1
502	TO102016	HDIS_502_08			0					7.00	9	5.00	1
530	TO102016	HDIS_530_08			0					20.00	26	10.00	2
56	TO102016	HDIS_56_08	HDIS_56_08	Kevin	3	Flat, bushes		Damp	B	4.00	2	5.00	1
57	TO102016	HDIS_57_08	HDIS_57_08	Kevin	2	Moderate slope S, bu		Damp	B	3.00	2	5.00	1
573	TO102016	HDIS_573_08			0					0.50	1	5.00	1
574	TO102016	HDIS_574_08			0					13.00	17	5.00	1
575	TO102016	HDIS_575_08			0					2.00	3	100.00	20
576	TO102016	HDIS_576_08			0					34.00	44	20.00	4
58	TO102016	HDIS_58_08	HDIS_58_08	Kevin	3	Moderate slope S		Damp	B	1.00	1	5.00	1
59	TO102016	HDIS_59_08	HDIS_59_08	Kevin	2	Moderate slope S		Damp	B	3.00	2	20.00	4
62	TO102016	HDIS_62_08	HDIS_62_08	Tubs	2	Steep	Boulders	Damp	B	12.00	6	5.00	1
63	TO102016	HDIS_63_08	HDIS_63_08	Tubs	2	Steep	Boulders	Damp	B	3.00	2	5.00	1
632	TO102016	HDIS_632_08			0					0.50	1	5.00	1
633	TO102016	HDIS_633_08			0					1.00	1	5.00	1
634	TO102016	HDIS_634_08			0					1.00	1	10.00	2

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
592	0.05	1	0.50	1	220.00	1	420.00	1	2.00	4	0.50	1	430.00	2	376760.55	7141239.12
593	0.40	8	0.50	1	700.00	4	130.00	0	5.00	10	0.50	1	490.00	2	376748.05	7141495.89
594	0.05	1	0.50	1	270.00	1	450.00	1	1.00	2	0.50	1	110.00	0	376768.62	7141747.79
595	0.20	4	0.50	1	1450.00	9	30.00	0	0.50	1	0.50	1	90.00	0	376753.06	7141990.72
596	0.05	1	0.50	1	150.00	1	140.00	0	0.50	1	0.50	1	440.00	2	376771.98	7142196.43
597	0.10	2	1.00	2	1600.00	10	350.00	1	3.00	6	0.50	1	260.00	1	377003.58	7137754.15
598	0.30	6	2.00	4	1480.00	9	80.00	0	6.00	12	0.50	1	110.00	0	376956.36	7138003.91
599	0.20	4	3.00	6	1590.00	10	80.00	0	3.00	6	1.00	2	200.00	1	376977.91	7138248.37
105	0.05	1	0.50	1	750.00	5	620.00	2	0.50	1	1.00	2	130.00	0	372255.26	7140994.93
121	0.05	1	0.50	1	60.00	0	210.00	0	0.50	1	1.00	2	220.00	1	372551.54	7139013.70
122	0.20	4	0.50	1	530.00	3	140.00	0	0.50	1	1.00	2	110.00	0	372561.64	7139222.92
123	0.05	1	0.50	1	90.00	0	400.00	1	0.50	1	1.00	2	130.00	0	372504.29	7139447.74
129	0.05	1	0.50	1	120.00	0	130.00	0	0.50	1	1.00	2	360.00	2	372507.13	7141052.62
169	0.05	1	0.50	1	50.00	1	330.00	2	0.50	1	1.00	1	660.00	3	0.00	0.00
170	0.05	1	0.50	1	330.00	5	330.00	2	0.50	1	1.00	1	740.00	3	0.00	0.00
196	0.05	1	0.50	1	90.00	0	350.00	1	0.50	1	1.00	2	230.00	1	372998.36	7144492.35
197	0.05	1	0.50	1	80.00	1	560.00	3	0.50	1	1.00	1	250.00	1	0.00	0.00
217	0.05	1	0.50	1	110.00	2	200.00	1	0.50	1	1.00	1	140.00	1	0.00	0.00
224	0.05	1	0.50	1	190.00	3	160.00	1	0.50	1	1.00	1	580.00	2	0.00	0.00
225	0.05	1	0.50	1	60.00	1	460.00	2	0.50	1	1.00	1	920.00	4	0.00	0.00
24	0.05	1	0.50	1	140.00	0	420.00	1	0.50	1	1.00	2	470.00	2	371336.57	7139748.29
29	0.05	1	0.50	1	250.00	1	910.00	3	0.50	1	1.00	2	70.00	0	371258.65	7141000.44
340	0.05	1	0.50	1	90.00	1	150.00	1	0.50	1	1.00	1	200.00	1	0.00	0.00
374	0.05	1	0.50	1	610.00	9	240.00	1	1.00	2	1.00	1	310.00	1	0.00	0.00
39	0.05	1	0.50	1	760.00	5	630.00	2	0.50	1	1.00	2	190.00	1	371480.48	7139551.43
40	0.05	1	1.00	2	240.00	1	500.00	1	0.50	1	1.00	2	250.00	1	371548.38	7139750.96
401	0.30	6	0.50	1	280.00	4	550.00	3	2.00	4	1.00	1	460.00	2	0.00	0.00
430	0.05	1	0.50	1	420.00	6	500.00	2	2.00	4	1.00	1	550.00	2	0.00	0.00
44	0.05	1	0.50	1	60.00	0	590.00	2	0.50	1	1.00	2	1030.00	5	371495.22	7140754.24
45	0.05	1	0.50	1	70.00	0	680.00	2	0.50	1	1.00	2	190.00	1	371504.14	7140973.78
502	0.10	2	0.50	1	580.00	8	910.00	4	0.50	1	1.00	1	800.00	3	0.00	0.00
530	0.30	6	0.50	1	480.00	7	3760.00	18	4.00	8	1.00	1	330.00	1	0.00	0.00
56	0.05	1	0.50	1	140.00	0	800.00	2	0.50	1	1.00	2	60.00	0	371752.85	7139243.69
57	0.05	1	0.50	1	770.00	5	270.00	1	0.50	1	1.00	2	480.00	2	371703.80	7139518.85
573	0.05	1	0.50	1	60.00	1	1080.00	5	0.50	1	1.00	1	1260.00	5	0.00	0.00
574	0.05	1	0.50	1	200.00	3	450.00	2	2.00	4	1.00	1	200.00	1	0.00	0.00
575	0.05	1	3.00	6	70.00	1	560.00	3	5.00	10	1.00	1	2360.00	10	0.00	0.00
576	0.20	4	0.50	1	1430.00	21	1080.00	5	1.00	2	1.00	1	680.00	3	0.00	0.00
58	0.05	1	0.50	1	90.00	0	260.00	0	0.50	1	1.00	2	1720.00	9	371763.57	7139799.31
59	0.05	1	0.50	1	220.00	1	290.00	1	0.50	1	1.00	2	230.00	1	371739.42	7139992.19
62	0.05	1	0.50	1	100.00	0	680.00	2	0.50	1	1.00	2	100.00	0	371721.87	7140743.26
63	0.05	1	0.50	1	80.00	0	820.00	3	0.50	1	1.00	2	310.00	1	371752.22	7141020.46
632	0.05	1	0.50	1	110.00	2	350.00	2	0.50	1	1.00	1	1870.00	8	0.00	0.00
633	0.05	1	0.50	1	130.00	2	650.00	3	0.50	1	1.00	1	620.00	3	0.00	0.00
634	0.05	1	2.00	4	210.00	3	1240.00	6	2.00	4	1.00	1	2840.00	12	0.00	0.00

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
74	TO102016	HDIS_74_08	HDIS_74_08	Kevin	2	Steep W, bushes		Damp	B	2.00	1	5.00	1
75	TO102016	HDIS_75_08	HDIS_75_08	Kevin	2	Moderate slope, W		Damp/dry	B	3.00	2	10.00	2
83	TO102016	HDIS_83_08	HDIS_83_08	Tubs	2	Steep	Boulders	Damp	B	1.00	1	5.00	1
95	TO102016	HDIS_95_08	HDIS_95_08	Kevin	3	Moderate slope W		Damp	B	0.50	0	5.00	1
96	TO102016	HDIS_96_08	HDIS_96_08	Kevin	3	Steep W		Damp	B	4.00	2	5.00	1
97	TO102016	HDIS_97_08	HDIS_97_08	Kevin	1	Steep W, boulders		Damp/dry	B	9.00	5	5.00	1
98	TO102016	HDIS_98_08	HDIS_98_08	Kevin	2	Steep N, boulders		Damp/dry	B	27.00	14	5.00	1
306	TO101878	HDIS_306_08	HDIS_306_08	Kevin	4	Flat, bushes		Wet	B	5.00	3	30.00	6
329	TO101878	HDIS_329_08	HDIS_329_08	Kevin	4	Flat	Sample taken 50m W of actual waypoint because of boulders	Damp	B	596.00	304	1370.00	274
212	TO101882	HDIS_212_08	HDIS_212_08	Tubs	2	Moderate	Boulders, vegetation	Damp	B	22.00	11	10.00	2
213	TO101882	HDIS_213_08	HDIS_213_08	Tubs	2	Moderate	Boulders	Damp	B	6.00	3	50.00	10
240	TO101882	HDIS_240_08	HDIS_240_08	Tubs	2	Steep	Scree slope	Damp	B	131.00	67	5.00	1
241	TO101882	HDIS_241_08	HDIS_241_08	Tubs	2	Flat	Boulders, vegetation	Damp	B	19.00	10	30.00	6
242	TO101882	HDIS_242_08	HDIS_242_08	Tubs	2	Moderate	Boulders, vegetation	Damp	B	0.50	0	990.00	198
264	TO101884	HDIS_264_08	HDIS_264_08	Shane	1	Moderate to SE	Overgrown talus (wine phyllite)	Damp	B	6.00	3	5.00	1
265	TO101884	HDIS_265_08	HDIS_265_08	Shane	1	Moderate to SE	Grassy overgrown talus, a lot of wine phyllite in this sample	Damp	B	2.00	1	5.00	1
266	TO101884	HDIS_266_08	HDIS_266_08	Shane	2	Steep talus slope to		Damp	B	11.00	6	10.00	2
267	TO101884	HDIS_267_08	HDIS_267_08	Shane	3	Moderate to SE	Grassy talus slope near ridge top	Damp	B	4.00	2	5.00	1
292	TO101884	HDIS_292_08	HDIS_292_08	Shane	1	Gentle to E		Damp	B	7.00	4	5.00	1
293	TO101884	HDIS_293_08	HDIS_293_08	Shane	1	Moderate to E	Grassy overgrown talus	Damp	B	3.00	2	5.00	1
294	TO101884	HDIS_294_08	HDIS_294_08	Shane	1	Gentle to E	Grassy talus slope	Damp	B	19.00	10	5.00	1
295	TO101884	HDIS_295_08	HDIS_295_08	Shane	3	Gentle to S	Sandy soil with good clay, grassy hillside	Damp	B	5.00	3	5.00	1
320	TO101884	HDIS_320_08	HDIS_320_08	Shane	1	Steep to W and creek	Overgrown talus, light willow cover	Damp	B	10.00	5	5.00	1
321	TO101884	HDIS_321_08	HDIS_321_08	Shane	3	Moderate to W		Damp	B	29.00	15	5.00	1
322	TO101884	HDIS_322_08	HDIS_322_08	Shane	2	Gentle to W	Grassy talus slope	Damp	B	6.00	3	5.00	1
323	TO101884	HDIS_323_08	HDIS_323_08	Shane	1	Moderate to SW	Open hillside	Damp	B	5.00	3	5.00	1
324	TO101884	HDIS_324_08	HDIS_324_08	Archie	2	Mtn. top, gentle E s	Shale in sample, N face cliff, S steep	Damp	B	1.00	1	5.00	1
348	TO101884	HDIS_348_08	HDIS_348_08	Shane	1	Moderate to S	Overgrown talus, moderate willow cover	Damp	B	4.00	2	5.00	1
349	TO101884	HDIS_349_08	HDIS_349_08	Shane	2	Moderate to W	Overgrown talus, light willow cover	Damp	B	3.00	2	5.00	1
350	TO101884	HDIS_350_08	HDIS_350_08	Shane	2	Gentle to W	Overgrown talus	Damp/wet	B	2.00	1	5.00	1
351	TO101884	HDIS_351_08	HDIS_351_08	Shane	1	Moderate to W	Overgrown talus	Damp	B	93.00	47	5.00	1
513	TO101884	HDIS_513_08	HDIS_513_08	Tubs	2	Moderate	Willows	Damp	B	6.00	3	170.00	34
514	TO101884	HDIS_514_08	HDIS_514_08	Tubs	2	Steep	Willows	Damp	B	6.00	3	70.00	14
515	TO101884	HDIS_515_08	HDIS_515_08	Tubs	2	Steep	Cliffs, loose boulders	Damp	B	41.00	21	5.00	1
516	TO101884	HDIS_516_08	HDIS_516_08	Tubs	2	Steep	Boulders	Damp	B	0.50	0	5.00	1
517	TO101884	HDIS_517_08	HDIS_517_08	Tubs	2	Steep	Boulders	Damp	B	52.00	27	5.00	1
518	TO101884	HDIS_518_08	HDIS_518_08	Tubs	2	Very steep	Boulders	Damp	B	29.00	15	5.00	1
519	TO101884	HDIS_519_08	HDIS_519_08	Archie	1	Steep S slope, rock	Shale in sample	Damp	A	1.00	1	5.00	1
521	TO101884	HDIS_521_08	HDIS_521_08	Thomas	2	Steep slope to E, ne		Damp	B	54.00	28	5.00	1
543	TO101884	HDIS_543_08	HDIS_543_08	Tubs	2	Steep	Boulders	Damp	B	9.00	5	5.00	1
544	TO101884	HDIS_544_08	HDIS_544_08	Archie	1	Steep SE slope, boul	Lots of shale in sample	Damp	B	6.00	3	5.00	1
566	TO101884	HDIS_566_08	HDIS_566_08	Tubs	2	Steep	Boulders	Damp	B	23.00	12	5.00	1
567	TO101884	HDIS_567_08	HDIS_567_08	Archie	2	Moderate SW slope, r	Shale in sample	Damp	B	28.00	14	20.00	4

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
74	0.05	1	0.50	1	110.00	0	1040.00	3	0.50	1	1.00	2	240.00	1	372038.00	7138701.69
75	0.05	1	1.00	2	100.00	0	420.00	1	0.50	1	1.00	2	120.00	0	372007.35	7138941.51
83	0.05	1	0.50	1	170.00	1	180.00	0	0.50	1	1.00	2	430.00	2	371999.94	7141000.19
95	0.05	1	0.50	1	2910.00	19	30.00	0	0.50	1	1.00	2	110.00	0	372192.35	7138446.68
96	0.05	1	0.50	1	60.00	0	210.00	0	0.50	1	1.00	2	70.00	0	372204.41	7138729.86
97	0.05	1	0.50	1	160.00	1	50.00	0	0.50	1	1.00	2	60.00	0	372354.68	7139024.67
98	0.30	6	0.50	1	9500.00	63	40.00	0	0.50	1	1.00	2	3300.00	18	372300.34	7139204.90
306	0.20	4	0.50	1	390.00	2	810.00	3	10.00	20	0.50	1	110.00	0	374005.00	7143989.00
329	36.90	738	2.00	4	750.00	5	920.00	3	14.00	28	0.50	1	90.00	0	374264.00	7142803.00
212	0.05	1	0.50	1	140.00	0	2000.00	7	5.00	10	0.50	1	430.00	2	373251.00	7141759.00
213	0.05	1	0.50	1	60.00	0	1030.00	3	7.00	14	0.50	1	320.00	1	373244.00	7142005.00
240	0.30	6	0.50	1	1410.00	9	410.00	1	4.00	8	0.50	1	450.00	2	373571.00	7141604.00
241	0.20	4	0.50	1	570.00	3	500.00	1	15.00	30	0.50	1	170.00	0	373492.00	7141750.00
242	0.30	6	0.50	1	380.00	2	180.00	0	182.00	364	0.50	1	250.00	1	373505.00	7142004.00
264	0.05	1	0.50	1	420.00	2	220.00	0	0.50	1	0.50	1	320.00	1	373750.53	7140502.88
265	0.05	1	0.50	1	190.00	1	360.00	1	0.50	1	0.50	1	670.00	3	373749.17	7140747.96
266	0.05	1	0.50	1	380.00	2	710.00	2	1.00	2	0.50	1	370.00	2	373747.22	7140998.86
267	0.05	1	0.50	1	120.00	0	790.00	2	1.00	2	0.50	1	200.00	1	373750.98	7141252.18
292	0.05	1	0.50	1	290.00	1	140.00	0	1.00	2	0.50	1	1020.00	5	373999.71	7140499.38
293	0.05	1	0.50	1	100.00	0	520.00	1	0.50	1	0.50	1	540.00	3	373999.88	7140748.42
294	0.05	1	0.50	1	410.00	2	670.00	2	0.50	1	0.50	1	490.00	2	373995.75	7140999.07
295	0.05	1	0.50	1	40.00	0	150.00	0	0.50	1	0.50	1	70.00	0	373998.18	7141250.22
320	0.05	1	0.50	1	80.00	0	830.00	3	2.00	4	0.50	1	770.00	4	374249.08	7140501.14
321	0.30	6	0.50	1	590.00	3	1170.00	4	10.00	20	0.50	1	330.00	1	374253.27	7140750.70
322	0.05	1	0.50	1	70.00	0	510.00	1	0.50	1	0.50	1	130.00	0	374253.91	7141005.69
323	0.05	1	0.50	1	140.00	0	370.00	1	0.50	1	0.50	1	120.00	0	374252.49	7141251.90
324	0.05	1	0.50	1	120.00	0	410.00	1	0.50	1	0.50	1	590.00	3	374252.00	7141434.00
348	0.05	1	0.50	1	60.00	0	420.00	1	0.50	1	0.50	1	950.00	5	374504.53	7140256.23
349	0.05	1	0.50	1	120.00	0	840.00	3	0.50	1	0.50	1	650.00	3	374503.83	7140500.41
350	0.05	1	0.50	1	60.00	0	640.00	2	0.50	1	0.50	1	150.00	0	374501.41	7140751.30
351	0.05	1	0.50	1	310.00	2	450.00	1	4.00	8	0.50	1	150.00	0	374498.95	7141006.63
513	0.40	8	4.00	8	390.00	2	350.00	1	7.00	14	2.00	4	200.00	1	375990.00	7138754.00
514	0.20	4	1.00	2	250.00	1	570.00	2	4.00	8	0.50	1	350.00	1	376007.00	7139009.00
515	0.10	2	0.50	1	200.00	1	60.00	0	2.00	4	0.50	1	110.00	0	376136.00	7139265.00
516	0.05	1	0.50	1	150.00	1	350.00	1	0.50	1	0.50	1	1360.00	7	375996.00	7139498.00
517	0.10	2	0.50	1	160.00	1	130.00	0	1.00	2	0.50	1	220.00	1	376013.00	7139766.00
518	0.05	1	0.50	1	200.00	1	30.00	0	0.50	1	0.50	1	150.00	0	376075.00	7139981.00
519	0.05	1	0.50	1	120.00	2	910.00	7	0.50	1	0.50	1	960.00	6	375966.31	7140199.80
521	0.10	2	0.50	1	770.00	5	580.00	2	0.50	1	0.50	1	320.00	1	376048.71	7140755.07
543	0.05	1	0.50	1	160.00	1	310.00	1	1.00	2	0.50	1	170.00	0	376257.00	7140006.00
544	0.05	1	0.50	1	90.00	0	3600.00	13	2.00	4	0.50	1	970.00	5	376240.44	7140227.23
566	0.05	1	0.50	1	170.00	1	70.00	0	0.50	1	0.50	1	80.00	0	376554.00	7140116.00
567	0.05	1	0.50	1	90.00	0	7980.00	29	14.00	28	0.50	1	660.00	3	376540.64	7140274.89

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
588	TO101884	HDIS_588_08	HDIS_588_08	Tubs	2	Steep	Boulders	Damp	B	11.00	6	5.00	1
589	TO101884	HDIS_589_08	HDIS_589_08	Archie	1	Top of mtn, steep S	Shale and sand in sample	Damp	B	1.00	1	5.00	1
608	TO101884	HDIS_608_08	HDIS_608_08	Tubs	2	Steep	Boulders	Damp	B	2.00	1	5.00	1
111	TO102012	HDIS_111_08	HDIS_111_08	Thomas	3	Moderate slope to NW		Damp	B	59.00	30	250.00	50
112	TO102012	HDIS_112_08	HDIS_112_08	Thomas	3	Moderate slope to NW		Damp	B	69.00	35	120.00	24
113	TO102012	HDIS_113_08	HDIS_113_08	Thomas	3	Moderate slope to W		Damp	B	28.00	14	40.00	8
114	TO102012	HDIS_114_08	HDIS_114_08	Thomas	2	Moderate slope to W		Damp	B	7.00	4	30.00	6
115	TO102012	HDIS_115_08	HDIS_115_08	Thomas	3	Steep slope to W		Damp	B	21.00	11	20.00	4
116	TO102012	HDIS_116_08	HDIS_116_08	Thomas	2	Steep slope to NW		Damp	B	8.00	4	5.00	1
135	TO102012	HDIS_135_08	HDIS_135_08	Thomas	2	Steep slope to W		Damp	B	482.00	246	50.00	10
136	TO102012	HDIS_136_08	HDIS_136_08	Thomas	3	Steep slope to SW		Damp	B	138.00	70	20.00	4
137	TO102012	HDIS_137_08	HDIS_137_08	Thomas	2	Moderate slope to W		Damp	B	62.00	32	90.00	18
138	TO102012	HDIS_138_08	HDIS_138_08	Thomas	3	Gentle slope to S		Damp	B	41.00	21	40.00	8
139	TO102012	HDIS_139_08	HDIS_139_08	Archie	2	Steep E slope	Sample below outcrop, shale and debris in sample, below rock face	Wet	B	7.00	4	20.00	4
140	TO102012	HDIS_140_08	HDIS_140_08	Archie	2	Steep E and cliff N	Shale and debris in sample, below OC, boulder field	Damp	B	13.00	7	5.00	1
141	TO102012	HDIS_141_08	HDIS_141_08	Tubs	2	Steep	Cliffs, boulders	Damp	B	0.50	0	5.00	1
162	TO102012	HDIS_162_08	HDIS_162_08	Thomas	3	Flat, on ridge		Damp	B	3.00	2	5.00	1
163	TO102012	HDIS_163_08	HDIS_163_08	Thomas	2	Flat, on ridge		Damp	B	91.00	46	770.00	154
164	TO102012	HDIS_164_08	HDIS_164_08	Archie	3	Plateau, gentle NW s	Bottom od outcrops, lolts of boulders, veg visible, sandy texture to sample	Wet	B	22.00	11	60.00	12
165	TO102012	HDIS_165_08	HDIS_165_08	Archie	2	Valley floor, gentle	Below rock field, lots of sand and gravel in sample	Damp	B	574.00	293	20.00	4
166	TO102012	HDIS_166_08	HDIS_166_08	Archie	4	Flat, beside stream	In a valley, very good smaple, grass and moss present	Damp	B	106.00	54	20.00	4
167	TO102012	HDIS_167_08	HDIS_167_08	Tubs	2	Moderate	Willows, boulders	Damp	B	12.00	6	10.00	2
168	TO102012	HDIS_168_08	HDIS_168_08	Tubs	3	Flat	Willows, boulders	Damp	B	7.00	4	40.00	8
190	TO102012	HDIS_190_08	HDIS_190_08	Thomas	2	Moderate slope to NW		Damp	B	704.00	359	150.00	30
191	TO102012	HDIS_191_08	HDIS_191_08	Archie	2	Moderate NW slope	Shale in sample, avalanche area, boulder field	Damp	B	3.00	2	60.00	12
192	TO102012	HDIS_192_08	HDIS_192_08	Archie	2	Steep W slope	Sample taken below OC, shale and sandy texture to sample	Damp	B	3.00	2	5.00	1
193	TO102012	HDIS_193_08	HDIS_193_08	Archie	2	Mtn. ridge, W cliff,	Boulders and outcrops, veg visible	Damp	B	3.00	2	5.00	1
194	TO102012	HDIS_194_08	HDIS_194_08	Tubs	1	Moderate	Boulder city, cliffs	Damp	A	0.50	1	5.00	1
195	TO102012	HDIS_195_08	HDIS_195_08	Tubs	3	Flat	Willows, boulders	Damp	B	14.00	7	150.00	30
216	TO102012	HDIS_216_08	HDIS_216_08	Tubs	1	Steep	Boulders	Damp	B	54.00	28	50.00	10
218	TO102012	HDIS_218_08	HDIS_218_08	Archie	2	Steep W slope	Boulder field, veg visible	Damp	B	3.00	2	10.00	2
219	TO102012	HDIS_219_08	HDIS_219_08	Archie	2	Moderate	Lots of shale, rock field	Damp	B	5.00	3	10.00	2
220	TO102012	HDIS_220_08	HDIS_220_08	Kevin	1	Steep, cliffs NE		Dry	B	5.00	3	190.00	38
221	TO102012	HDIS_221_08	HDIS_221_08	Tubs	3	Flat	Boulder field	Damp	B	268.00	137	10.00	2
222	TO102012	HDIS_222_08	HDIS_222_08	Tubs	3	Flat	Willows	Damp	B	8.00	4	70.00	14
223	TO102012	HDIS_223_08	HDIS_223_08	Tubs	2	Flat	Willows, boulders	Damp	B	3.00	2	10.00	2
245	TO102012	HDIS_245_08	HDIS_245_08	Tubs	2	Steep	Boulders	Damp	B	8.00	4	30.00	6
246	TO102012	HDIS_246_08	HDIS_246_08	Archie	2	Steep E slope, cliff	Lots of shale in sample, rocks everywhere	Damp	B	4.00	2	5.00	1
247	TO102012	HDIS_247_08	HDIS_247_08	Archie	2	Moderate NW slope, c	Lots of shale in sample, rocks everywhere	Damp	B	3.00	2	20.00	4
248	TO102012	HDIS_248_08	HDIS_248_08	Kevin	3	Steep NE		Dry	B	506.00	258	60.00	12
249	TO102012	HDIS_249_08	HDIS_249_08	Kevin	2	Gentle slope NE, bou		Damp/dry	B	75.00	38	50.00	10
250	TO102012	HDIS_250_08	HDIS_250_08	Tubs	3	Moderate	Willows, boulders	Damp	B	122.00	62	20.00	4

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
588	0.05	1	0.50	1	170.00	1	1040.00	3	2.00	4	0.50	1	180.00	1	376759.00	7140253.00
589	0.05	1	0.50	1	150.00	1	660.00	2	0.50	1	0.50	1	850.00	4	376731.10	7140535.91
608	0.05	1	0.50	1	50.00	0	310.00	1	1.00	2	0.50	1	2000.00	11	377003.00	7140509.00
111	3.90	78	0.50	1	790.00	5	5510.00	20	194.00	388	0.50	1	5960.00	33	372324.68	7142520.88
112	0.40	8	0.50	1	520.00	3	1570.00	5	15.00	30	0.50	1	1180.00	6	372240.26	7142718.25
113	0.30	6	0.50	1	160.00	1	1330.00	4	11.00	22	0.50	1	940.00	5	372223.05	7142981.56
114	0.30	6	0.50	1	250.00	1	1130.00	4	24.00	48	0.50	1	1350.00	7	372243.88	7143233.78
115	0.10	2	0.50	1	170.00	1	810.00	3	2.00	4	0.50	1	560.00	3	372266.45	7143500.77
116	0.05	1	0.50	1	150.00	1	80.00	0	0.50	1	0.50	1	320.00	1	372299.01	7143754.76
135	7.50	150	0.50	1	260.00	1	1220.00	4	10.00	20	0.50	1	3900.00	21	372469.11	7142550.73
136	0.50	10	0.50	1	160.00	1	7280.00	26	21.00	42	0.50	1	4730.00	26	372470.58	7142772.42
137	0.30	6	0.50	1	120.00	0	3300.00	12	83.00	166	0.50	1	3000.00	16	372495.22	7142991.26
138	0.10	2	0.50	1	50.00	0	620.00	2	1.00	2	0.50	1	710.00	3	372512.88	7143203.14
139	0.05	1	0.50	1	270.00	1	860.00	3	1.00	2	0.50	1	920.00	5	372521.55	7143493.03
140	0.05	1	0.50	1	250.00	1	590.00	2	0.50	1	0.50	1	170.00	0	372512.68	7143742.81
141	0.05	1	0.50	1	170.00	1	770.00	2	0.50	1	0.50	1	1190.00	6	372504.04	7144024.40
162	0.05	1	0.50	1	110.00	0	1730.00	6	2.00	4	0.50	1	1780.00	9	372859.43	7142689.65
163	14.00	280	1.00	2	310.00	2	780.00	2	205.00	410	0.50	1	1950.00	10	372776.51	7143029.91
164	1.20	24	0.50	1	1180.00	7	2650.00	9	71.00	142	0.50	1	550.00	3	372761.75	7143324.14
165	5.30	106	0.50	1	490.00	3	4150.00	15	80.00	160	0.50	1	2590.00	14	372755.18	7143502.84
166	2.30	46	0.50	1	290.00	1	3690.00	13	13.00	26	0.50	1	1310.00	7	372748.99	7143726.82
167	0.40	8	0.50	1	730.00	4	460.00	1	3.00	6	0.50	1	150.00	0	372755.54	7143995.20
168	0.30	6	1.00	2	520.00	3	540.00	2	6.00	12	0.50	1	170.00	0	372752.68	7144252.08
190	0.80	16	0.50	1	470.00	3	7380.00	27	107.00	214	0.50	1	390.00	2	373059.35	7142933.82
191	1.80	36	0.50	1	160.00	1	3960.00	14	79.00	158	0.50	1	870.00	4	372968.06	7143229.40
192	0.05	1	0.50	1	360.00	2	890.00	3	0.50	1	0.50	1	860.00	4	372964.92	7143501.63
193	0.05	1	0.50	1	40.00	0	640.00	2	0.50	1	0.50	1	260.00	1	373089.69	7143659.42
194	0.05	1	2.00	4	50.00	1	440.00	3	0.50	1	0.50	1	950.00	6	372991.01	7144056.48
195	0.50	10	2.00	4	730.00	4	1100.00	4	71.00	142	1.00	2	290.00	1	373002.05	7144245.91
216	0.30	6	0.50	1	260.00	1	770.00	2	10.00	20	0.50	1	350.00	1	373242.68	7142766.29
218	0.05	1	0.50	1	180.00	1	1530.00	5	3.00	6	0.50	1	2940.00	16	373259.65	7143263.11
219	0.20	4	0.50	1	200.00	1	3590.00	13	3.00	6	0.50	1	850.00	4	373221.12	7143477.24
220	0.10	2	3.00	6	160.00	1	1850.00	6	32.00	64	0.50	1	650.00	3	373278.27	7143688.78
221	3.00	60	0.50	1	1130.00	7	390.00	1	4.00	8	0.50	1	190.00	1	373264.80	7144022.38
222	0.50	10	2.00	4	770.00	5	1150.00	4	22.00	44	1.00	2	300.00	1	373199.81	7144253.29
223	0.10	2	0.50	1	570.00	3	500.00	1	1.00	2	0.50	1	460.00	2	373243.36	7144504.80
245	0.30	6	0.50	1	220.00	1	590.00	2	4.00	8	0.50	1	200.00	1	373488.77	7142765.15
246	0.05	1	0.50	1	250.00	1	2710.00	10	0.50	1	0.50	1	280.00	1	373486.77	7142990.15
247	0.05	1	0.50	1	70.00	0	2190.00	8	5.00	10	0.50	1	5570.00	30	373369.29	7143233.82
248	1.30	26	0.50	1	260.00	1	3520.00	13	37.00	74	0.50	1	1450.00	8	373448.76	7143461.70
249	0.40	8	0.50	1	480.00	3	430.00	1	6.00	12	0.50	1	640.00	3	373448.50	7143754.96
250	3.80	76	0.50	1	180.00	1	1440.00	5	12.00	24	0.50	1	870.00	4	373500.23	7144003.60

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
251	TO102012	HDIS_251_08	HDIS_251_08	Tubs	3	Flat	Willows, boulders	Damp	B	147.00	75	10.00	2
252	TO102012	HDIS_252_08	HDIS_252_08	Kevin	3	Flat, swampy, bushes	Very deep horizon A here	Wet	A	1.00	1	10.00	2
273	TO102012	HDIS_273_08	HDIS_273_08	Tubs	2	Steep	Boulders	Damp	B	20.00	10	20.00	4
274	TO102012	HDIS_274_08	HDIS_274_08	Tubs	2	Steep	Cliffs, boulders	Damp	B	33.00	17	470.00	94
276	TO102012	HDIS_276_08	HDIS_276_08	Tubs	2	Steep	Cliffs, boulders	Damp	B	201.00	103	20.00	4
277	TO102012	HDIS_277_08	HDIS_277_08	Tubs	1	Steep	Boulder field	Damp	B	67.00	34	40.00	8
278	TO102012	HDIS_278_08	HDIS_278_08	Tubs	2	Moderate	Willows, boulders	Damp	B	146.00	74	30.00	6
279	TO102012	HDIS_279_08	HDIS_279_08	Kevin	4	Flat, swampy		Damp/wet	B	4.00	2	30.00	6
50	TO102012	HDIS_50_08	HDIS_50_08	Kevin	3	Steep W, boulders		Damp	B	167.00	85	50.00	10
51	TO102012	HDIS_51_08	HDIS_51_08	Kevin	3	Steep W, small bould		Damp	B	42.00	21	30.00	6
52	TO102012	HDIS_52_08	HDIS_52_08	Kevin	2	Steep NW. boulders		Damp	B	7.00	4	5.00	1
53	TO102012	HDIS_53_08	HDIS_53_08	Kevin	3	Moderate slope NW		Damp	A	0.50	1	5.00	1
54	TO102012	HDIS_54_08	HDIS_54_08	Kevin	4	Gentle slope NW, bou		Damp	B	2.00	1	10.00	2
67	TO102012	HDIS_67_08	HDIS_67_08	Kevin	2	Moderate slope SW		Damp	B	10.00	5	40.00	8
68	TO102012	HDIS_68_08	HDIS_68_08	Kevin	3	Moderate slope SW		Damp	B	2.00	1	5.00	1
69	TO102012	HDIS_69_08	HDIS_69_08	Kevin	2	Steep NE		Damp	B	214.00	109	5.00	1
70	TO102012	HDIS_70_08	HDIS_70_08	Kevin	2	Steep NE		Damp	B	15.00	8	5.00	1
71	TO102012	HDIS_71_08	HDIS_71_08	Kevin	2	Flat, ridge		Damp	B	2.00	1	10.00	2
72	TO102012	HDIS_72_08	HDIS_72_08	Kevin	2	Moderate slope N		Damp	B	3.00	2	50.00	10
73	TO102012	HDIS_73_08	HDIS_73_08	Kevin	4	Flat, base of mounta		Damp	B	25.00	13	240.00	48
89	TO102012	HDIS_89_08	HDIS_89_08	Kevin	2	Steep N		Damp	B	205.00	105	10.00	2
90	TO102012	HDIS_90_08	HDIS_90_08	Kevin	2	Steep NE		Damp	B	30.00	15	30.00	6
352	TO101884	HDIS_352_08	HDIS_352_08	Shane	2	Moderate to SW	Open hillside	Damp	B	8.00	4	5.00	1
353	TO101884	HDIS_353_08	HDIS_353_08	Archie	1	Steep slope S, N cli	Grass and moss covering ground, poor sample, shale in sample	Damp	A	2.00	3	5.00	1
360	TO101884	HDIS_360_08	HDIS_360_08	Kevin	4	Flat, clear area		Damp	B	22.00	11	10.00	2
361	TO101884	HDIS_361_08	HDIS_361_08	Kevin	4	Flat. Swampy, clear		Wet	B	2.00	1	40.00	8
362	TO101884	HDIS_362_08	HDIS_362_08	Kevin	4	Gentle slope N, bush		Damp	B	4.00	2	40.00	8
375	TO101884	HDIS_375_08	HDIS_375_08	Aiden	3	Moderate slope facin	Clay	Moist	B	0.50	0	5.00	1
376	TO101884	HDIS_376_08	HDIS_376_08	Aiden	3	Moderate slope facin	Soil with minor grit	Moist		3.00	4	5.00	1
377	TO101884	HDIS_377_08	HDIS_377_08	Aiden	3	Moderate slope facin		Moist	B	12.00	6	5.00	1
378	TO101884	HDIS_378_08	HDIS_378_08	Aiden	2	Steep slope, hummock	Gritty clay	Moist	B	4.00	2	5.00	1
379	TO101884	HDIS_379_08	HDIS_379_08	Aiden	2	Moderate slope facin	Boulders, sample slight mixed A/B, mostly B	Moist	B	0.50	0	5.00	1
380	TO101884	HDIS_380_08	HDIS_380_08	Thomas	1	Moderate slope to S		Damp	B	2.00	1	5.00	1
382	TO101884	HDIS_382_08	HDIS_382_08	Archie	1	Moderate W slope	Shale in sample, rock field	Damp	B	9.00	5	5.00	1
388	TO101884	HDIS_388_08	HDIS_388_08	Kevin	3	Flat, bushes, creek		Damp	B	79.00	40	160.00	32
389	TO101884	HDIS_389_08	HDIS_389_08	Kevin	4	Gentle slope N, bush		Damp	B	6.00	3	180.00	36
390	TO101884	HDIS_390_08	HDIS_390_08	Kevin	4	Flat, swampy		Damp	B	5.00	3	5.00	1
391	TO101884	HDIS_391_08	HDIS_391_08	Kevin	4	Flat, swampy, bushes		Wet	B	11.00	6	270.00	54
402	TO101884	HDIS_402_08	HDIS_402_08	Aiden	3	Moderate slope facin	Clay with some grit	Moist	B	1.00	1	5.00	1
403	TO101884	HDIS_403_08	HDIS_403_08	Aiden	1	Steep slope facing E	Stony soil, shallow sample	Moist	B	8.00	4	5.00	1
404	TO101884	HDIS_404_08	HDIS_404_08	Aiden	3	Moderate facing E in	Clay with some grit	Moist	B	6.00	3	5.00	1
406	TO101884	HDIS_406_08	HDIS_406_08	Aiden	1	Steep hill facing SE	Gritty clay	Moist	B	3.00	2	5.00	1
407	TO101884	HDIS_407_08	HDIS_407_08	Thomas	2	Moderate slope to SW		Damp	B	3.00	2	5.00	1
408	TO101884	HDIS_408_08	HDIS_408_08	Archie	2	Ledge, steep	Shale in sample	Damp	B	192.00	98	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
251	3.10	62	0.50	1	540.00	3	9050.00	33	15.00	30	0.50	1	200.00	1	373495.01	7144247.31
252	0.05	1	2.00	4	2560.00	51	700.00	5	11.00	22	0.50	1	140.00	1	373514.48	7144487.40
273	0.20	4	0.50	1	580.00	3	230.00	0	1.00	2	0.50	1	210.00	1	373748.75	7142759.50
274	0.30	6	0.50	1	170.00	1	10.00	0	0.50	1	0.50	1	130.00	0	373737.70	7142846.20
276	0.90	18	0.50	1	400.00	2	1290.00	4	11.00	22	0.50	1	1280.00	7	373728.20	7143495.87
277	0.40	8	0.50	1	600.00	4	480.00	1	25.00	50	0.50	1	1640.00	9	373750.61	7143777.29
278	1.40	28	0.50	1	650.00	4	950.00	3	36.00	72	0.50	1	1430.00	7	373743.70	7144000.54
279	0.30	6	1.00	2	630.00	4	2850.00	10	12.00	24	0.50	1	150.00	0	373664.63	7144203.47
50	0.70	14	0.50	1	130.00	0	740.00	2	8.00	16	0.50	1	590.00	3	371549.07	7142221.59
51	0.20	4	0.50	1	1010.00	6	170.00	0	5.00	10	0.50	1	160.00	0	371523.77	7142499.78
52	0.05	1	0.50	1	650.00	4	280.00	1	0.50	1	0.50	1	180.00	1	371513.42	7142734.86
53	0.05	1	0.50	1	80.00	1	330.00	3	0.50	1	0.50	1	580.00	4	371495.82	7142992.83
54	0.05	1	1.00	2	500.00	3	850.00	3	1.00	2	0.50	1	380.00	2	371486.37	7143243.66
67	0.05	1	0.50	1	150.00	1	390.00	1	6.00	12	0.50	1	560.00	3	371783.04	7142039.59
68	0.05	1	0.50	1	230.00	1	150.00	0	0.50	1	0.50	1	620.00	3	371758.92	7142264.29
69	0.10	2	0.50	1	310.00	2	2820.00	10	4.00	8	0.50	1	1120.00	6	371692.01	7142540.37
70	0.05	1	0.50	1	100.00	0	290.00	1	0.50	1	0.50	1	420.00	2	371802.20	7142722.07
71	0.05	1	0.50	1	190.00	1	530.00	1	2.00	4	0.50	1	670.00	3	371738.54	7142964.31
72	0.20	4	2.00	4	4160.00	27	650.00	2	7.00	14	0.50	1	680.00	3	371792.75	7143243.25
73	0.60	12	1.00	2	550.00	3	3100.00	11	59.00	118	0.50	1	380.00	2	371747.91	7143501.22
89	0.20	4	0.50	1	420.00	2	430.00	1	4.00	8	0.50	1	350.00	1	371932.69	7142423.60
90	0.05	1	0.50	1	480.00	3	750.00	2	9.00	18	0.50	1	880.00	4	371916.46	7142770.72
352	0.05	1	0.50	1	20.00	0	120.00	0	0.50	1	0.50	1	260.00	1	374504.37	7141249.54
353	0.05	1	0.50	1	90.00	1	580.00	5	0.50	1	0.50	1	160.00	1	374482.00	7141408.00
360	0.50	10	0.50	1	170.00	1	1130.00	4	4.00	8	0.50	1	180.00	1	374500.66	7143243.41
361	1.60	32	1.00	2	740.00	4	1350.00	5	43.00	86	0.50	1	110.00	0	374495.87	7143487.94
362	0.20	4	2.00	4	540.00	3	90.00	0	4.00	8	0.50	1	190.00	1	374535.01	7143730.69
375	0.05	1	0.50	1	130.00	0	440.00	1	0.50	1	0.50	1	830.00	4	374744.05	7140015.64
376	0.05	1	0.50	1	120.00	2	850.00	4	2.00	4	0.50	1	580.00	2	374751.55	7140272.99
377	0.05	1	0.50	1	60.00	0	780.00	2	3.00	6	0.50	1	560.00	3	374749.67	7140509.41
378	0.05	1	0.50	1	80.00	0	720.00	2	0.50	1	0.50	1	1540.00	8	374742.77	7140739.77
379	0.05	1	0.50	1	40.00	0	250.00	0	0.50	1	0.50	1	930.00	5	374746.35	7141008.56
380	0.05	1	1.00	2	250.00	1	750.00	2	6.00	12	0.50	1	1260.00	7	374748.76	7141261.66
382	0.05	1	0.50	1	330.00	2	770.00	2	1.00	2	0.50	1	970.00	5	374741.00	7141784.00
388	0.50	10	3.00	6	950.00	6	3680.00	13	31.00	62	0.50	1	580.00	3	374761.36	7143253.08
389	0.10	2	3.00	6	170.00	1	3040.00	11	25.00	50	0.50	1	300.00	1	374750.35	7143504.81
390	0.10	2	0.50	1	170.00	1	270.00	1	4.00	8	0.50	1	80.00	0	374757.74	7143746.48
391	1.10	22	7.00	14	3550.00	23	1770.00	6	89.00	178	1.00	2	600.00	3	374750.42	7144000.90
402	0.05	1	0.50	1	30.00	0	330.00	1	0.50	1	0.50	1	130.00	0	374993.77	7139998.20
403	0.05	1	0.50	1	200.00	1	380.00	1	4.00	8	0.50	1	200.00	1	375002.09	7140263.74
404	0.05	1	0.50	1	110.00	0	480.00	1	0.50	1	0.50	1	860.00	4	375007.83	7140513.27
406	0.05	1	0.50	1	120.00	0	480.00	1	2.00	4	0.50	1	1720.00	9	375019.65	7141001.68
407	0.05	1	0.50	1	120.00	0	930.00	3	0.50	1	0.50	1	1700.00	9	374999.30	7141247.27
408	0.20	4	0.50	1	430.00	2	730.00	2	4.00	8	0.50	1	220.00	1	375067.00	7141440.00

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
409	TO101884	HDIS_409_08	HDIS_409_08	Archie	2	Flat	Shale in sample, shale hill and boulder field	Damp	B	9.00	5	5.00	1
410	TO101884	HDIS_410_08	HDIS_410_08	Archie	3	Moderate S slope	Grass and moss visible, near a stream, not too much sand or pebbles in sample	Wet	B	9.00	5	5.00	1
415	TO101884	HDIS_415_08	HDIS_415_08	Kevin	3	Flat, boulders, base		Damp	B	10.00	5	630.00	126
416	TO101884	HDIS_416_08	HDIS_416_08	Kevin	4	Flat, bushes		Damp	B	51.00	26	190.00	38
417	TO101884	HDIS_417_08	HDIS_417_08	Kevin	4	Flat, bushes		Damp	B	7.00	4	50.00	10
418	TO101884	HDIS_418_08	HDIS_418_08	Kevin	3	Flat, bushes		Wet	B	9.00	5	220.00	44
431	TO101884	HDIS_431_08	HDIS_431_08	Aiden	2	Moderate slope facin		Moist	B	20.00	10	5.00	1
432	TO101884	HDIS_432_08	HDIS_432_08	Aiden	3	Steep hillside facin	Clay	Moist	B	0.50	0	5.00	1
433	TO101884	HDIS_433_08	HDIS_433_08	Aiden	3	Steep slope facing S	Clay	Moist	B	10.00	5	5.00	1
434	TO101884	HDIS_434_08	HDIS_434_08	Aiden	2	Steep hillside facin	Gritty clay	Moist	B	11.00	6	5.00	1
435	TO101884	HDIS_435_08	HDIS_435_08	Aiden	2	Steep scree slope fa	Gritty clay	Moist	B	7.00	4	5.00	1
436	TO101884	HDIS_436_08	HDIS_436_08	Thomas	3	Flat, on ridge		Damp	B	2.00	1	5.00	1
438	TO101884	HDIS_438_08	HDIS_438_08	Archie	1	Moderate W slope	Sample mostly sand and shale, boulder field	Damp	B	163.00	83	5.00	1
439	TO101884	HDIS_439_08	HDIS_439_08	Archie	3	Moderate S slope	A little bit of shale in sample	Damp	B	26.00	13	10.00	2
445	TO101884	HDIS_445_08	HDIS_445_08	Kevin	4	Flat, bushes		Damp	B	36.00	18	690.00	138
446	TO101884	HDIS_446_08	HDIS_446_08	Kevin	4	Flat, bushes		Damp	B	5.00	3	20.00	4
447	TO101884	HDIS_447_08	HDIS_447_08	Kevin	4	Gentle slope N, bush		Damp	B	9.00	5	100.00	20
448	TO101884	HDIS_448_08	HDIS_448_08	Kevin	3	Flat, right next to		Damp	B	23.00	12	30.00	6
466	TO101884	HDIS_466_08	HDIS_466_08	Thomas	2	Gentle slope to S, o		Damp	B	11.00	6	5.00	1
468	TO101884	HDIS_468_08	HDIS_468_08	Archie	1	Moderate W slope	Bottom of outcrop, shale in sample	Damp	A	6.00	8	5.00	1
469	TO101884	HDIS_469_08	HDIS_469_08	Archie	2	Steep W slope	Shale in sample, grass and moss visible, sandy texture	Damp	B	57.00	29	10.00	2
475	TO101884	HDIS_475_08	HDIS_475_08	Kevin	4	Flat, bushes		Damp/wet	B	14.00	7	630.00	126
476	TO101884	HDIS_476_08	HDIS_476_08	Kevin	3	Flat, right next to	Could not cross river so sample 50m short	Damp	B	10.00	5	120.00	24
477	TO101884	HDIS_477_08	HDIS_477_08	Kevin	3	Flat, swampy, bushes		Damp	B	8.00	4	110.00	22
487	TO101884	HDIS_487_08	HDIS_487_08	Archie	2	Moderate	Rocks and shale	Damp	B	6.00	3	150.00	30
488	TO101884	HDIS_488_08	HDIS_488_08	Archie	2	Moderate to steep W	Sandy texture to sample	Damp	B	10.00	5	20.00	4
489	TO101884	HDIS_489_08	HDIS_489_08	Archie	3	Gentle		Wet	B	5.00	3	5.00	1
490	TO101884	HDIS_490_08	HDIS_490_08	Archie	1	Steep SW slope, rock	Shale in sample	Damp	A	40.00	51	5.00	1
491	TO101884	HDIS_491_08	HDIS_491_08	Archie	1	Steep S slope, rock	Mostly dirt in sample	Damp	A	1.00	1	5.00	1
493	TO101884	HDIS_493_08	HDIS_493_08	Thomas	1	Steep slope to E, ne	Very rocky sample	Damp	B	18.00	9	5.00	1
494	TO101884	HDIS_494_08	HDIS_494_08	Thomas	2	Moderate slope to E		Damp	B	1.00	1	5.00	1
495	TO101884	HDIS_495_08	HDIS_495_08	Thomas	2	Moderate slope to E		Damp	B	3.00	2	5.00	1
504	TO101884	HDIS_504_08	HDIS_504_08	Kevin	4	Gentle slope N, bush		Damp	B	29.00	15	70.00	14
91	TO102012	HDIS_91_08	HDIS_91_08	Kevin	2	Moderate slope NE		Damp	B	9.00	5	20.00	4
92	TO102012	HDIS_92_08	HDIS_92_08	Kevin	4	Flat, right next to		Damp	B	39.00	20	90.00	18
93	TO102012	HDIS_93_08	HDIS_93_08	Thomas	3	Moderate slope to W		Damp	B	6.00	3	20.00	4
94	TO102012	HDIS_94_08	HDIS_94_08	Thomas	1	Steep slope to NW		Damp	A	0.50	1	5.00	1
99	TO102013	HDIS_99_08	HDIS_99_08	Thomas	1	Moderate to W	Very rocky sample	Damp	B	4.00	2	10.00	2
100	TO102013	HDIS_100_08	HDIS_100_08	Thomas	3	Flat, on a small rid		Damp	B	3.00	2	20.00	4
101	TO102013	HDIS_101_08	HDIS_101_08	Thomas	3	Steep slope to W		Damp	B	5.00	3	20.00	4
102	TO102013	HDIS_102_08	HDIS_102_08	Thomas	2	Steep to W		Damp	B	3.00	2	10.00	2
103	TO102013	HDIS_103_08	HDIS_103_08	Thomas	1	Steep to W		Damp	B	5.00	3	10.00	2
117	TO102013	HDIS_117_08	HDIS_117_08	Kevin	3	Moderate slope NW, r		Damp	B	1.00	1	5.00	1
118	TO102013	HDIS_118_08	HDIS_118_08	Kevin	3	Steep W		Damp	B	5.00	3	10.00	2

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
409	0.05	1	0.50	1	370.00	2	2650.00	9	3.00	6	0.50	1	1280.00	7	375030.00	7141838.00
410	0.05	1	0.50	1	200.00	1	2250.00	8	3.00	6	0.50	1	1430.00	7	374999.00	7141988.00
415	0.90	18	12.00	24	2370.00	15	3650.00	13	148.00	296	0.50	1	220.00	1	375013.67	7143231.59
416	1.60	32	0.50	1	200.00	1	1370.00	5	19.00	38	0.50	1	240.00	1	374996.32	7143500.77
417	0.90	18	0.50	1	530.00	3	1050.00	3	20.00	40	0.50	1	130.00	0	375003.31	7143747.99
418	0.60	12	4.00	8	720.00	4	910.00	3	46.00	92	2.00	4	300.00	1	374996.34	7143999.30
431	0.10	2	0.50	1	180.00	1	220.00	0	2.00	4	0.50	1	340.00	1	375243.63	7139968.86
432	0.05	1	1.00	2	160.00	1	700.00	2	0.50	1	0.50	1	480.00	2	375253.18	7140255.16
433	0.10	2	0.50	1	450.00	3	280.00	1	2.00	4	0.50	1	90.00	0	375246.21	7140490.05
434	0.05	1	0.50	1	180.00	1	790.00	2	2.00	4	0.50	1	690.00	3	375246.46	7140758.57
435	0.05	1	0.50	1	170.00	1	1280.00	4	2.00	4	0.50	1	310.00	1	375272.55	7140998.87
436	0.05	1	0.50	1	110.00	0	1610.00	5	1.00	2	0.50	1	310.00	1	375174.46	7141256.22
438	0.10	2	0.50	1	370.00	2	620.00	2	5.00	10	0.50	1	590.00	3	375242.00	7141801.00
439	0.20	4	0.50	1	280.00	1	1810.00	6	8.00	16	0.50	1	580.00	3	375252.00	7141999.00
445	1.10	22	4.00	8	500.00	3	3080.00	11	71.00	142	0.50	1	690.00	3	375241.32	7143499.57
446	0.30	6	0.50	1	650.00	4	70.00	0	2.00	4	0.50	1	270.00	1	375191.12	7143758.34
447	1.00	20	1.00	2	230.00	1	8160.00	30	67.00	134	0.50	1	420.00	2	375260.52	7143993.07
448	0.20	4	0.50	1	760.00	5	380.00	1	11.00	22	0.50	1	430.00	2	375234.27	7144236.60
466	0.05	1	0.50	1	60.00	0	350.00	1	0.50	1	0.50	1	180.00	1	375533.91	7141237.47
468	0.05	1	0.50	1	5710.00	114	510.00	4	2.00	4	0.50	1	500.00	3	375488.00	7141789.00
469	0.10	2	0.50	1	250.00	1	1750.00	6	7.00	14	0.50	1	1070.00	5	375499.00	7141993.00
475	0.90	18	10.00	20	930.00	6	3150.00	11	107.00	214	2.00	4	420.00	2	375498.81	7143500.09
476	0.40	8	0.50	1	790.00	5	1920.00	7	41.00	82	0.50	1	170.00	0	375456.40	7143772.14
477	0.30	6	2.00	4	1470.00	9	750.00	2	79.00	158	0.50	1	380.00	2	375503.29	7144005.57
487	0.05	1	11.00	22	350.00	2	260.00	0	4.00	8	0.50	1	480.00	2	375753.39	7139245.61
488	0.05	1	0.50	1	210.00	1	970.00	3	4.00	8	0.50	1	370.00	2	375797.77	7139506.19
489	0.05	1	0.50	1	60.00	0	460.00	1	0.50	1	0.50	1	280.00	1	375792.95	7139736.31
490	0.05	1	0.50	1	170.00	3	240.00	2	2.00	4	0.50	1	90.00	1	375732.73	7139931.49
491	0.05	1	0.50	1	40.00	0	460.00	4	2.00	4	0.50	1	2240.00	14	375769.06	7140227.04
493	0.05	1	0.50	1	220.00	1	240.00	0	0.50	1	0.50	1	290.00	1	375796.08	7140843.48
494	0.05	1	0.50	1	70.00	0	600.00	2	0.50	1	0.50	1	2090.00	11	375744.42	7141013.14
495	0.05	1	0.50	1	210.00	1	410.00	1	0.50	1	0.50	1	770.00	4	375764.54	7141253.89
504	0.40	8	0.50	1	1520.00	10	250.00	0	14.00	28	0.50	1	1790.00	9	375730.92	7143521.74
91	0.05	1	0.50	1	210.00	1	600.00	2	3.00	6	0.50	1	610.00	3	371944.35	7142972.98
92	9.10	182	0.50	1	1890.00	12	27400.00	101	49.00	98	0.50	1	2100.00	11	371978.78	7143252.50
93	0.05	1	0.50	1	130.00	0	650.00	2	2.00	4	0.50	1	1090.00	6	372029.26	7143520.55
94	0.05	1	0.50	1	30.00	0	1020.00	8	0.50	1	0.50	1	3910.00	25	372000.07	7143733.83
99	0.05	1	0.50	1	400.00	2	190.00	0	0.50	1	0.50	1	440.00	2	372250.99	7139511.26
100	0.05	1	1.00	2	490.00	3	350.00	1	1.00	2	0.50	1	540.00	3	372234.42	7139805.60
101	0.05	1	0.50	1	380.00	2	110.00	0	1.00	2	0.50	1	530.00	2	372221.92	7140009.79
102	0.05	1	1.00	2	150.00	1	590.00	2	0.50	1	0.50	1	1520.00	8	372214.59	7140282.84
103	0.05	1	0.50	1	1270.00	8	350.00	1	0.50	1	0.50	1	800.00	4	372210.02	7140472.26
117	0.05	1	0.50	1	0.50	0	20.00	0	0.50	1	0.50	1	130.00	0	372496.08	7138000.22
118	0.05	1	0.50	1	700.00	4	50.00	0	0.50	1	2.00	4	220.00	1	372519.66	7138242.77

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
119	TO102013	HDIS_119_08	HDIS_119_08	Kevin	1	Steep NW, boulders a		Damp/dry	B	3.00	2	5.00	1
120	TO102013	HDIS_120_08	HDIS_120_08	Kevin	1	Flat ridge/plateau,		Damp	B	11.00	6	5.00	1
124	TO102013	HDIS_124_08	HDIS_124_08	Thomas	2	Steep slope to SW		Damp	B	5.00	3	5.00	1
125	TO102013	HDIS_125_08	HDIS_125_08	Thomas	2	Moderate slope to S		Damp	B	3.00	2	10.00	2
126	TO102013	HDIS_126_08	HDIS_126_08	Thomas	2	Moderate slope to S,		Damp	B	5.00	3	20.00	4
127	TO102013	HDIS_127_08	HDIS_127_08	Thomas	2	Flat, on ridge		Damp	B	3.00	2	5.00	1
142	TO102013	HDIS_142_08	HDIS_142_08	Kevin	3	Steep SE		Damp	B	3.00	2	5.00	1
143	TO102013	HDIS_143_08	HDIS_143_08	Kevin	2	Steep SE		Damp	B	1.00	1	5.00	1
144	TO102013	HDIS_144_08	HDIS_144_08	Kevin	1	Steep S		Dry	A	3.00	4	5.00	1
145	TO102013	HDIS_145_08	HDIS_145_08	Kevin	2	Steep SW		Damp/dry	B	4.00	2	5.00	1
146	TO102013	HDIS_146_08	HDIS_146_08	Kevin	1	Steep W		Dry	B	3.00	2	10.00	2
147	TO102013	HDIS_147_08	HDIS_147_08	Kevin	2	Steep S, shales		Damp/dry	B	3.00	2	20.00	4
148	TO102013	HDIS_148_08	HDIS_148_08	Kevin	2	Steep W, shales		Damp/dry	B	4.00	2	5.00	1
171	TO102013	HDIS_171_08	HDIS_171_08	Aiden	2	Steep hillside facin	Gritty clay	Moist	B	3.00	2	20.00	4
172	TO102013	HDIS_172_08	HDIS_172_08	Aiden	1	Steep slope, some cl	Gritty soil contains a lot of shale fragments	Moist	B	2.00	1	10.00	2
173	TO102013	HDIS_173_08	HDIS_173_08	Daithi	1	Peak of ridge, all s	No soil, all crushed shale chips; bedding is 106/40W	Damp	A	2.00	3	10.00	2
174	TO102013	HDIS_174_08	HDIS_174_08	Daithi	1	top of ridge running	Area is a steep slope of weathered platey and brittle thinly bedded wine/purple shale. Areas have some silicieous filled fractures, bedding is variabl	Damp	A	3.00	4	20.00	4
198	TO102013	HDIS_198_08	HDIS_198_08	Aiden	2	Steep slope facing S	Gritty	Moist	B	18.00	9	5.00	1
199	TO102013	HDIS_199_08	HDIS_199_08	Aiden	1	Steep hillside facin	Gritty sample	Moist	B	3.00	2	30.00	6
200	TO102013	HDIS_200_08	HDIS_200_08	Daithi	2	V steep, shale scree		Damp	A	2.00	3	10.00	2
201	TO102013	HDIS_201_08	HDIS_201_08	Daithi	3	Steep scree slope, s	Good sample taken from sheltered crevice/lee side of rock, a little moss aroun. Structure here is 82/42 S	Damp	B	5.00	3	10.00	2
226	TO102013	HDIS_226_08	HDIS_226_08	Shane	2	Moderate to SW and c	Open hillside	Damp	B	3.00	2	5.00	1
227	TO102013	HDIS_227_08	HDIS_227_08	Aiden	2	Steep hillside facin	organic soil and grit	Dry	A	2.00	3	5.00	1
228	TO102013	HDIS_228_08	HDIS_228_08	Aiden	4	Steep slope facing E	Organic soil	Moist	A	0.50	1	5.00	1
229	TO102013	HDIS_229_08	HDIS_229_08	Daithi	2	Steep scree slope, s	Some grass, mainly bare	Damp	B	3.00	2	5.00	1
230	TO102013	HDIS_230_08	HDIS_230_08	Daithi	3	Steep S facing grass	Lots of shale fragments	Damp	B	5.00	3	10.00	2
253	TO102013	HDIS_253_08	HDIS_253_08	Shane	3	Gentle to S	Thick willows	Damp	B	3.00	2	30.00	6
254	TO102013	HDIS_254_08	HDIS_254_08	Shane	2	Moderate to SE	Light willow cover	Dry/damp	B	3.00	2	5.00	1
255	TO102013	HDIS_255_08	HDIS_255_08	Aiden	2	Moderate slope facin		Moist	B	2.00	1	5.00	1
256	TO102013	HDIS_256_08	HDIS_256_08	Aiden	2	Steep hillside facin	Gritty clay	Moist	B	1.00	1	5.00	1
257	TO102013	HDIS_257_08	HDIS_257_08	Daithi	2	Steep E facing slope		Damp	B	4.00	2	20.00	4
258	TO102013	HDIS_258_08	HDIS_258_08	Daithi	3	Steep S facing grass	More vegetaion here than at 230	Damp	B	3.00	2	20.00	4
281	TO102013	HDIS_281_08	HDIS_281_08	Shane	2	Moderate to S	Thick willows	Damp/wet	B	6.00	3	30.00	6
282	TO102013	HDIS_282_08	HDIS_282_08	Shane	3	Moderate to SE	Light to moderate willow cover	Damp	B	2.00	1	5.00	1
283	TO102013	HDIS_283_08	HDIS_283_08	Aiden	1	Moderate slope facin	Clay and grit	Moist	B	2.00	1	5.00	1
284	TO102013	HDIS_284_08	HDIS_284_08	Aiden	2	Rocky slope facing N	Gritty clay	Moist	B	2.00	1	5.00	1
285	TO102013	HDIS_285_08	HDIS_285_08	Daithi	2	Bottom of steep N fa	Thin pebble conglomerate, lots of heather, boulders	Damp	B	3.00	2	5.00	1
286	TO102013	HDIS_286_08	HDIS_286_08	Daithi	2	Steep slope, purple	Lots of wine red shale fragments	Damp	B	2.00	1	5.00	1
309	TO102013	HDIS_309_08	HDIS_309_08	Shane	2	Moderate to S	Thick willows	Damp	B	4.00	2	5.00	1
310	TO102013	HDIS_310_08	HDIS_310_08	Shane	2	Moderate to S	Thick willows	Damp	B	2.00	1	10.00	2
311	TO102013	HDIS_311_08	HDIS_311_08	Aiden	2	Moderate slope facin		Moist	B	3.00	2	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
119	0.05	1	0.50	1	330.00	2	880.00	3	0.50	1	0.50	1	350.00	1	372503.47	7138501.78
120	0.05	1	0.50	1	150.00	1	760.00	2	0.50	1	0.50	1	650.00	3	372496.48	7138724.25
124	0.05	1	1.00	2	350.00	2	750.00	2	0.50	1	0.50	1	1040.00	5	372445.31	7139784.99
125	0.05	1	0.50	1	660.00	4	210.00	0	0.50	1	0.50	1	660.00	3	372436.06	7139997.93
126	0.05	1	0.50	1	520.00	3	210.00	0	0.50	1	0.50	1	400.00	2	372487.61	7140253.38
127	0.05	1	0.50	1	100.00	0	400.00	1	0.50	1	0.50	1	900.00	5	372574.11	7140503.20
142	0.05	1	0.50	1	190.00	1	240.00	0	0.50	1	0.50	1	290.00	1	372709.75	7137850.02
143	0.05	1	0.50	1	310.00	2	950.00	3	0.50	1	0.50	1	1970.00	10	372760.21	7138020.45
144	0.05	1	0.50	1	50.00	1	40.00	0	0.50	1	0.50	1	630.00	4	372805.88	7138261.78
145	0.05	1	0.50	1	120.00	0	120.00	0	0.50	1	0.50	1	1100.00	6	372732.16	7138560.46
146	0.05	1	0.50	1	370.00	2	430.00	1	0.50	1	0.50	1	1050.00	5	372689.78	7138722.10
147	0.05	1	0.50	1	1390.00	9	420.00	1	0.50	1	0.50	1	1300.00	7	372745.00	7139045.09
148	0.05	1	0.50	1	660.00	4	1120.00	4	0.50	1	0.50	1	280.00	1	372848.94	7139228.66
171	0.05	1	0.50	1	320.00	2	320.00	1	0.50	1	4.00	8	1650.00	9	372998.44	7138285.00
172	0.05	1	0.50	1	590.00	3	190.00	0	0.50	1	2.00	4	1050.00	5	373063.68	7138530.72
173	0.05	1	0.50	1	710.00	14	570.00	4	0.50	1	1.00	2	460.00	3	373029.46	7138776.38
174	0.05	1	0.50	1	200.00	4	380.00	3	1.00	2	1.00	2	230.00	1	373019.79	7138997.59
198	0.20	4	0.50	1	13000.00	86	220.00	0	0.50	1	2.00	4	430.00	2	373229.38	7138244.03
199	0.10	2	0.50	1	11300.00	75	80.00	0	0.50	1	1.00	2	120.00	0	373260.74	7138480.21
200	0.05	1	0.50	1	270.00	5	550.00	4	0.50	1	0.50	1	1220.00	8	373243.48	7138798.46
201	0.05	1	0.50	1	1190.00	7	360.00	1	0.50	1	1.00	2	90.00	0	373253.21	7138996.72
226	0.05	1	0.50	1	120.00	0	550.00	2	0.50	1	0.50	1	740.00	4	373499.08	7137998.03
227	0.05	1	0.50	1	240.00	4	170.00	1	0.50	1	0.50	1	880.00	6	373508.05	7138253.41
228	0.05	1	0.50	1	20.00	0	50.00	0	0.50	1	0.50	1	2090.00	13	373486.62	7138517.99
229	0.05	1	0.50	1	380.00	2	320.00	1	0.50	1	0.50	1	620.00	3	373491.03	7138807.52
230	0.05	1	0.50	1	450.00	3	490.00	1	0.50	1	0.50	1	370.00	2	373533.10	7139005.94
253	0.05	1	1.00	2	200.00	1	790.00	2	2.00	4	2.00	4	330.00	1	373750.35	7137750.12
254	0.05	1	0.50	1	70.00	0	470.00	1	0.50	1	0.50	1	540.00	3	373751.01	7138000.13
255	0.05	1	0.50	1	100.00	0	480.00	1	0.50	1	0.50	1	1100.00	6	373745.17	7138246.80
256	0.05	1	0.50	1	1360.00	9	670.00	2	0.50	1	0.50	1	450.00	2	373730.99	7138502.17
257	0.05	1	0.50	1	580.00	3	440.00	1	0.50	1	0.50	1	520.00	2	373744.05	7138741.52
258	0.10	2	2.00	4	480.00	3	400.00	1	0.50	1	0.50	1	400.00	2	373756.96	7138989.28
281	0.50	10	1.00	2	240.00	1	380.00	1	2.00	4	2.00	4	580.00	3	374000.39	7137750.26
282	0.30	6	0.50	1	80.00	0	970.00	3	0.50	1	0.50	1	580.00	3	373998.96	7138003.41
283	0.05	1	0.50	1	120.00	0	370.00	1	0.50	1	0.50	1	1630.00	9	373995.64	7138247.12
284	0.05	1	0.50	1	310.00	2	560.00	2	0.50	1	0.50	1	920.00	5	373999.32	7138495.84
285	0.05	1	1.00	2	370.00	2	520.00	1	0.50	1	0.50	1	1210.00	6	373983.19	7138752.30
286	0.05	1	0.50	1	340.00	2	210.00	0	0.50	1	0.50	1	1580.00	8	374014.22	7138994.15
309	0.05	1	0.50	1	150.00	1	360.00	1	0.50	1	0.50	1	340.00	1	374250.36	7137748.35
310	0.05	1	0.50	1	90.00	0	820.00	3	0.50	1	0.50	1	630.00	3	374253.42	7138000.18
311	0.05	1	0.50	1	410.00	2	820.00	3	0.50	1	0.50	1	370.00	2	374233.58	7138247.58

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
313	TO102013	HDIS_313_08	HDIS_313_08	Daithi	3	Bottom of steep slop	Clay and rock chips, possibly near shale/conglomerate contact	Damp	B	7.00	4	20.00	4
314	TO102013	HDIS_314_08	HDIS_314_08	Daithi	3	Steep mossy purple s	All of above dips 40-55	Damp	B	3.00	2	5.00	1
338	TO102013	HDIS_338_08	HDIS_338_08	Shane	2	Gentle to S	Thick willows	Damp	B	3.00	2	20.00	4
339	TO102013	HDIS_339_08	HDIS_339_08	Shane	2	Gentle to SE	Thick willows	Dry/damp	B	4.00	2	5.00	1
342	TO102013	HDIS_342_08	HDIS_342_08	Daithi	1	Very steep willow sl	Clay and organic, all boulders and roots, difficult to get depth or quality	Damp	A	3.00	4	10.00	2
343	TO102013	HDIS_343_08	HDIS_343_08	Daithi	3	Top of small hill, o	Clay with lots of chips	Damp	B	7.00	4	5.00	1
366	TO102013	HDIS_366_08	HDIS_366_08	Shane	2	Steep to SE and cree	Poplar stand in dense willows, powdery soil	Dry/damp	B	2.00	1	10.00	2
367	TO102013	HDIS_367_08	HDIS_367_08	Shane	2	Steep to SW abd cree	Thick willows, sandy powdery soil	Dry/damp	B	9.00	5	20.00	4
370	TO102013	HDIS_370_08	HDIS_370_08	Daithi	2	Steep 45deg slope	S slope of V-steep valley cut, look like stream is shale-conglomerate contact	Damp	A	3.00	4	10.00	2
371	TO102013	HDIS_371_08	HDIS_371_08	Daithi	3	E slope of steep hil	Lots of sand, qtz pebble conglomerate chips; must have crossed purple shale contact/now in well rounded pebble qtz conglomerate with some oxidation	Damp	A	8.00	10	20.00	4
421	TO102013	HDIS_421_08	HDIS_421_08	Tubs	3	Flat	Willows, trees, boulders	Damp	B	3.00	2	40.00	8
482	TO102013	HDIS_482_08	HDIS_482_08	Tubs	2	Steep	Willows, boulders	Damp	B	7.00	4	30.00	6
483	TO102013	HDIS_483_08	HDIS_483_08	Tubs	2	Steep	Willows	Damp	B	1.00	1	20.00	4
509	TO102013	HDIS_509_08	HDIS_509_08	Tubs	2	Moderate	Willows, trees	Damp	B	4.00	2	20.00	4
510	TO102013	HDIS_510_08	HDIS_510_08	Tubs	2	Moderate	Willows, trees, boulders	Damp	B	5.00	3	60.00	12
511	TO102013	HDIS_511_08	HDIS_511_08	Tubs	2	Steep	Willows	Damp	B	3.00	2	110.00	22
512	TO102013	HDIS_512_08	HDIS_512_08	Tubs	2	Moderate	Willows	Damp	B	8.00	4	300.00	60
535	TO102013	HDIS_535_08	HDIS_535_08	Tubs	2		Willows	Damp	B	4.00	2	40.00	8
536	TO102013	HDIS_536_08	HDIS_536_08	Tubs	3	Steep	Big trees, willows	Damp	B	6.00	3	60.00	12
537	TO102013	HDIS_537_08	HDIS_537_08	Tubs	2	Steep	Willows	Damp	B	4.00	2	110.00	22
538	TO102013	HDIS_538_08	HDIS_538_08	Tubs	3	Moderate	Steep to E	Damp	B	4.00	2	60.00	12
561	TO102013	HDIS_561_08	HDIS_561_08	Tubs	2	Moderate	Steep E/W	Damp	B	9.00	5	100.00	20
562	TO102013	HDIS_562_08	HDIS_562_08	Tubs	2	Moderate	By creek, willows, boulders	Damp	B	4.00	2	10.00	2
563	TO102013	HDIS_563_08	HDIS_563_08	Tubs	2	Steep	Willows, boulders	Damp	B	2.00	1	5.00	1
564	TO102013	HDIS_564_08	HDIS_564_08	Tubs	2	Steep	Boulders, veg	Damp	B	1.00	1	5.00	1
565	TO102013	HDIS_565_08	HDIS_565_08	Tubs	2	Steep	Boulders	Damp	B	4.00	2	5.00	1
77	TO102013	HDIS_77_08	HDIS_77_08	Thomas	2	Moderate slope to S		Damp	B	8.00	4	10.00	2
78	TO102013	HDIS_78_08	HDIS_78_08	Thomas	3	Flat, on a small rid		Damp	B	4.00	2	5.00	1
79	TO102013	HDIS_79_08	HDIS_79_08	Thomas	2	Moderate to SW		Damp	B	5.00	3	5.00	1
80	TO102013	HDIS_80_08	HDIS_80_08	Thomas	2	Moderate to SW		Damp	B	5.00	3	5.00	1
315	TO101886	HDIS_315_08	HDIS_315_08	Aiden	3	Near creek in valley	Clay sample	Moist	B	1.00	1	5.00	1
316	TO101886	HDIS_316_08	HDIS_316_08	Archie	1	Moderate E slope	Lots of shale in sample, brush knee high	Damp	B	0.50	0	20.00	4
317	TO101886	HDIS_317_08	HDIS_317_08	Kevin	2	Steep N, boulders		Damp	B	2.00	1	5.00	1
318	TO101886	HDIS_318_08	HDIS_318_08	Kevin	3	Flat, bushes		Damp	B	0.50	0	5.00	1
319	TO101886	HDIS_319_08	HDIS_319_08	Kevin	3	Gentle slope SW		Damp	B	13.00	7	10.00	2
344	TO101886	HDIS_344_08	HDIS_344_08	Aiden	1	Moderate slope facin	Gritty sample	Moist	B	5.00	3	20.00	4
345	TO101886	HDIS_345_08	HDIS_345_08	Archie	2	Moderate E slope	Shale in sample, bush getting thick	Damp	B	5.00	3	10.00	2
346	TO101886	HDIS_346_08	HDIS_346_08	Kevin	1	Steep N, boulders, c		Damp	B	4.00	2	10.00	2
347	TO101886	HDIS_347_08	HDIS_347_08	Kevin	3	Flat, bushes		Damp	B	4.00	2	5.00	1
359	TO101886	HDIS_359_08	HDIS_359_08	Daithi	4	Flat area near fuel	Silty clay, good sample!	Damp	B	9.00	5	140.00	28

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
313	0.05	1	0.50	1	560.00	3	640.00	2	0.50	1	0.50	1	330.00	1	374238.62	7138712.61
314	0.05	1	0.50	1	540.00	3	260.00	0	0.50	1	0.50	1	310.00	1	374253.70	7139007.41
338	0.05	1	0.50	1	190.00	1	410.00	1	1.00	2	0.50	1	320.00	1	374500.65	7137750.75
339	0.05	1	0.50	1	230.00	1	580.00	2	0.50	1	0.50	1	270.00	1	374499.95	7138000.02
342	0.05	1	0.50	1	120.00	2	1570.00	12	0.50	1	1.00	2	550.00	4	374528.18	7138729.10
343	0.05	1	0.50	1	100.00	0	620.00	2	0.50	1	0.50	1	80.00	0	374503.06	7138995.27
366	0.05	1	0.50	1	100.00	0	860.00	3	0.50	1	0.50	1	690.00	3	374753.22	7137748.24
367	0.05	1	0.50	1	140.00	0	840.00	3	2.00	4	0.50	1	330.00	1	374755.06	7137997.14
370	0.05	1	0.50	1	100.00	2	750.00	6	0.50	1	0.50	1	330.00	2	374728.96	7138765.46
371	0.50	10	0.50	1	250.00	5	840.00	7	1.00	2	0.50	1	130.00	1	374740.82	7138985.31
421	0.20	4	0.50	1	1730.00	11	250.00	0	9.00	18	0.50	1	270.00	1	375212.84	7137378.98
482	0.20	4	0.50	1	550.00	3	10.00	0	0.50	1	0.50	1	50.00	0	375766.46	7138002.65
483	0.05	1	1.00	2	80.00	0	50.00	0	0.50	1	0.50	1	260.00	1	375763.16	7138234.30
509	0.20	4	1.00	2	1710.00	11	650.00	2	4.00	8	0.50	1	300.00	1	376004.98	7137742.29
510	0.20	4	2.00	4	1240.00	8	30.00	0	1.00	2	0.50	1	50.00	0	376007.01	7137995.42
511	0.20	4	2.00	4	810.00	5	30.00	0	3.00	6	1.00	2	80.00	0	376012.56	7138262.39
512	0.60	12	6.00	12	500.00	3	360.00	1	11.00	22	4.00	8	360.00	2	376022.09	7138486.13
535	0.20	4	1.00	2	1090.00	7	30.00	0	2.00	4	0.50	1	50.00	0	376226.23	7138007.10
536	0.30	6	1.00	2	960.00	6	30.00	0	2.00	4	0.50	1	50.00	0	376234.05	7138254.53
537	0.10	2	3.00	6	260.00	1	420.00	1	5.00	10	2.00	4	460.00	2	376246.88	7138518.98
538	0.10	2	1.00	2	440.00	2	350.00	1	2.00	4	1.00	2	110.00	0	376258.12	7138734.58
561	0.10	2	2.00	4	530.00	3	710.00	2	9.00	18	1.00	2	510.00	2	376451.37	7138747.15
562	0.05	1	0.50	1	190.00	1	310.00	1	8.00	16	0.50	1	380.00	2	376509.24	7139005.23
563	0.05	1	0.50	1	100.00	0	630.00	2	0.50	1	0.50	1	1310.00	7	376495.04	7139256.16
564	0.05	1	0.50	1	30.00	0	220.00	0	0.50	1	0.50	1	260.00	1	376501.22	7139509.34
565	0.60	12	0.50	1	50.00	0	540.00	2	0.50	1	0.50	1	510.00	2	376508.16	7139757.28
77	0.05	1	0.50	1	260.00	1	430.00	1	0.50	1	0.50	1	620.00	3	372026.27	7139501.29
78	0.05	1	0.50	1	200.00	1	470.00	1	0.50	1	0.50	1	1190.00	6	372057.19	7139720.50
79	0.05	1	0.50	1	170.00	1	40.00	0	0.50	1	0.50	1	260.00	1	372027.27	7140032.68
80	0.05	1	0.50	1	180.00	1	350.00	1	0.50	1	0.50	1	540.00	3	372028.28	7140250.30
315	0.10	2	0.50	1	400.00	2	600.00	2	0.50	1	0.50	1	150.00	0	374257.91	7139305.83
316	0.05	1	1.00	2	350.00	2	360.00	1	0.50	1	0.50	1	1110.00	6	374250.77	7139498.10
317	0.05	1	0.50	1	410.00	2	610.00	2	0.50	1	0.50	1	230.00	1	374230.16	7139768.14
318	0.05	1	0.50	1	230.00	1	520.00	1	0.50	1	0.50	1	200.00	1	374259.49	7140004.85
319	0.05	1	0.50	1	240.00	1	450.00	1	1.00	2	0.50	1	320.00	1	374256.65	7140238.31
344	0.05	1	0.50	1	170.00	1	740.00	2	1.00	2	0.50	1	880.00	4	374512.73	7139261.71
345	0.05	1	0.50	1	600.00	4	350.00	1	0.50	1	0.50	1	480.00	2	374487.42	7139508.60
346	0.05	1	0.50	1	250.00	1	470.00	1	0.50	1	0.50	1	230.00	1	374478.77	7139735.86
347	0.05	1	0.50	1	140.00	0	450.00	1	0.50	1	0.50	1	630.00	3	374497.13	7139989.63
359	0.20	4	0.50	1	150.00	1	700.00	2	3.00	6	0.50	1	180.00	1	374492.82	7142983.86

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
372	TO101886	HDIS_372_08	HDIS_372_08	Aiden	2	Moderate slope facin	Some grit	Moist	B	9.00	5	5.00	1
373	TO101886	HDIS_373_08	HDIS_373_08	Archie	3	Gentle E slope	A little biot of shale in sample, vegetation thick	Damp	B	3.00	2	5.00	1
383	TO101886	HDIS_383_08	HDIS_383_08	Daithi	3	Bottom of hill	Clay, some grit; at end of big talus slope	Damp	B	26.00	13	5.00	1
384	TO101886	HDIS_384_08	HDIS_384_08	Daithi	4	Steep grassy slope	Clay, some grit	Damp	B	10.00	5	10.00	2
385	TO101886	HDIS_385_08	HDIS_385_08	Daithi	3	Steep scree slope	Clay, lots of grit	Damp	B	122.00	62	250.00	50
386	TO101886	HDIS_386_08	HDIS_386_08	Daithi	2	Boulder field, mossy	Peaty/organic, from between boulders, not good sample	Damp	A	1.00	1	30.00	6
387	TO101886	HDIS_387_08	HDIS_387_08	Daithi	4	Flat, good soil	Clay with silty chips etc, mossy area	Damp	B	76.00	39	80.00	16
392	TO101886	HDIS_392_08	HDIS_392_08	Aiden	4	Gentle slope S, low		Moist	B	2.00	1	50.00	10
393	TO101886	HDIS_393_08	HDIS_393_08	Aiden	4	Flat spot, low brush	Brown clay sample	Moist	B	3.00	2	60.00	12
394	TO101886	HDIS_394_08	HDIS_394_08	Aiden	2	Steep slope facing S	Thin organic soil sampled	Moist	A	1.00	1	5.00	1
395	TO101886	HDIS_395_08	HDIS_395_08	Aiden	2	Steep slope facing S	Clay and some grit	Moist	B	6.00	3	40.00	8
396	TO101886	HDIS_396_08	HDIS_396_08	Aiden	0	Moderate slope NE to	Pebbly grit in sample		B	5.00	3	20.00	4
397	TO101886	HDIS_397_08	HDIS_397_08	Aiden	3	Steep slope E into g	Clay with some grit, large boulders	Moist	B	7.00	4	10.00	2
398	TO101886	HDIS_398_08	HDIS_398_08	Aiden	3	Moderate slope E int	Clay and grit sample	Moist	B	1.00	1	5.00	1
399	TO101886	HDIS_399_08	HDIS_399_08	Aiden	3	Gentle slope E into		Moist	B	3.00	2	30.00	6
420	TO101886	HDIS_420_08	HDIS_420_08	Thomas	3	Gentle to N		Damp	B	4.00	2	30.00	6
422	TO101886	HDIS_422_08	HDIS_422_08	Archie	3	Moderate S slope	Bushy	Wet	B	11.00	6	5.00	1
423	TO101886	HDIS_423_08	HDIS_423_08	Archie	4	Flat	Bushy, pure clay	Wet	B	2.00	1	20.00	4
424	TO101886	HDIS_424_08	HDIS_424_08	Archie	1	Moderate	Black dirt with clay, 10m N of creek, bush	Wet	A	0.50	1	5.00	1
425	TO101886	HDIS_425_08	HDIS_425_08	Archie	1	Flat	Beside stream E side, bushy, lots of shale in sample	Damp	B	5.00	3	30.00	6
426	TO101886	HDIS_426_08	HDIS_426_08	Archie	2	Steep W	Sand and pebbly clay soil, sample on OC, bushy	Damp	B	4.00	2	10.00	2
427	TO101886	HDIS_427_08	HDIS_427_08	Archie	2	Moderate W slope	Sandy texture, taken below OC	Damp	B	1.00	1	20.00	4
428	TO101886	HDIS_428_08	HDIS_428_08	Archie	2	Moderate W slope	Shale in sample, bushy	Damp	B	1.00	1	10.00	2
429	TO101886	HDIS_429_08	HDIS_429_08	Archie	2	Moderate E slope	Shale and sand in sample, bushy	Damp	B	3.00	2	5.00	1
440	TO101886	HDIS_440_08	HDIS_440_08	Daithi	3	Small hollow on stee	Clay, lots of shale chips and grit	Damp	B	57.00	29	90.00	18
444	TO101886	HDIS_444_08	HDIS_444_08	Daithi	4	Bottom of cliff	Clay with shaley grit, good sample	Damp	B	15.00	8	30.00	6
449	TO101886	HDIS_449_08	HDIS_449_08	Shane	1	Moderate to N	Wine phyllite talus slope	Damp	B	4.00	2	20.00	4
450	TO101886	HDIS_450_08	HDIS_450_08	Shane	3	Gentle to N	Permafrost directly under thick moss blanket; sample taken from dry stream bed	Wet/damp	B	0.50	0	20.00	4
451	TO101886	HDIS_451_08	HDIS_451_08	Shane	1	Flat on S side of cr	Sandy soil possibly subject to occasional flooding	Damp	B	10.00	5	20.00	4
452	TO101886	HDIS_452_08	HDIS_452_08	Shane	2	Gentle to S	Thick willows, some trees	Damp	B	3.00	2	10.00	2
453	TO101886	HDIS_453_08	HDIS_453_08	Shane	2	Gentle to S	Thick willows	Wet/damp	B	1.00	1	50.00	10
454	TO101886	HDIS_454_08	HDIS_454_08	Shane	3	Gentle to S	Thick willows	Damp	B	8.00	4	20.00	4
455	TO101886	HDIS_455_08	HDIS_455_08	Shane	2	Steep to W and creek	Moderate willow cover	Damp	B	5.00	3	100.00	20
470	TO101886	HDIS_470_08	HDIS_470_08	Daithi	1	Steep grassy slope,	Lots of mud(?) with rock chips, poor sample	Damp	A	0.50	1	5.00	1
474	TO101886	HDIS_474_08	HDIS_474_08	Daithi	3	Bottom of cliff	Clay with shaley chips, looks like area has slumped	Damp	B	21.00	11	20.00	4
478	TO101886	HDIS_478_08	HDIS_478_08	Shane	2	Gentle to N	Open grassy hillside, permafrost under moss layer	Wet	B	0.50	0	20.00	4
479	TO101886	HDIS_479_08	HDIS_479_08	Thomas	2	Gentle slope to N		Wet	B	5.00	3	30.00	6
480	TO101886	HDIS_480_08	HDIS_480_08	Tubs	3	Moderate	Big trees, boulders	Wet	B	4.00	2	160.00	32
481	TO101886	HDIS_481_08	HDIS_481_08	Tubs	3	Steep to creek	Vegetation, trees	Damp	B	4.00	2	40.00	8
484	TO101886	HDIS_484_08	HDIS_484_08	Shane	3	Gentle to S	Thick willows	Damp	B	1.00	1	110.00	22
485	TO101886	HDIS_485_08	HDIS_485_08	Shane	2	Gentle slope to S	Thick willows	Damp	B	3.00	2	620.00	124
486	TO101886	HDIS_486_08	HDIS_486_08	Shane	2	Moderate to S	Hillside with moderate hillcover	Damp	B	9.00	5	160.00	32
600	TO101886	HDIS_600_08	HDIS_600_08	Thomas	4	Gentle slope to S		Damp	B	1.00	1	40.00	8

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
372	0.10	2	0.50	1	310.00	2	270.00	1	0.50	1	0.50	1	230.00	1	374751.25	7139245.09
373	0.05	1	0.50	1	130.00	0	460.00	1	0.50	1	0.50	1	450.00	2	374740.84	7139493.71
383	0.20	4	0.50	1	240.00	1	890.00	3	4.00	8	0.50	1	160.00	0	374681.61	7142062.71
384	0.05	1	0.50	1	300.00	2	870.00	3	0.50	1	0.50	1	140.00	0	374733.85	7142251.28
385	1.50	30	2.00	4	360.00	2	14900.00	55	104.00	208	0.50	1	1580.00	8	374760.21	7142514.21
386	0.10	2	1.00	2	320.00	6	1640.00	13	4.00	8	0.50	1	760.00	5	374725.84	7142698.46
387	2.60	52	0.50	1	900.00	6	8070.00	29	43.00	86	0.50	1	1660.00	9	374749.22	7142997.96
392	0.20	4	1.00	2	370.00	2	350.00	1	3.00	6	1.00	2	380.00	2	374995.75	7137510.77
393	0.50	10	2.00	4	720.00	4	490.00	1	4.00	8	3.00	6	200.00	1	374996.28	7137756.88
394	0.05	1	0.50	1	70.00	1	270.00	2	0.50	1	0.50	1	8260.00	53	374994.30	7138004.05
395	0.05	1	1.00	2	120.00	0	600.00	2	5.00	10	0.50	1	830.00	4	374988.94	7138252.36
396	0.05	1	0.50	1	260.00	1	520.00	1	1.00	2	0.50	1	460.00	2	374999.26	7138511.53
397	0.20	4	0.50	1	920.00	6	120.00	0	1.00	2	0.50	1	90.00	0	374995.96	7138754.06
398	0.05	1	0.50	1	240.00	1	600.00	2	0.50	1	0.50	1	230.00	1	374994.23	7139003.12
399	0.20	4	1.00	2	950.00	6	150.00	0	3.00	6	0.50	1	100.00	0	374991.57	7139252.28
420	0.20	4	2.00	4	2610.00	17	740.00	2	3.00	6	1.00	2	480.00	2	375244.16	7137244.90
422	0.05	1	0.50	1	100.00	0	580.00	2	0.50	1	0.50	1	120.00	0	375245.55	7137752.95
423	0.30	6	0.50	1	400.00	2	20.00	0	0.50	1	0.50	1	10.00	0	375243.65	7138001.58
424	0.05	1	0.50	1	110.00	2	180.00	1	0.50	1	0.50	1	1610.00	10	375250.20	7138252.89
425	0.05	1	0.50	1	290.00	1	380.00	1	3.00	6	0.50	1	840.00	4	375281.64	7138536.17
426	0.10	2	0.50	1	70.00	0	630.00	2	1.00	2	0.50	1	480.00	2	375276.63	7138744.98
427	0.05	1	0.50	1	100.00	0	370.00	1	0.50	1	0.50	1	1070.00	5	375253.85	7139013.45
428	0.05	1	0.50	1	100.00	0	2870.00	10	2.00	4	0.50	1	1090.00	6	375234.91	7139248.20
429	0.05	1	0.50	1	40.00	0	390.00	1	0.50	1	0.50	1	1230.00	6	375242.57	7139505.90
440	0.30	6	0.50	1	300.00	2	3070.00	11	52.00	104	1.00	2	910.00	5	375258.25	7142257.23
444	0.70	14	0.50	1	850.00	5	1490.00	5	10.00	20	0.50	1	110.00	0	375244.70	7143250.01
449	0.05	1	0.50	1	640.00	4	550.00	2	0.50	1	0.50	1	310.00	1	375499.34	7136994.33
450	0.10	2	0.50	1	790.00	5	100.00	0	0.50	1	0.50	1	90.00	0	375498.43	7137249.05
451	0.10	2	1.00	2	1320.00	8	280.00	1	3.00	6	0.50	1	70.00	0	375500.39	7137502.92
452	0.05	1	0.50	1	610.00	4	10.00	0	0.50	1	0.50	1	40.00	0	375501.77	7137750.82
453	0.10	2	2.00	4	700.00	4	50.00	0	1.00	2	1.00	2	60.00	0	375499.88	7138000.34
454	0.05	1	0.50	1	140.00	0	210.00	0	2.00	4	0.50	1	120.00	0	375501.00	7138252.92
455	0.05	1	5.00	10	160.00	1	430.00	1	1.00	2	0.50	1	120.00	0	375504.59	7138499.38
470	0.05	1	0.50	1	50.00	1	250.00	2	1.00	2	0.50	1	2780.00	18	375500.31	7142250.25
474	0.60	12	0.50	1	430.00	2	710.00	2	24.00	48	0.50	1	710.00	3	375500.73	7143241.22
478	0.10	2	1.00	2	900.00	6	60.00	0	0.50	1	0.50	1	40.00	0	375749.97	7136996.94
479	0.20	4	2.00	4	2130.00	14	430.00	1	2.00	4	0.50	1	430.00	2	375751.63	7137252.15
480	0.40	8	4.00	8	2980.00	19	1260.00	4	22.00	44	4.00	8	340.00	1	375749.67	7137489.21
481	0.30	6	1.00	2	1170.00	7	30.00	0	2.00	4	0.50	1	30.00	0	375745.59	7137746.39
484	0.10	2	3.00	6	680.00	4	20.00	0	2.00	4	0.50	1	10.00	0	375748.49	7138500.29
485	0.20	4	15.00	30	280.00	1	210.00	0	12.00	24	2.00	4	120.00	0	375750.38	7138751.83
486	0.10	2	9.00	18	340.00	2	170.00	0	2.00	4	0.50	1	140.00	0	375749.68	7139001.11
600	0.10	2	1.00	2	1130.00	7	30.00	0	2.00	4	0.50	1	30.00	0	377014.17	7138500.19

HDI_ID	CERT_NUM	ANALYTE	FIELD_NUM	NAME	SQI	TOPOGRAPHY	NOTES	MOISTURE	HORIZON	AG_PPB	AG_RATIO	AS_PPB	AS_RATIO
601	TO101886	HDIS_601_08	HDIS_601_08	Thomas	3	Gentle slope to S		Damp	B	2.00	1	20.00	4
602	TO101886	HDIS_602_08	HDIS_602_08	Thomas	3	Gentle slope to S		Damp	B	5.00	3	50.00	10
603	TO101886	HDIS_603_08	HDIS_603_08	Thomas	3	Gentle slope to S		Damp	B	5.00	3	30.00	6
604	TO101886	HDIS_604_08	HDIS_604_08	Thomas	1	Moderate slope to E		Damp	B	7.00	4	10.00	2
605	TO101886	HDIS_605_08	HDIS_605_08	Thomas	2	Moderate slope to E		Damp	B	6.00	3	5.00	1
606	TO101886	HDIS_606_08	HDIS_606_08	Thomas	3	Moderate slope to SW		Damp	B	2.00	1	10.00	2
607	TO101886	HDIS_607_08	HDIS_607_08	Tubs	2	Steep	Boulders	Damp	B	2.00	1	5.00	1
412	TO101883	HDIS_412_08	HDIS_412_08	Tubs	2	Steep	Boulders	Damp	B	95.00	48	5.00	1
413	TO101883	HDIS_413_08	HDIS_413_08	Tubs	1	Steep	Boulders	Damp	B	2.00	1	70.00	14
414	TO101883	HDIS_414_08	HDIS_414_08	Tubs	2	Steep	Boulders	Damp	B	2.00	1	10.00	2
441	TO101883	HDIS_441_08	HDIS_441_08	Tubs	2	Steep	Boulders, cliffs, scree	Damp	B	39.00	20	5.00	1
442	TO101883	HDIS_442_08	HDIS_442_08	Tubs	3	Steep	Cliffs	Damp	B	5.00	3	5.00	1
443	TO101883	HDIS_443_08	HDIS_443_08	Tubs	2	Steep	Boulders	Damp	B	7.00	4	5.00	1
456	TO101883	HDIS_456_08	HDIS_456_08		0					19.00	24	160.00	32
457	TO101883	HDIS_457_08	HDIS_457_08	Thomas	3	Gentle slope to W		Damp	B	4.00	2	40.00	8
458	TO101883	HDIS_458_08	HDIS_458_08	Thomas	2	Moderate slope to W		Damp	B	14.00	7	20.00	4
459	TO101883	HDIS_459_08	HDIS_459_08	Thomas	2	Moderate slope to W		Damp	B	1.00	1	230.00	46
460	TO101883	HDIS_460_08	HDIS_460_08	Thomas	3	Moderate slope to W		Damp	B	8.00	4	40.00	8
461	TO101883	HDIS_461_08	HDIS_461_08	Thomas	3	Moderate slope to W		Damp	B	2.00	1	20.00	4
462	TO101883	HDIS_462_08	HDIS_462_08	Thomas	3	Moderate slope to W		Damp	B	3.00	2	30.00	6
463	TO101883	HDIS_463_08	HDIS_463_08	Thomas	2	Moderate slope to W		Damp	B	11.00	6	5.00	1
464	TO101883	HDIS_464_08	HDIS_464_08	Thomas	2	Moderate slope to SW		Damp	B	8.00	4	5.00	1
465	TO101883	HDIS_465_08	HDIS_465_08	Thomas	3	Moderate slope to S		Damp	B	10.00	5	5.00	1
471	TO101883	HDIS_471_08	HDIS_471_08	Tubs	2	Steep	Edge of mountain	Damp	B	5.00	3	5.00	1
472	TO101883	HDIS_472_08	HDIS_472_08	Tubs	2	Steep	Cliffs	Damp	B	392.00	200	40.00	8
473	TO101883	HDIS_473_08	HDIS_473_08	Tubs	2	Steep	Boulders	Damp	B	35.00	18	30.00	6
520	TO101883	HDIS_520_08	HDIS_520_08	Thomas	3	Flat, on ridge		Damp	B	11.00	6	30.00	6
545	TO101883	HDIS_545_08	HDIS_545_08	Thomas	3	Gentle slope to S, o		Damp	B	2.00	1	5.00	1
496	TO101883	HDIS_496_08			0					2.00	3	5.00	1

HDI_ID	AU_PPB	AU_RATIO	BI_PPB	BI_RATIO	CU_PPB	CU_RATIO	PB_PPB	PB_RATIO	SB_PPB	SB_RATIO	W_PPB	W_RATIO	ZN_PPB	ZN_RATIO	X_PROJ	Y_PROJ
601	0.05	1	0.50	1	530.00	3	20.00	0	1.00	2	0.50	1	30.00	0	377001.58	7138763.89
602	0.30	6	1.00	2	360.00	2	400.00	1	3.00	6	2.00	4	330.00	1	376985.13	7139006.83
603	0.30	6	0.50	1	460.00	3	340.00	1	2.00	4	1.00	2	180.00	1	377017.77	7139240.67
604	0.05	1	0.50	1	110.00	0	810.00	3	2.00	4	0.50	1	250.00	1	377004.84	7139491.25
605	0.05	1	0.50	1	40.00	0	90.00	0	0.50	1	0.50	1	300.00	1	377024.95	7139742.13
606	0.05	1	0.50	1	190.00	1	390.00	1	0.50	1	0.50	1	960.00	5	377057.65	7139960.52
607	0.05	1	0.50	1	100.00	0	940.00	3	0.50	1	0.50	1	810.00	4	376999.24	7140235.88
412	0.20	4	0.50	1	930.00	6	260.00	0	0.50	1	0.50	1	250.00	1	375013.25	7142497.60
413	0.40	8	5.00	10	390.00	2	420.00	1	25.00	50	0.50	1	310.00	1	375000.92	7142746.51
414	0.05	1	0.50	1	200.00	1	920.00	3	1.00	2	0.50	1	1530.00	8	375012.51	7142991.19
441	0.05	1	0.50	1	360.00	2	490.00	1	2.00	4	0.50	1	240.00	1	375127.88	7142562.80
442	0.10	2	0.50	1	190.00	1	180.00	0	0.50	1	0.50	1	130.00	0	375261.85	7142778.87
443	0.05	1	0.50	1	430.00	2	260.00	0	0.50	1	0.50	1	270.00	1	375286.21	7143145.33
456	0.20	4	2.00	4	430.00	6	90.00	0	3.00	6	0.50	1	510.00	2	0.00	0.00
457	0.10	2	1.00	2	740.00	4	50.00	0	2.00	4	0.50	1	120.00	0	375506.00	7139000.00
458	0.20	4	0.50	1	690.00	4	280.00	1	2.00	4	0.50	1	130.00	0	375503.00	7139241.00
459	0.05	1	10.00	20	390.00	2	310.00	1	19.00	38	4.00	8	420.00	2	375527.00	7139479.00
460	0.20	4	0.50	1	750.00	5	120.00	0	12.00	24	2.00	4	240.00	1	375528.00	7139734.00
461	0.05	1	2.00	4	80.00	0	270.00	1	7.00	14	1.00	2	110.00	0	375486.00	7140008.00
462	0.05	1	0.50	1	550.00	3	230.00	0	8.00	16	1.00	2	260.00	1	375518.00	7140241.00
463	0.05	1	0.50	1	200.00	1	240.00	0	1.00	2	0.50	1	240.00	1	375471.00	7140551.00
464	0.05	1	0.50	1	1210.00	8	170.00	0	2.00	4	0.50	1	340.00	1	375503.00	7140746.00
465	0.05	1	0.50	1	180.00	1	4640.00	17	3.00	6	0.50	1	520.00	2	375496.00	7141012.00
471	0.30	6	0.50	1	80.00	0	420.00	1	1.00	2	0.50	1	1010.00	5	375473.63	7142468.58
472	0.30	6	0.50	1	130.00	0	70.00	0	0.50	1	0.50	1	80.00	0	375409.11	7142739.94
473	0.40	8	0.50	1	1710.00	11	760.00	2	18.00	36	0.50	1	380.00	2	375532.16	7143047.77
520	0.20	4	0.50	1	80.00	0	6800.00	25	16.00	32	0.50	1	950.00	5	376006.00	7140460.00
545	0.05	1	0.50	1	290.00	1	370.00	1	0.50	1	0.50	1	1050.00	5	376229.00	7140419.00
496	0.05	1	0.50	1	120.00	2	840.00	4	1.00	2	0.50	1	3160.00	13	0.00	0.00

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Dy	Er	Eu
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	10	1	0.5	0.5
UNITS	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_243_08	18	133	200	0.2	1350	<1	290	15	97	36	<100	110	33	13.7	9.8
DUP-HDIS_243_08	13	127	160	0.2	1420	<1	310	18	81	31	<100	90	30	12.8	9
HDIS_327_08	3	95	<10	2.7	2210	2	230	20	<5	71	<100	950	56	86	2.2
DUP-HDIS_327_08	5	119	<10	2.2	2260	2	230	27	43	58	<100	1020	168	108	14.7
HDIS_161_08	1	103	<10	<0.1	700	<1	250	33	42	29	<100	50	39	22.2	7.2
DUP-HDIS_161_08	4	112	<10	0.2	690	<1	260	30	94	18	<100	40	61	29	15.2
HDIS_354_08	128	59	<10	<0.1	930	<1	530	15	74	73	<100	1170	74	33.1	19
DUP-HDIS_354_08	122	61	<10	<0.1	940	<1	530	14	74	61	<100	1130	74	34.1	19.8
HDIS_132_08	10	229	<10	0.2	240	<1	<10	10	102	10	<100	110	36	15	8.8
DUP-HDIS_132_08	11	242	<10	0.2	190	<1	<10	10	94	12	<100	100	33	13.3	8.5
HDIS_241_08	19	102	30	0.2	2100	<1	260	10	88	135	<100	570	20	9.5	5.9
DUP-HDIS_241_08	16	99	40	0.3	1870	<1	240	9	93	257	<100	970	15	6.9	4.4
HDIS_323_08	5	>300	<10	<0.1	220	<1	<10	6	73	117	<100	140	20	7.5	6.1
DUP-HDIS_323_08	5	>300	<10	<0.1	240	<1	<10	7	67	150	<100	140	18	6.9	5.1
HDIS_376_08	3	>300	<10	<0.1	1060	<1	30	19	22	61	<100	120	51	30.3	3.5
DUP-HDIS_376_08	5	297	<10	<0.1	1110	<1	50	18	23	99	<100	130	66	36.8	5.5
HDIS_404_08	6	144	<10	<0.1	1800	<1	440	10	52	17	<100	110	114	53	29.1
DUP-HDIS_404_08	4	136	<10	<0.1	1250	<1	350	12	42	30	<100	120	25	13.1	6.4
HDIS_433_08	10	112	<10	0.1	2210	<1	280	13	128	355	<100	450	76	37.2	20.7
DUP-HDIS_433_08	7	112	<10	<0.1	2160	<1	280	18	175	252	<100	250	73	36.4	20.3
HDIS_469_08	57	180	10	0.1	950	<1	210	24	280	52	<100	250	105	41.1	36.4
DUP-HDIS_469_08A	54	175	10	0.1	980	<1	200	23	297	53	<100	230	105	40.4	36.6
HDIS_566_08	23	27	<10	<0.1	980	<1	590	6	62	41	<100	170	47	18.5	23.9
DUP-HDIS_566_08A	21	24	<10	<0.1	940	<1	560	6	50	47	<100	160	42	16.9	21.2
HDIS_179_08	1	>300	10	<0.1	2200	<1	20	7	151	285	<100	1130	109	47.4	23.9
DUP-HDIS_179_08	2	>300	20	<0.1	2130	<1	20	8	159	230	<100	1050	132	57.8	28.2

ANALYTE	Fe	Gd	La	Li	Mg	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	1	5	1	5	0.5	1	5	10	1	1	1	5	1
UNITS	PPM	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_243_08	36	44	31	<5	32	<5	2.1	86	100	490	<1	15	<1	160	5
DUP-HDIS_243_08	34	40	27	<5	36	<5	1.1	75	103	450	<1	13	<1	141	4
HDIS_327_08	135	11	1	<5	16	<5	<0.5	8	98	3480	<1	1	<1	57	19
DUP-HDIS_327_08	105	82	17	<5	16	<5	<0.5	75	187	6150	<1	11	<1	57	14
HDIS_161_08	86	33	16	<5	7	<5	<0.5	42	88	600	<1	7	<1	23	2
DUP-HDIS_161_08	58	63	30	<5	7	<5	<0.5	91	135	480	<1	15	<1	56	2
HDIS_354_08	6	90	10	15	31	<5	<0.5	69	478	830	<1	9	<1	86	<1
DUP-HDIS_354_08	7	90	10	15	31	<5	<0.5	72	462	840	<1	9	<1	87	<1
HDIS_132_08	8	36	26	<5	<1	<5	<0.5	87	26	3380	<1	17	<1	82	3
DUP-HDIS_132_08	7	35	23	<5	<1	<5	<0.5	84	26	3210	<1	15	<1	81	3
HDIS_241_08	57	24	22	<5	17	<5	<0.5	52	74	500	<1	10	<1	172	15
DUP-HDIS_241_08	110	18	21	<5	16	<5	<0.5	45	71	390	<1	9	<1	170	18
HDIS_323_08	32	27	19	<5	<1	<5	2.3	50	47	370	<1	9	<1	219	<1
DUP-HDIS_323_08	40	22	17	<5	<1	<5	2.3	42	53	380	<1	8	<1	217	<1
HDIS_376_08	65	17	7	6	2	<5	1.2	17	123	850	<1	3	<1	126	2
DUP-HDIS_376_08	69	27	8	<5	2	<5	0.8	25	116	730	<1	4	<1	79	1
HDIS_404_08	19	140	32	<5	15	<5	<0.5	156	130	480	<1	23	<1	89	<1
DUP-HDIS_404_08	20	27	13	7	10	<5	0.9	38	152	560	<1	7	<1	60	2
HDIS_433_08	64	85	43	<5	14	<5	<0.5	139	331	280	<1	24	<1	93	2
DUP-HDIS_433_08	78	84	45	<5	13	<5	<0.5	140	371	320	<1	25	<1	106	2
HDIS_469_08	32	151	108	<5	6	<5	<0.5	328	242	1750	<1	61	<1	157	7
DUP-HDIS_469_08A	30	152	114	5	7	<5	<0.5	335	233	1720	<1	63	<1	159	6
HDIS_566_08	7	85	10	<5	12	<5	<0.5	92	118	70	<1	11	<1	78	<1
DUP-HDIS_566_08A	7	76	9	<5	10	<5	<0.5	86	112	60	<1	10	<1	75	<1
HDIS_179_08	91	124	72	<5	4	6	1.9	186	243	310	<1	33	<1	140	<1
DUP-HDIS_179_08	58	148	73	<5	3	5	1.9	200	214	370	<1	35	<1	159	<1

ANALYTE	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	5	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_243_08	33	31	1	1300	2	6	<10	31.7	185	<0.5	29	8	150	9	650	41
DUP-HDIS_243_08	26	28	<1	1450	1	6	<10	21.1	151	<0.5	26	3	139	8	690	32
HDIS_327_08	33	4	<1	1490	<1	4	<10	11.3	9	<0.5	59	<1	380	78	130	14
DUP-HDIS_327_08	54	35	<1	1460	<1	20	<10	22.3	17	<0.5	102	<1	1050	75	220	18
HDIS_161_08	39	18	<1	870	<1	6	<10	16.5	113	0.7	9	<1	201	15	2010	29
DUP-HDIS_161_08	48	38	<1	760	<1	10	<10	23.4	121	0.5	11	<1	293	20	1420	35
HDIS_354_08	7	44	<1	2840	<1	13	<10	14.4	<3	0.6	140	1	347	19	470	17
DUP-HDIS_354_08	7	45	<1	2860	<1	13	<10	13.8	<3	0.6	139	1	354	19	450	17
HDIS_132_08	45	27	<1	20	<1	6	<10	7.2	139	1.9	7	<1	166	9	<20	18
DUP-HDIS_132_08	42	25	<1	20	<1	6	<10	8.3	129	1.9	7	<1	153	8	60	23
HDIS_241_08	20	18	<1	1160	<1	4	<10	11.9	87	1.1	24	<1	100	7	170	31
DUP-HDIS_241_08	24	14	<1	1030	<1	3	<10	12.1	111	1.3	22	<1	71	5	120	33
HDIS_323_08	39	21	<1	<10	<1	4	<10	37.6	778	1.1	14	<1	69	5	120	96
DUP-HDIS_323_08	37	18	<1	10	<1	3	<10	36.9	844	1	13	<1	61	5	140	98
HDIS_376_08	67	8	<1	150	<1	5	<10	25	364	1	8	<1	220	23	580	45
DUP-HDIS_376_08	59	13	<1	230	<1	8	<10	23.6	253	0.7	8	<1	321	25	450	36
HDIS_404_08	48	83	<1	1260	<1	10	<10	23	30	<0.5	26	<1	573	32	860	45
DUP-HDIS_404_08	42	17	<1	900	<1	4	<10	22.2	103	<0.5	19	1	125	9	1020	63
HDIS_433_08	83	58	<1	1180	<1	13	<10	22.6	27	0.7	87	<1	413	26	90	80
DUP-HDIS_433_08	89	59	<1	1180	<1	13	<10	24.1	39	0.9	90	<1	403	26	110	77
HDIS_469_08	70	117	<1	360	<1	20	<10	85	252	0.9	35	<1	440	27	1070	108
DUP-HDIS_469_08A	69	121	<1	370	<1	21	<10	84.4	240	1	34	<1	438	26	1080	104
HDIS_566_08	11	55	<1	3680	<1	10	<10	22.6	4	<0.5	62	<1	237	11	80	35
DUP-HDIS_566_08A	11	50	<1	3470	<1	9	<10	21.6	<3	<0.5	59	1	212	10	80	34
HDIS_179_08	47	87	<1	140	<1	20	<10	39.2	672	0.7	30	<1	457	30	1080	64
DUP-HDIS_179_08	58	100	<1	110	<1	24	<10	47	642	0.7	35	<1	556	37	910	80

HDIS_238_08	5	75	<10	<0.1	22400	<1	460	2	429	<5	<100	180	74	27.3	27.3
DUP-HDIS_238_08	6	59	<10	<0.1	21700	<1	450	2	324	<5	<100	160	75	27.1	28.8
HDIS_508_08	14	62	<10	0.4	3210	<1	430	11	190	149	<100	2030	43	17.7	16.2
DUP-HDIS_508_08	13	58	20	0.4	3270	<1	380	10	242	175	<100	2470	49	21.6	18.4
HDIS_539_08	1	>300	20	<0.1	2380	<1	110	19	133	107	<100	130	70	37.7	14.6
DUP-HDIS_539_08	2	>300	20	<0.1	2470	<1	140	18	192	104	<100	130	67	32.1	16.6
HDIS_555_08	83	190	<10	0.3	1600	<1	420	103	70	24	<100	190	61	29	13.5
DUP-HDIS_555_08	81	182	<10	0.3	1590	<1	440	126	68	18	<100	170	59	28.4	13
HDIS_580_08	2	132	30	0.1	1130	1	10	1	39	69	<100	1160	7	4.1	1.1
DUP-HDIS_580_08	2	120	30	0.1	1260	1	<10	1	41	65	<100	1130	7	4.2	1.2
HDIS_595_08	11	47	<10	0.2	1120	<1	560	6	38	35	<100	1450	9	3.3	3.4
DUP-HDIS_595_08	10	54	<10	<0.1	1220	<1	550	8	65	61	<100	2260	8	3.4	3.3
HDIS_315_08	1	198	<10	0.1	1610	<1	80	5	60	218	<100	400	82	42.8	12.8
DUP-HDIS_315_08	1	208	<10	<0.1	1330	<1	70	6	74	157	<100	370	101	47	17.7
HDIS_383_08	26	95	<10	0.2	1410	<1	400	8	94	21	<100	240	49	20.2	17
DUP-HDIS_383_08	20	95	<10	0.1	1090	<1	380	8	84	22	<100	190	45	19	15.2
HDIS_399_08	3	172	30	0.2	1500	1	10	4	112	147	<100	950	20	11.2	4.9
DUP-HDIS_399_08	3	168	30	0.3	1390	<1	<10	4	110	167	<100	1000	22	12.4	5
HDIS_449_08	4	215	20	<0.1	1730	<1	160	5	254	107	<100	640	45	16.8	14
DUP-HDIS_449_08	5	211	10	<0.1	1700	<1	150	4	259	74	<100	640	45	15.3	14.2
HDIS_481_08	4	121	40	0.3	2640	1	50	<1	39	142	<100	1170	6	3.1	1.4
DUP-HDIS_481_08	6	137	40	0.3	2540	<1	40	<1	46	121	<100	1090	7	3.7	1.5
HDIS_610_08	8	36	<10	<0.1	5900	<1	560	3	103	46	<100	80	94	34.3	25.8
DUP-HDIS_610_08	8	42	<10	<0.1	5440	<1	530	3	143	38	<100	80	117	42	32.3
HDIS_622_08	2	263	<10	<0.1	1300	<1	30	14	69	48	<100	150	55	24.2	10.6
DUP-HDIS_622_08	4	281	10	<0.1	1870	<1	30	10	123	61	<100	180	52	21.7	12.9
HDIS_639_08	13	239	<10	<0.1	1930	<1	40	6	196	192	<100	670	411	190	68.2
DUP-HDIS_639_08	12	243	<10	<0.1	1400	<1	40	4	148	137	<100	640	409	194	63.2
HDIS_50_08	167	106	50	0.7	1060	<1	190	32	183	40	<100	130	83	29.9	28.4
DUP-HDIS_50_08	303	113	60	0.8	1070	<1	200	24	164	31	<100	190	83	30	29.4

HDIS_238_08	11	134	242	<5	39	<5	<0.5	530	18	20	<1	103	<1	186	<1
DUP-HDIS_238_08	10	144	228	<5	39	<5	<0.5	564	18	10	<1	107	<1	174	<1
HDIS_508_08	81	72	71	<5	42	<5	<0.5	169	219	190	<1	31	<1	109	2
DUP-HDIS_508_08	145	77	88	<5	35	5	<0.5	208	212	240	<1	40	<1	111	3
HDIS_539_08	93	61	40	<5	10	<5	0.8	112	142	850	<1	20	<1	98	2
DUP-HDIS_539_08	73	70	57	<5	10	<5	0.9	148	162	770	<1	27	<1	122	2
HDIS_555_08	52	61	29	<5	34	<5	<0.5	84	381	4720	<1	14	<1	53	7
DUP-HDIS_555_08	54	58	28	<5	38	<5	<0.5	81	412	6840	<1	14	<1	43	7
HDIS_580_08	506	5	17	<5	4	<5	4.3	18	171	30	<1	4	<1	144	1
DUP-HDIS_580_08	516	6	17	<5	3	<5	4.7	18	181	30	<1	4	<1	154	1
HDIS_595_08	11	16	14	<5	5	<5	<0.5	41	106	30	<1	7	<1	47	<1
DUP-HDIS_595_08	19	15	17	<5	5	6	<0.5	45	158	40	<1	8	<1	42	<1
HDIS_315_08	132	68	24	<5	12	<5	0.7	77	179	600	<1	14	<1	81	<1
DUP-HDIS_315_08	76	95	29	<5	9	<5	0.7	103	153	630	<1	17	<1	79	<1
HDIS_383_08	21	69	35	<5	14	<5	<0.5	111	202	890	<1	19	<1	95	4
DUP-HDIS_383_08	22	63	31	<5	13	<5	<0.5	99	191	880	<1	17	<1	93	4
HDIS_399_08	370	21	44	<5	2	<5	4.5	56	115	150	<1	13	<1	115	3
DUP-HDIS_399_08	340	22	43	<5	1	<5	3.8	57	106	210	<1	14	<1	129	3
HDIS_449_08	56	66	72	<5	11	<5	1.2	167	254	550	<1	34	<1	113	<1
DUP-HDIS_449_08	47	66	76	<5	10	<5	0.9	176	237	540	<1	35	<1	112	<1
HDIS_481_08	493	6	16	<5	8	6	2.1	18	164	30	<1	5	<1	100	2
DUP-HDIS_481_08	458	7	19	<5	6	<5	1.8	21	161	20	<1	5	<1	99	2
HDIS_610_08	8	160	26	13	50	<5	<0.5	192	150	530	<1	23	<1	78	<1
DUP-HDIS_610_08	10	196	36	11	48	<5	<0.5	260	148	650	<1	33	<1	83	<1
HDIS_622_08	84	45	20	<5	3	<5	2.6	68	111	410	<1	11	<1	66	<1
DUP-HDIS_622_08	99	52	34	<5	3	<5	3.7	89	132	380	<1	16	<1	152	2
HDIS_639_08	104	319	52	<5	2	<5	0.5	327	328	1410	<1	47	<1	159	1
DUP-HDIS_639_08	82	290	37	<5	2	<5	<0.5	278	380	1400	<1	38	<1	151	<1
HDIS_50_08	24	136	44	<5	18	<5	<0.5	209	348	740	<1	31	<1	190	8
DUP-HDIS_50_08	27	140	44	<5	19	<5	<0.5	211	291	800	<1	32	<1	212	11

HDIS_238_08	127	136	<1	3430	<1	17	<10	34.4	8	1.6	15	<1	316	17	50	35
DUP-HDIS_238_08	119	151	<1	3310	<1	18	<10	33.3	5	1.2	13	<1	333	17	40	30
HDIS_508_08	27	57	<1	1870	<1	9	<10	28	58	<0.5	55	<1	210	13	160	59
DUP-HDIS_508_08	55	66	<1	1700	<1	10	<10	37.2	81	<0.5	60	<1	241	16	130	81
HDIS_539_08	79	44	<1	400	<1	11	<10	63.5	351	<0.5	15	<1	354	27	520	67
DUP-HDIS_539_08	73	53	<1	380	<1	11	<10	69.7	403	<0.5	14	<1	324	23	520	81
HDIS_555_08	30	37	<1	2540	<1	10	<10	23.2	21	<0.5	24	<1	353	20	2400	23
DUP-HDIS_555_08	32	36	<1	2760	<1	10	<10	23.6	17	<0.5	25	<1	351	20	2850	25
HDIS_580_08	24	4	<1	110	<1	<1	<10	33.7	1120	0.5	10	<1	28	3	60	80
DUP-HDIS_580_08	23	5	<1	110	<1	1	<10	37.5	1220	0.5	11	<1	28	3	50	85
HDIS_595_08	<5	13	<1	1290	<1	2	<10	10.8	16	<0.5	25	<1	48	2	90	9
DUP-HDIS_595_08	<5	13	<1	1310	<1	2	<10	12.7	13	<0.5	29	<1	47	3	70	11
HDIS_315_08	59	39	<1	410	<1	13	<10	30.9	192	0.6	40	<1	390	27	150	53
DUP-HDIS_315_08	53	54	<1	320	<1	17	<10	29.7	199	0.5	35	<1	468	30	160	50
HDIS_383_08	11	49	<1	1350	<1	10	<10	14.4	34	<0.5	43	<1	226	13	160	36
DUP-HDIS_383_08	11	42	<1	1320	<1	9	<10	13.4	34	<0.5	41	<1	206	12	160	34
HDIS_399_08	66	16	<1	70	<1	4	<10	55.3	1680	0.6	28	<1	89	9	100	93
DUP-HDIS_399_08	69	18	<1	50	<1	4	<10	55.6	1530	0.7	28	<1	92	10	90	95
HDIS_449_08	32	56	<1	270	<1	10	<10	53	487	<0.5	12	<1	154	10	310	52
DUP-HDIS_449_08	30	58	<1	240	<1	10	<10	51.1	383	<0.5	11	<1	149	10	300	49
HDIS_481_08	27	5	<1	350	<1	1	<10	34.1	546	0.6	23	<1	25	2	30	54
DUP-HDIS_481_08	32	6	<1	290	<1	1	<10	39	533	0.7	23	<1	27	3	20	57
HDIS_610_08	10	95	<1	3420	<1	19	<10	93.8	8	0.5	33	<1	361	16	230	11
DUP-HDIS_610_08	10	124	<1	3120	<1	24	<10	102	<3	0.5	31	<1	454	19	360	14
HDIS_622_08	77	30	<1	160	<1	9	<10	40	831	0.8	16	<1	225	16	920	90
DUP-HDIS_622_08	89	39	<1	120	<1	9	<10	82.9	1400	1.3	22	<1	196	15	580	178
HDIS_639_08	159	180	<1	280	<1	65	<10	75.4	204	0.9	82	<1	2470	122	180	78
DUP-HDIS_639_08	165	161	<1	280	<1	63	<10	61.4	112	0.8	76	<1	2450	128	160	54
HDIS_50_08	20	104	<1	560	<1	18	<10	40.1	148	1.3	26	<1	347	19	590	112
DUP-HDIS_50_08	21	104	<1	560	<1	18	<10	38.5	158	1.2	27	<1	355	19	400	114

HDIS_89_08	14	224	53	<5	12	<5	<0.5	336	334	430	<1	45	<1	109	4
DUP-HDIS_89_08	14	218	53	<5	12	<5	<0.5	330	332	420	<1	44	<1	127	4
HDIS_135_08	33	106	46	<5	6	<5	<0.5	170	317	1220	<1	27	<1	78	10
DUP-HDIS_135_08	30	96	40	<5	6	<5	<0.5	157	302	1130	<1	25	<1	78	10
HDIS_167_08	160	26	25	<5	7	<5	<0.5	51	172	460	<1	10	<1	123	3
DUP-HDIS_167_08	174	25	25	<5	7	<5	<0.5	52	185	350	<1	10	<1	131	4
HDIS_220_08	132	23	34	<5	2	<5	<0.5	65	89	1850	<1	13	<1	280	32
DUP-HDIS_220_08	108	22	32	<5	5	<5	<0.5	62	88	1810	<1	12	<1	260	25
HDIS_273_08	63	52	73	<5	8	<5	0.6	159	193	230	<1	31	<1	104	1
DUP-HDIS_273_08	64	56	68	<5	8	<5	0.5	150	201	280	<1	30	<1	104	1
HDIS_77_08	53	27	18	<5	2	<5	2.5	41	130	430	<1	7	<1	170	<1
DUP-HDIS_77_08	70	25	22	<5	2	5	2.9	40	146	390	<1	8	<1	151	<1
HDIS_120_08	10	113	47	<5	53	<5	<0.5	157	157	760	<1	25	<1	251	<1
DUP-HDIS_120_08	10	111	47	<5	54	<5	<0.5	154	161	760	<1	25	<1	256	<1
HDIS_171_08	99	26	18	15	7	6	3.1	30	212	320	<1	6	<1	150	<1
DUP-HDIS_171_08	83	51	28	16	5	6	3.2	58	238	320	<1	11	<1	164	<1
HDIS_230_08	63	52	34	9	2	<5	2.5	80	173	490	<1	15	<1	236	<1
DUP-HDIS_230_08	59	55	34	9	2	<5	2.3	87	170	470	<1	16	<1	232	<1
HDIS_286_08	43	45	17	<5	33	<5	0.7	57	258	210	<1	9	<1	142	<1
DUP-HDIS_286_08	33	50	18	<5	32	<5	0.6	66	245	180	<1	11	<1	136	<1
HDIS_370_08	122	17	12	<5	4	<5	3.3	25	104	750	<1	5	<1	101	<1
DUP-HDIS_370_08	146	7	6	<5	4	<5	2.2	11	96	600	<1	2	<1	88	<1
HDIS_538_08	108	100	82	<5	2	<5	5	200	130	350	<1	39	<1	192	2
DUP-HDIS_538_08	133	48	24	<5	2	<5	3.9	60	120	380	<1	11	<1	132	1
HDIS_3_08	83	57	21	<5	2	<5	1.8	73	133	780	<1	12	<1	128	<1
DUP-HDIS_3_08	70	69	25	<5	1	<5	2	88	148	580	<1	15	<1	175	<1
HDIS_31_08	7	85	11	6	45	<5	<0.5	94	182	260	<1	11	<1	165	<1
DUP-HDIS_31_08	6	81	11	6	44	<5	<0.5	92	176	310	<1	11	<1	156	<1
HDIS_64_08	33	97	36	<5	<1	<5	1.1	172	88	2910	<1	27	<1	388	<1

HDIS_89_08	8	175	<1	980	<1	26	<10	30.4	14	0.5	37	<1	565	25	350	48
DUP-HDIS_89_08	8	170	<1	960	<1	24	<10	34.6	8	0.6	35	<1	529	23	380	54
HDIS_135_08	9	70	<1	1510	<1	14	<10	13.8	8	0.6	46	<1	398	20	3900	42
DUP-HDIS_135_08	8	63	<1	1430	<1	13	<10	13.5	9	0.6	46	<1	363	18	3470	43
HDIS_167_08	46	17	<1	1160	<1	5	<10	17.4	72	0.9	62	<1	164	10	150	41
DUP-HDIS_167_08	47	17	<1	1140	<1	4	<10	17.9	85	1	67	<1	156	10	130	44
HDIS_220_08	27	19	<1	110	<1	3	<10	56.9	178	2.5	17	<1	81	6	650	193
DUP-HDIS_220_08	24	18	<1	150	<1	3	<10	50	98	2.4	13	<1	80	5	670	180
HDIS_273_08	24	46	<1	800	<1	8	<10	50.2	284	1.3	21	<1	161	11	210	88
DUP-HDIS_273_08	26	44	<1	740	<1	8	<10	54.1	287	1.5	21	<1	167	11	220	86
HDIS_77_08	44	18	<1	100	<1	6	<10	37	944	0.9	21	<1	121	9	620	65
DUP-HDIS_77_08	40	17	<1	120	<1	5	<10	38.8	1090	0.9	19	<1	109	9	1030	75
HDIS_120_08	24	67	<1	910	<1	18	<10	36.6	21	1.2	62	<1	368	18	650	53
DUP-HDIS_120_08	24	67	<1	920	<1	17	<10	38.9	23	1.3	59	<1	350	16	640	57
HDIS_171_08	61	16	1	150	1	6	<10	74.1	983	2.5	33	4	115	12	1650	103
DUP-HDIS_171_08	74	32	1	110	1	10	<10	85	1070	1.9	40	3	175	16	1240	127
HDIS_230_08	75	37	<1	70	<1	9	<10	77.1	905	1.5	22	<1	181	16	370	113
DUP-HDIS_230_08	73	39	<1	60	<1	10	<10	81.3	889	1.5	23	<1	182	16	370	113
HDIS_286_08	59	28	<1	580	<1	7	<10	33.1	293	0.7	16	<1	161	13	1580	63
DUP-HDIS_286_08	55	32	<1	590	<1	8	<10	32.9	246	0.6	15	<1	157	11	1510	55
HDIS_370_08	46	11	<1	90	<1	4	<10	38.3	1510	0.5	13	<1	102	9	330	58
DUP-HDIS_370_08	36	4	<1	80	<1	2	<10	26.9	997	<0.5	9	<1	70	11	350	38
HDIS_538_08	104	71	<1	90	<1	18	<10	71.5	1880	0.9	22	1	375	24	110	128
DUP-HDIS_538_08	85	27	<1	80	<1	11	<10	50.9	1260	0.7	15	<1	309	25	130	82
HDIS_3_08	75	39	3	60	<1	10	<10	55.8	551	0.6	32	1	192	16	520	139
DUP-HDIS_3_08	86	48	<1	40	<1	12	<10	69.1	630	0.6	36	1	231	20	430	159
HDIS_31_08	16	54	<1	2300	<1	10	<10	32	4	0.6	39	1	233	10	450	30
DUP-HDIS_31_08	15	51	<1	2280	<1	10	<10	29.5	<3	0.5	37	1	220	9	430	26
HDIS_64_08	102	74	<1	10	<1	15	<10	81.8	288	1.5	29	1	309	20	240	153

DUP-HDIS_64_08	6	>300	<10	<0.1	500	<1	<10	7	103	41	<100	300	72	29.3	15.3
HDIS_312_08	2	145	<10	<0.1	1770	<1	190	9	109	167	<100	220	158	77.2	27.5
DUP-HDIS_312_08	2	139	<10	<0.1	1410	<1	190	8	99	272	<100	190	95	47.6	19.2
HDIS_649_08	4	274	<10	<0.1	3790	<1	40	88	63	141	<100	150	60	30.4	8.2
DUP-HDIS_649_08	3	282	<10	<0.1	3360	<1	40	71	49	141	<100	150	56	28.1	7.3
HDIS_2_08	1	267	<10	<0.1	600	<1	10	3	114	23	<100	280	46	14.7	12.5
DUP-HDIS_2_08	1	271	<10	<0.1	580	<1	10	3	109	20	<100	300	49	16.1	12.5
HDIS_28_08	1	254	<10	<0.1	510	<1	<10	9	168	19	<100	100	54	18.7	14.2
DUP-HDIS_28_08	1	247	<10	<0.1	500	<1	<10	9	158	18	<100	100	54	19.2	13.6
HDIS_365_08	5	206	20	<0.1	1710	<1	20	13	201	344	<100	530	133	65.7	25.6
DUP-HDIS_365_08	4	168	20	<0.1	1520	2	20	10	139	353	<100	400	76	40.1	15.1
HDIS_24_08	2	>300	10	<0.1	1810	<1	20	6	73	54	<100	140	27	11.5	6.4
DUP-HDIS_24_08	2	293	10	<0.1	1910	<1	30	5	98	50	<100	150	25	9.9	6.9
HDIS_98_08	27	22	<10	0.3	620	<1	410	27	25	26	<100	9500	39	13.5	22
DUP-HDIS_98_08	24	23	<10	0.3	560	<1	400	27	27	35	<100	9700	38	14	21.5
HDIS_633_08	1	251	<10	<0.1	1090	<1	70	20	53	322	<100	130	31	12.7	6
DUP-HDIS_633_08	1	258	<10	<0.1	940	<1	50	23	49	378	<100	120	31	13.7	6.2
HDIS_196_08	2	200	<10	<0.1	1850	<1	200	13	114	122	<100	90	50	21.4	12.5
DUP-HDIS_196_08	3	184	<10	<0.1	1560	<1	230	13	133	111	<100	70	42	17.2	13.2
MMI Standard MMISRM16															
ANALYTE	**Ag**	**Al**	**As**	**Au**	**Ba**	**Bi**	**Ca**	**Cd**	**Ce**	**Co**	**Cr**	**Cu**	**Dy**	**Er**	**Eu**
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**
DETECTION	**1**	**1**	**10**	**0.1**	**10**	**1**	**10**	**1**	**5**	**5**	**100**	**10**	**1**	**0.5**	**0.5**
UNITS	**PPB**	**PPM**	**PPB**	**PPB**	**PPB**	**PPB**	**PPM**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**
MMISRM16	13	43	<10	21.9	70	<1	140	3	30	45	<100	460	3	1.2	1.5
MMISRM16	15	42	10	33	70	<1	260	3	13	48	<100	500	2	0.7	0.8
MMISRM16	22	61	20	34.6	140	<1	310	5	24	79	<100	720	3	1.4	1.6
MMISRM16	17	40	10	26.4	80	<1	210	3	18	43	<100	450	3	0.7	1.3
MMISRM16	19	44	20	25.5	50	<1	220	4	24	48	<100	510	5	1.4	1.9
MMISRM16	13	36	20	23.7	70	<1	200	3	21	43	<100	490	2	0.8	1.1
MMISRM16	12	29	10	24.1	60	<1	140	3	19	33	<100	410	2	0.8	1

DUP-HDIS_64_08	32	76	23	<5	<1	<5	0.9	116	73	2480	<1	18	<1	388	<1
HDIS_312_08	101	113	43	<5	3	<5	<0.5	149	140	600	<1	25	<1	86	<1
DUP-HDIS_312_08	147	76	38	<5	3	<5	<0.5	110	156	470	<1	20	<1	71	<1
HDIS_649_08	133	40	18	<5	9	<5	1.2	59	112	620	<1	10	<1	35	<1
DUP-HDIS_649_08	109	36	13	<5	9	<5	1.1	47	96	640	<1	8	<1	31	<1
HDIS_2_08	26	61	33	<5	3	<5	1.3	87	70	320	<1	18	<1	147	<1
DUP-HDIS_2_08	24	62	31	<5	3	<5	1.2	86	71	340	<1	17	<1	152	<1
HDIS_28_08	19	64	32	<5	1	<5	0.6	109	83	660	<1	22	<1	131	<1
DUP-HDIS_28_08	18	62	30	<5	1	<5	0.6	105	83	660	<1	21	<1	124	<1
HDIS_365_08	72	109	72	<5	6	<5	1	159	274	1000	<1	35	<1	89	2
DUP-HDIS_365_08	100	64	53	<5	6	<5	1.9	99	217	1180	<1	23	<1	70	2
HDIS_24_08	91	31	23	<5	4	<5	3	60	108	420	<1	11	<1	80	<1
DUP-HDIS_24_08	97	33	31	<5	4	<5	3.9	71	100	400	<1	14	<1	95	<1
HDIS_98_08	6	75	15	<5	5	<5	<0.5	123	100	40	<1	15	<1	45	<1
DUP-HDIS_98_08	7	74	15	<5	4	<5	<0.5	120	106	50	<1	15	<1	51	<1
HDIS_633_08	104	31	13	<5	16	<5	0.7	39	183	650	<1	7	<1	85	<1
DUP-HDIS_633_08	84	32	12	<5	12	<5	0.6	40	158	640	<1	6	<1	72	<1
HDIS_196_08	28	57	25	<5	13	<5	<0.5	93	179	350	<1	15	<1	117	<1
DUP-HDIS_196_08	24	58	28	<5	13	<5	<0.5	100	174	310	<1	17	<1	124	<1
MMI Standard MMIS															
ANALYTE	**Fe**	**Gd**	**La**	**Li**	**Mg**	**Mo**	**Nb**	**Nd**	**Ni**	**Pb**	**Pd**	**Pr**	**Rb**	**Sb**	**Sc**
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**
DETECTION	**1**	**1**	**1**	**5**	**1**	**5**	**0.5**	**1**	**5**	**10**	**1**	**1**	**5**	**1**	**5**
UNITS	**PPM**	**PPB**	**PPB**	**PPB**	**PPM**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**
MMISRM16	4	6	7	<5	33	40	<0.5	20	185	110	18	4	263	<1	9
MMISRM16	3	3	2	<5	42	44	<0.5	10	165	80	18	2	249	<1	12
MMISRM16	4	6	5	<5	41	71	<0.5	19	294	130	30	4	375	<1	<5
MMISRM16	2	4	5	<5	31	41	<0.5	18	165	80	23	3	279	<1	13
MMISRM16	3	7	4	<5	33	42	<0.5	16	181	80	24	5	305	<1	14
MMISRM16	3	4	5	<5	28	38	<0.5	17	211	90	20	3	265	<1	7
MMISRM16	2	4	5	<5	20	30	<0.5	16	183	100	19	3	207	<1	5

DUP-HDIS_64_08	99	54	3	<10	<1	13	<10	66.1	223	1.4	26	1	305	20	170	139
HDIS_312_08	80	64	<1	930	<1	23	<10	20.5	40	<0.5	31	1	910	44	230	28
DUP-HDIS_312_08	82	45	<1	840	<1	15	<10	25.8	62	<0.5	29	1	539	30	180	39
HDIS_649_08	58	25	<1	340	<1	9	<10	34.2	375	<0.5	9	1	282	18	650	31
DUP-HDIS_649_08	53	21	<1	310	<1	8	<10	30.2	322	<0.5	8	1	262	16	700	25
HDIS_2_08	27	43	<1	70	<1	12	<10	45.5	378	0.8	26	<1	129	9	140	55
DUP-HDIS_2_08	28	42	<1	70	<1	12	<10	41.4	327	0.8	25	<1	144	10	130	49
HDIS_28_08	31	47	<1	30	<1	13	<10	60.4	158	0.5	13	<1	176	12	150	58
DUP-HDIS_28_08	30	44	<1	30	<1	13	<10	55.5	145	<0.5	13	<1	176	12	120	53
HDIS_365_08	51	69	<1	170	<1	26	<10	89	211	<0.5	109	<1	528	42	150	72
DUP-HDIS_365_08	33	42	<1	160	<1	15	<10	72.2	269	<0.5	99	<1	368	27	220	67
HDIS_24_08	52	22	<1	130	<1	5	<10	30.4	1080	0.6	12	1	94	8	470	39
DUP-HDIS_24_08	49	25	<1	120	<1	5	<10	38.3	1480	0.7	13	1	84	7	370	52
HDIS_98_08	11	58	<1	760	<1	9	<10	20.1	<3	<0.5	27	1	167	9	3300	24
DUP-HDIS_98_08	11	57	<1	730	<1	9	<10	21.3	<3	<0.5	27	1	172	9	3250	26
HDIS_633_08	32	19	<1	220	<1	5	<10	59	344	<0.5	16	1	106	8	620	44
DUP-HDIS_633_08	31	20	<1	160	<1	5	<10	53.1	308	<0.5	9	1	107	8	760	37
HDIS_196_08	44	39	<1	440	<1	9	<10	40.3	162	<0.5	15	1	189	14	230	41
DUP-HDIS_196_08	40	41	<1	440	<1	8	<10	39.3	159	<0.5	14	1	160	12	180	44
MMI Standard MMIS																
ANALYTE	**Sm**	**Sn**	**Sr**	**Ta**	**Tb**	**Te**	**Th**	**Ti**	**Tl**	**U**	**W**	**Y**	**Yb**	**Zn**	**Zr**	
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	
DETECTION	**1**	**1**	**10**	**1**	**1**	**10**	**0.5**	**3**	**0.5**	**1**	**1**	**5**	**1**	**20**	**5**	
UNITS	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	
MMISRM16	6	<1	450	<1	<1	<10	32.8	<3	<0.5	51	<1	11	<1	140	12	
MMISRM16	3	<1	450	<1	<1	<10	25.8	<3	<0.5	39	<1	6	<1	170	10	
MMISRM16	7	<1	580	<1	<1	<10	34.4	3	0.5	50	1	15	<1	280	18	
MMISRM16	5	<1	440	<1	<1	<10	35.3	<3	<0.5	40	<1	11	<1	170	15	
MMISRM16	6	<1	450	<1	<1	<10	33.5	<3	1.5	42	<1	28	<1	180	16	
MMISRM16	5	<1	430	<1	<1	<10	27.1	<3	<0.5	46	<1	8	<1	220	12	
MMISRM16	4	<1	440	<1	<1	<10	28.3	<3	<0.5	49	<1	6	<1	190	9	

MMISRM16	24	63	20	41.9	100	<1	250	4	22	76	<100	700	4	1.4	1.5
MMISRM16	25	63	20	40	100	<1	250	5	22	77	<100	710	4	1.5	1.5
MMISRM16	21	69	20	35.5	120	<1	220	5	29	81	100	700	4	1.6	1.7
MMISRM16	20	74	20	35.8	120	<1	230	5	27	86	100	710	4	1.4	1.7
MMISRM16	21	74	20	36.2	60	<1	230	5	26	87	<100	740	4	1.5	1.7
MMISRM16	21	52	20	31.2	70	<1	220	4	23	54	<100	700	3	0.9	1.1
MMISRM16	21	56	20	32.4	70	<1	230	4	25	60	<100	710	3	1.1	1.3
MMISRM16	21	55	10	35.7	80	<1	200	5	19	67	<100	640	3	1.2	1.4
MMISRM16	22	56	10	36.2	120	<1	200	4	21	68	<100	640	4	1.3	1.5
MMISRM16	20	53	20	36.7	100	<1	270	4	21	65	<100	600	2	0.9	1.2
MMISRM16	14	52	20	28	40	<1	230	3	20	57	<100	520	2	1	1.1
MMISRM16	20	44	20	29.6	80	<1	230	4	24	56	<100	700	3	0.9	1.2
MMISRM16	21	59	20	33.6	80	<1	250	5	26	68	<100	770	3	1.1	1.3
MMISRM16	21	65	20	34.6	80	<1	270	5	26	72	<100	820	3	1.1	1.3
MMISRM16	19	50	10	26.7	70	<1	230	4	19	59	<100	620	3	1	1.2
MMISRM16	23	53	20	33.9	80	<1	260	4	18	64	<100	630	3	1	1.1
MMISRM16	23	54	20	34.1	90	<1	270	4	20	64	<100	640	3	1	1.2
MMISRM16	26	49	20	30.7	80	<1	210	4	26	61	<100	710	3	1.1	1.4
MMISRM16	25	49	10	39.6	80	<1	250	4	18	61	<100	630	2	0.9	1.1
MMISRM16	18	48	10	32.1	80	<1	220	3	20	56	<100	530	3	1	1.2
MMISRM16	18	43	20	27.6	70	<1	220	3	17	47	<100	500	3	1	1.3
MMISRM16	18	36	20	29.6	60	<1	190	3	17	43	<100	480	3	0.9	1.2

Recommended Values MMISRM16

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Dy	Er	Eu
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	10	1	0.5	0.5
UNITS	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
MMISRM16	17	45	10	31.9	65	<1	209	4	13	58	<100	629	2.7	1	1.5

Replicate Analyses-Analytical Blank

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Dy	Er	Eu
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	10	1	0.5	0.5
UNITS	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5

MMISRM16	2	6	4	<5	36	62	<0.5	18	285	160	33	3	366	<1	15
MMISRM16	2	6	4	<5	36	62	<0.5	18	279	160	34	3	364	<1	15
MMISRM16	3	7	7	<5	36	69	<0.5	23	332	170	34	4	343	<1	15
MMISRM16	3	8	7	<5	41	63	<0.5	23	354	170	33	4	331	<1	14
MMISRM16	3	7	6	<5	39	64	<0.5	22	357	190	34	4	350	<1	15
MMISRM16	3	5	6	<5	41	58	<0.5	19	267	110	27	3	378	<1	12
MMISRM16	4	6	6	<5	46	59	<0.5	19	278	120	28	3	378	<1	12
MMISRM16	2	5	4	<5	34	54	<0.5	18	260	140	31	3	329	<1	14
MMISRM16	2	6	5	<5	34	55	<0.5	19	274	140	30	3	337	<1	15
MMISRM16	2	5	5	<5	42	54	<0.5	16	235	120	24	3	298	<1	12
MMISRM16	3	5	4	<5	33	51	<0.5	15	222	100	19	3	262	<1	9
MMISRM16	3	5	6	<5	43	56	<0.5	19	241	110	28	3	379	<1	10
MMISRM16	3	6	6	<5	53	60	<0.5	20	315	130	30	4	406	<1	12
MMISRM16	4	6	6	<5	53	62	<0.5	20	340	130	31	4	415	<1	13
MMISRM16	3	5	4	<5	36	54	<0.5	17	215	110	27	3	325	<1	13
MMISRM16	3	5	4	<5	42	53	<0.5	16	223	110	30	3	354	<1	13
MMISRM16	3	5	4	<5	44	55	<0.5	17	218	110	31	3	362	<1	14
MMISRM16	3	6	6	<5	42	54	<0.5	20	278	130	27	4	350	<1	11
MMISRM16	3	4	4	<5	38	54	<0.5	15	217	110	30	3	338	<1	11
MMISRM16	2	5	3	<5	32	52	<0.5	16	218	100	25	3	305	<1	11
MMISRM16	3	4	3	<5	32	45	<0.5	16	205	80	20	2	295	<1	12
MMISRM16	2	4	3	<5	26	45	<0.5	14	195	90	22	2	274	<1	11
Recommended Valu															
ANALYTE	**Fe**	**Gd**	**La**	**Li**	**Mg**	**Mo**	**Nb**	**Nd**	**Ni**	**Pb**	**Pd**	**Pr**	**Rb**	**Sb**	**Sc**
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**
DETECTION	**1**	**1**	**1**	**5**	**1**	**5**	**0.5**	**1**	**5**	**10**	**1**	**1**	**5**	**1**	**5**
UNITS	**PPM**	**PPB**	**PPB**	**PPB**	**PPM**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**
MMISRM16	2	<1	6	2	36	51	<0.5	17	250	100	26	3	300	<1	13
Replicate Analyses-															
ANALYTE	**Fe**	**Gd**	**La**	**Li**	**Mg**	**Mo**	**Nb**	**Nd**	**Ni**	**Pb**	**Pd**	**Pr**	**Pt**	**Rb**	**Sb**
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**
DETECTION	**1**	**1**	**1**	**5**	**1**	**5**	**0.5**	**1**	**5**	**10**	**1**	**1**	**1**	**5**	**1**
UNITS	**PPM**	**PPB**	**PPB**	**PPB**	**PPM**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	9	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

MMISRM16	6	<1	530	<1	<1	<10	34.4	<3	<0.5	59	<1	15	1	260	15	
MMISRM16	6	<1	530	<1	<1	<10	33.6	<3	<0.5	57	<1	15	<1	270	16	
MMISRM16	8	<1	490	<1	<1	<10	45.1	3	<0.5	65	<1	17	1	250	20	
MMISRM16	7	<1	460	<1	<1	<10	46	3	<0.5	62	<1	17	1	240	19	
MMISRM16	7	<1	470	<1	<1	<10	44.1	<3	<0.5	61	<1	16	1	260	20	
MMISRM16	5	<1	550	<1	<1	<10	29	3	<0.5	45	<1	12	<1	250	15	
MMISRM16	6	<1	560	<1	<1	<10	30.9	4	<0.5	48	<1	13	<1	260	15	
MMISRM16	6	<1	460	<1	<1	<10	31	<3	<0.5	52	<1	12	<1	240	15	
MMISRM16	6	<1	480	<1	<1	<10	31.2	<3	<0.5	54	<1	14	<1	220	16	
MMISRM16	5	<1	480	<1	<1	<10	29.8	4	<0.5	45	<1	10	<1	200	13	
MMISRM16	5	<1	380	<1	<1	<10	28	10	<0.5	43	<1	10	<1	290	14	
MMISRM16	6	<1	520	<1	<1	<10	27.7	9	<0.5	47	<1	11	<1	230	15	
MMISRM16	6	<1	550	<1	<1	<10	30.5	<3	<0.5	49	<1	12	<1	280	16	
MMISRM16	6	<1	570	<1	<1	<10	29.3	5	<0.5	49	<1	14	<1	300	16	
MMISRM16	5	<1	490	<1	<1	<10	28.3	<3	<0.5	47	<1	11	<1	260	16	
MMISRM16	5	<1	530	<1	<1	<10	27.2	<3	<0.5	48	<1	11	<1	230	16	
MMISRM16	5	<1	540	<1	<1	<10	28.3	<3	<0.5	50	<1	12	<1	250	16	
MMISRM16	6	<1	510	<1	<1	<10	31	<3	<0.5	50	<1	13	<1	240	16	
MMISRM16	4	<1	540	<1	<1	<10	32.4	<3	<0.5	46	<1	10	<1	200	13	
MMISRM16	5	<1	470	<1	<1	<10	33.1	<3	<0.5	45	<1	10	<1	140	14	
MMISRM16	5	<1	520	<1	<1	<10	26.7	4	<0.5	40	<1	11	<1	170	15	
MMISRM16	4	<1	450	<1	<1	<10	27.2	5	<0.5	39	<1	10	<1	150	14	
Recommended Valu																
ANALYTE	**Sm**	**Sn**	**Sr**	**Ta**	**Tb**	**Te**	**Th**	**Ti**	**Tl**	**U**	**W**	**Y**	**Yb**	**Zn**	**Zr**	
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	
DETECTION	**1**	**1**	**10**	**1**	**1**	**10**	**0.5**	**3**	**0.5**	**1**	**1**	**5**	**1**	**20**	**5**	
UNITS	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	
MMISRM16	5	1.7	503	<1	<1	<10	22	7	<0.5	45	<1	10	<1	306	15	
Replicate Analyses-																
ANALYTE	**Sc**	**Sm**	**Sn**	**Sr**	**Ta**	**Tb**	**Te**	**Th**	**Tl**	**Tl**	**U**	**W**	**Y**	**Yb**	**Zn**	**Zr**
METHOD	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**	**MMI-M5**
DETECTION	**5**	**1**	**1**	**10**	**1**	**1**	**10**	**0.5**	**3**	**0.5**	**1**	**1**	**5**	**1**	**20**	**5**
UNITS	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**	**PPB**
BLANK	<5	<1	<1	<10	<1	<1	<10	0.7	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	<0.5	<1	1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	0.6	4	<0.5	<1	<1	<5	<1	<20	<5

BLANK	<1	<1	10	<0.1	<10	<1	<10	<1	5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	1	<0.5	<0.5
BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	20	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	2	<10	0.3	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<10	<1	<0.5	<0.5

BLANK	<1	<1	1	<5	<1	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	1	<1	<5	<1	<5	<0.5	1	<5	10	<1	<1	<1	<5	<1
BLANK	<1	<1	1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	1	<1	<1	<5	<1	<5	<0.5	<1	10	<10	<1	1	<1	<5	<1
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BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	<1	<1	<5	<1	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
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BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
BLANK	<1	1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
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BLANK	<1	<1	<1	<5	<1	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
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BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	1	<1	<10	<1	<1	<10	0.8	<3	<0.5	<1	<1	6	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5

APPENDIX 3

MMI RESPONSE RATIO PLOTS

Heidi Property
2008 MMI Response Ratios - Ag

369000 370000 371000 372000 373000 374000 375000 376000 377000 378000 379000 380000 381000

7144000 7143000 7142000 7141000 7140000 7139000 7138000 7137000

N

HDI MMI Ratios - Organics
AG_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

HDI MMI Ratios - Inorganics
AG_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

Heidi Claimblock
Yukon Quartz Claims
Streams
Lakes
Streams
HDI_Ag_ratio.grd
Value
High : 247.056
Low : 0

500 250 0 500 1,000 1,500 2,000
Meters

Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83

LOGAN RESOURCES LTD

Heidi Property
2008 MMI Response Ratios - As



369000 370000 371000 372000 373000 374000 375000 376000 377000 378000 379000 380000 381000

7144000 7143000 7142000 7141000 7140000 7139000 7138000 7137000

HDI MMI Ratios - Organics
AS_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

HDI MMI Ratios - Inorganics
AS_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

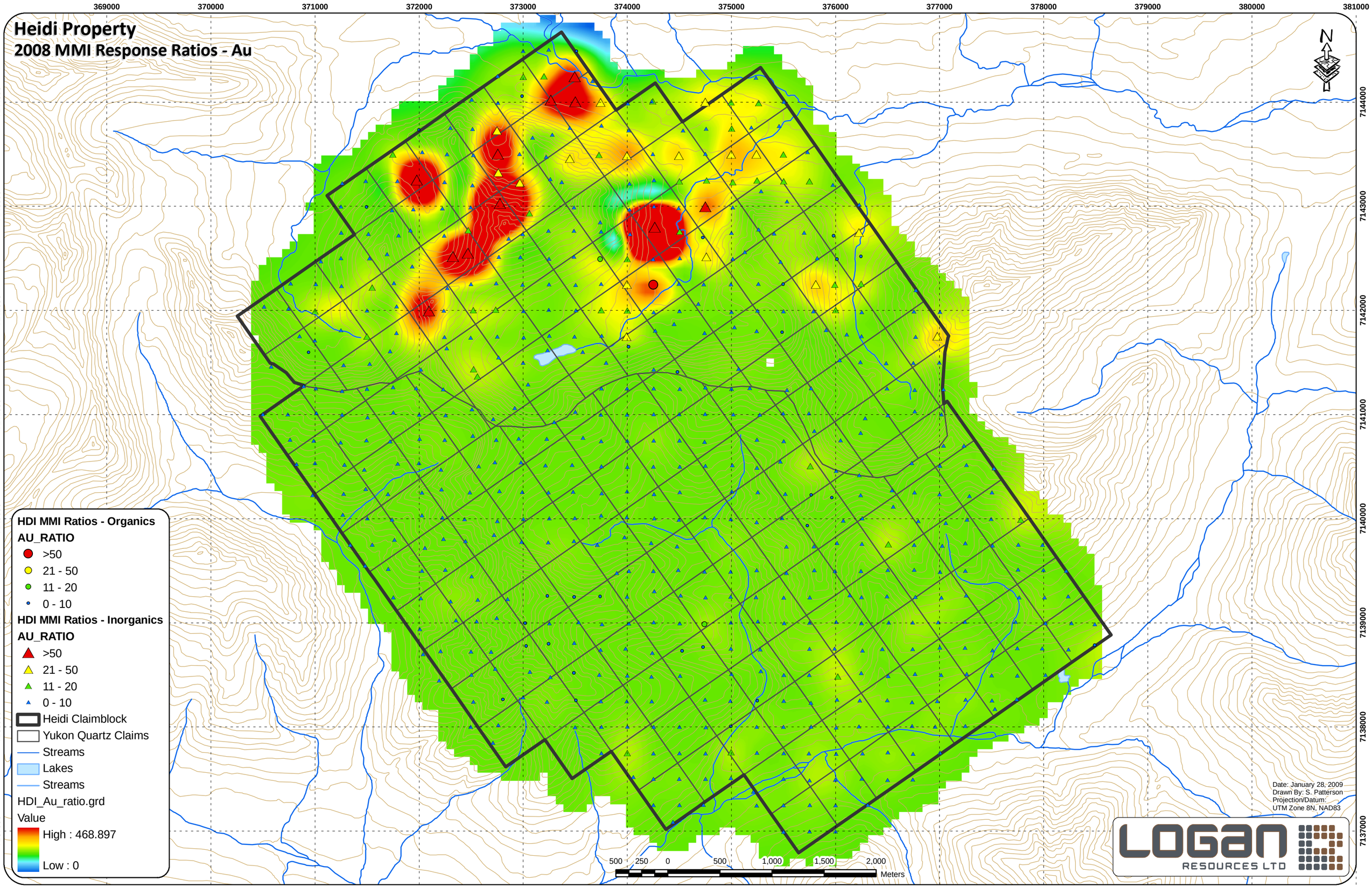
Heidi Claimblock
Yukon Quartz Claims
Streams
Lakes
Streams
HDI_As_ratio.grd
Value
High : 176.721
Low : 0

500 250 0 500 1,000 1,500 2,000 Meters

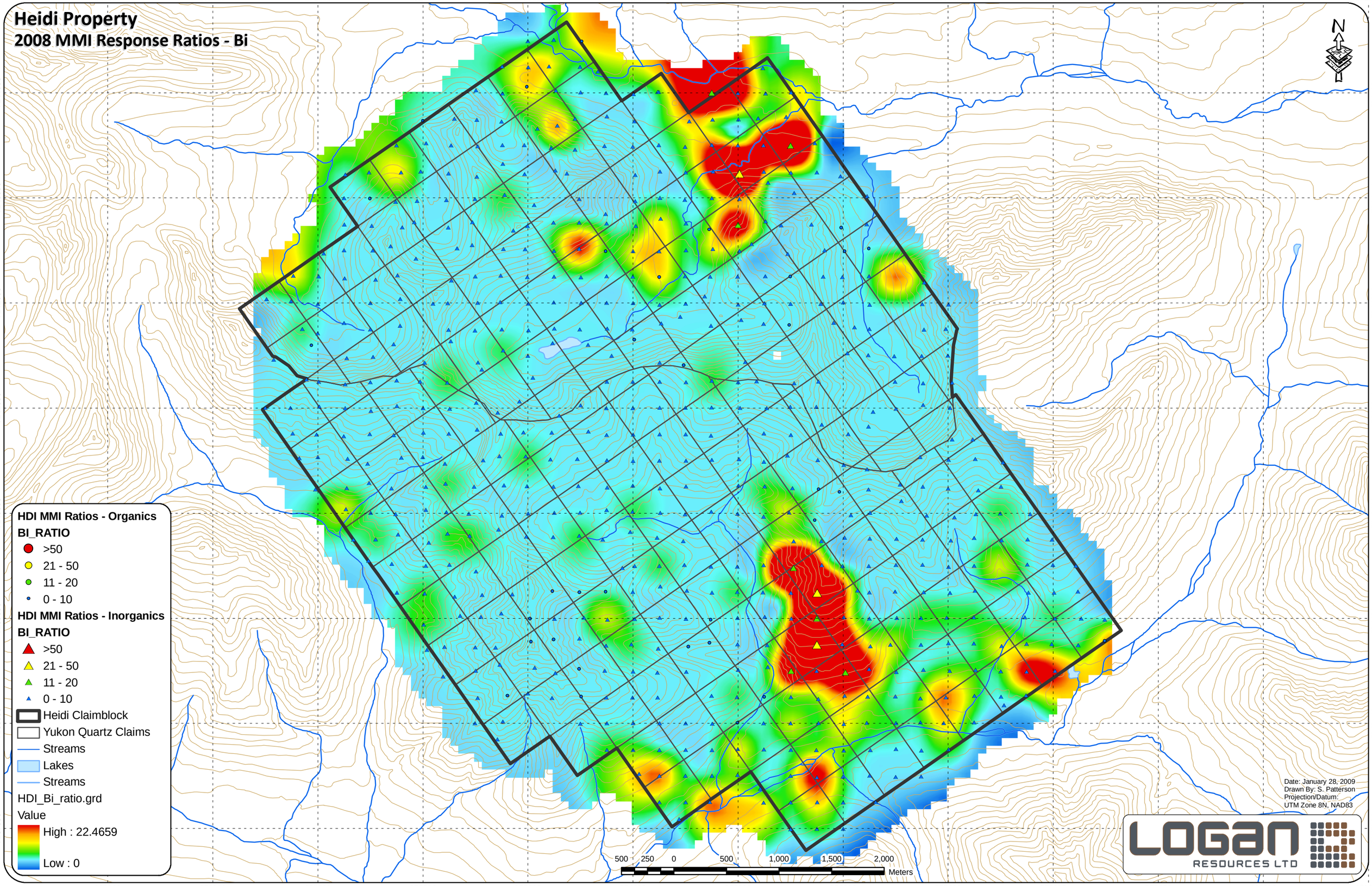
Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83

LOGAN RESOURCES LTD

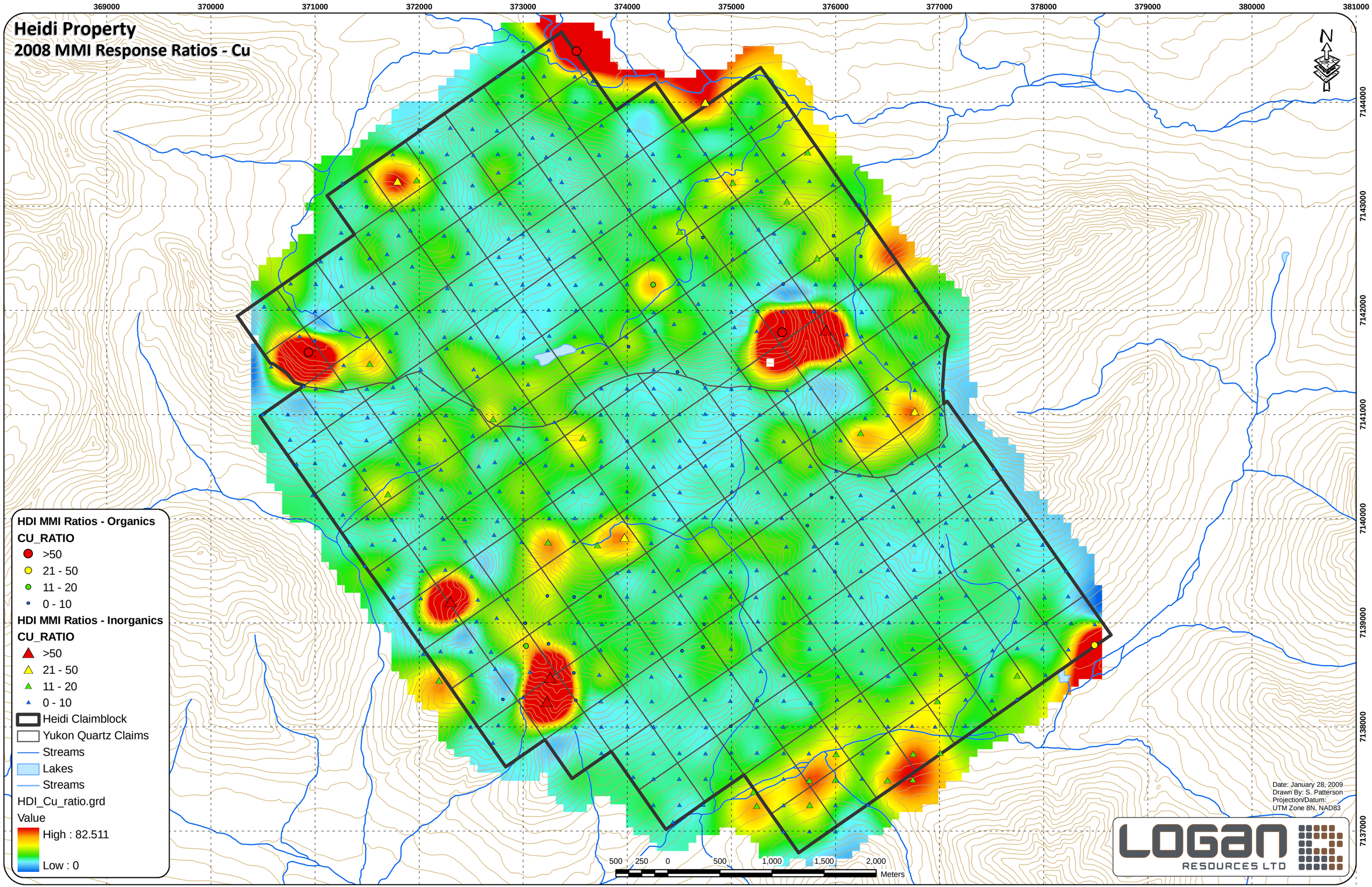
Heidi Property
2008 MMI Response Ratios - Au



Heidi Property
2008 MMI Response Ratios - Bi



Heidi Property
2008 MMI Response Ratios - Cu



Heidi Property
2008 MMI Response Ratios - Pb

369000 370000 371000 372000 373000 374000 375000 376000 377000 378000 379000 380000 381000

7144000 7143000 7142000 7141000 7140000 7139000 7138000 7137000

N

HDI MMI Ratios - Organics
PB_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

HDI MMI Ratios - Inorganics
PB_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

Heidi Claimblock
Yukon Quartz Claims
Streams
Lakes
Streams
HDI_Pb_ratio.grd
Value
High : 92.6271
Low : 0

500 250 0 500 1,000 1,500 2,000 Meters

Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83

LOGAN RESOURCES LTD

Heidi Property
2008 MMI Response Ratios - Sb



369000 370000 371000 372000 373000 374000 375000 376000 377000 378000 379000 380000 381000

7144000 7143000 7142000 7141000 7140000 7139000 7138000 7137000

HDI MMI Ratios - Organics
SB_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

HDI MMI Ratios - Inorganics
SB_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

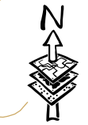
Heidi Claimblock
Yukon Quartz Claims
Streams
Lakes
Streams
HDI_Sb_ratio.grd
Value
High : 311.99
Low : 0

500 250 0 500 1,000 1,500 2,000 Meters

Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83

LOGAN RESOURCES LTD

Heidi Property
2008 MMI Response Ratios - W



369000 370000 371000 372000 373000 374000 375000 376000 377000 378000 379000 380000 381000

7144000 7143000 7142000 7141000 7140000 7139000 7138000 7137000

HDI MMI Ratios - Organics
W_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

HDI MMI Ratios - Inorganics
W_RATIO
- >50
- 21 - 50
- 11 - 20
- 0 - 10

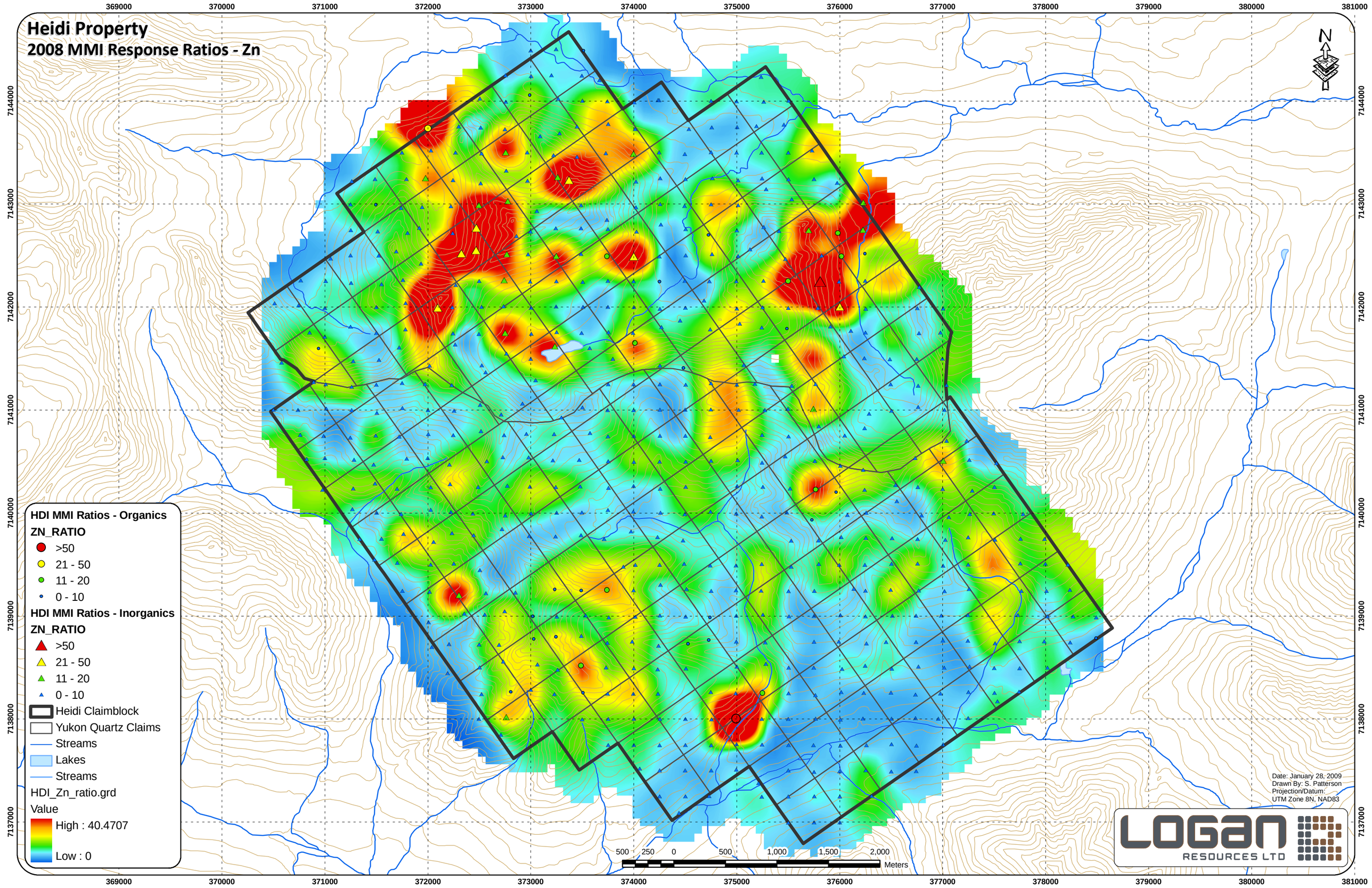
Heidi Claimblock
Yukon Quartz Claims
Streams
Lakes
Streams
HDI_W_ratio.grd
Value
High : 11.5927
Low : 0

500 250 0 500 1,000 1,500 2,000 Meters

Date: January 28, 2009
Drawn By: S. Patterson
Projection/Datum:
UTM Zone 8N, NAD83

LOGAN RESOURCES LTD

Heidi Property
2008 MMI Response Ratios - Zn



APPENDIX 4

ANALYTICAL CERTIFICATES

Certificate of Analysis

Work Order: TO101884

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 16, 2008

P.O. No. :	Heidi
Project No. :	DEFAULT
No. Of Samples	90
Date Submitted	Jul 22, 2008
Report Comprises	Pages 1 to 16 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 90 Soils

Certified By :
Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R. = Listed not received
n.a. = Not applicable
I.S. = Insufficient Sample
– = No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
CHYS_1281_08	19	125	10	<0.1	1870	<1	220	29	407	62
*Rep CHYS_1281_08	20	123	<10	<0.1	2220	<1	230	30	382	61
HDIS_264_08	6	>300	<10	<0.1	260	<1	<10	8	110	9
HDIS_265_08	2	278	<10	<0.1	930	<1	20	10	28	55
HDIS_266_08	11	>300	10	<0.1	450	<1	<10	10	77	209
HDIS_267_08	4	>300	<10	<0.1	840	<1	10	9	125	93
HDIS_292_08	7	100	<10	<0.1	4870	<1	260	19	97	32
HDIS_293_08	3	269	<10	<0.1	980	<1	20	13	32	42
HDIS_294_08	19	237	<10	<0.1	5480	<1	110	21	141	29
HDIS_295_08	5	136	<10	<0.1	2140	<1	610	5	71	9
HDIS_320_08	10	151	<10	<0.1	1820	<1	240	12	158	42
HDIS_321_08	29	119	<10	0.3	2340	<1	240	11	120	122
HDIS_322_08	6	114	<10	<0.1	1260	<1	370	13	81	17
HDIS_323_08	5	>300	<10	<0.1	220	<1	<10	6	73	117
*Rep HDIS_323_08	5	>300	<10	<0.1	240	<1	<10	7	67	150
HDIS_324_08	1	231	<10	<0.1	1030	<1	40	9	18	370
HDIS_348_08	4	140	<10	<0.1	2160	<1	380	55	51	36
HDIS_349_08	3	280	<10	<0.1	1200	<1	30	17	30	39
HDIS_350_08	2	>300	<10	<0.1	940	<1	<10	7	32	256
HDIS_351_08	93	97	<10	<0.1	3180	<1	220	8	187	172
HDIS_352_08	8	106	<10	<0.1	1320	<1	530	18	119	<5
HDIS_353_08	2	293	<10	<0.1	410	<1	<10	18	13	70
HDIS_360_08	22	104	10	0.5	3500	<1	390	15	109	41
HDIS_361_08	2	88	40	1.6	1240	1	590	13	59	21
HDIS_362_08	4	162	40	0.2	620	2	20	2	20	123
HDIS_375_08	<1	215	<10	<0.1	870	<1	30	32	18	49
HDIS_376_08	3	>300	<10	<0.1	1060	<1	30	19	22	61
*Rep HDIS_376_08	5	297	<10	<0.1	1110	<1	50	18	23	99
HDIS_377_08	12	268	<10	<0.1	990	<1	20	7	20	50
HDIS_378_08	4	207	<10	<0.1	1850	<1	150	15	37	63
HDIS_379_08	<1	122	<10	<0.1	1460	<1	330	17	46	37
HDIS_380_08	2	114	<10	<0.1	1510	1	220	8	61	302
HDIS_382_08	9	99	<10	<0.1	1200	<1	330	24	168	95
HDIS_388_08	79	125	160	0.5	2840	3	320	19	288	59
HDIS_389_08	6	287	180	0.1	620	3	10	4	48	216
HDIS_390_08	5	97	<10	0.1	1110	<1	220	30	102	176
HDIS_391_08	11	157	270	1.1	2650	7	50	16	1650	124
HDIS_402_08	1	228	<10	<0.1	680	<1	10	6	18	90
HDIS_403_08	8	148	<10	<0.1	1830	<1	200	6	419	615
HDIS_404_08	6	144	<10	<0.1	1800	<1	440	10	52	17
*Rep HDIS_404_08	4	136	<10	<0.1	1250	<1	350	12	42	30
HDIS_406_08	3	159	<10	<0.1	1080	<1	260	18	47	49
HDIS_407_08	3	257	<10	<0.1	1050	<1	60	13	50	577

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_408_08	192	55	<10	0.2	1280	<1	400	10	255	16
HDIS_409_08	9	142	<10	<0.1	1180	<1	370	18	93	104
HDIS_410_08	9	>300	<10	<0.1	890	<1	10	30	129	161
HDIS_415_08	10	97	630	0.9	1040	12	320	14	210	229
HDIS_416_08	51	60	190	1.6	3760	<1	210	10	651	140
HDIS_417_08	7	267	50	0.9	770	<1	<10	6	111	110
HDIS_418_08	9	>300	220	0.6	1580	4	10	7	300	181
HDIS_431_08	20	80	<10	0.1	670	<1	540	12	157	22
HDIS_432_08	<1	147	<10	<0.1	1880	1	110	25	40	429
HDIS_433_08	10	112	<10	0.1	2210	<1	280	13	128	355
*Rep HDIS_433_08	7	112	<10	<0.1	2160	<1	280	18	175	252
HDIS_434_08	11	183	<10	<0.1	2150	<1	180	22	118	678
HDIS_435_08	7	195	<10	<0.1	1910	<1	180	9	258	403
HDIS_436_08	2	>300	<10	<0.1	970	<1	10	5	306	30
HDIS_436_08A	1	196	<10	<0.1	2480	<1	120	35	23	69
HDIS_438_08	163	42	<10	0.1	990	<1	350	20	131	49
HDIS_439_08	26	>300	10	0.2	740	<1	<10	15	246	24
HDIS_445_08	36	107	690	1.1	3480	4	120	27	813	419
HDIS_446_08	5	172	20	0.3	490	<1	<10	9	35	813
HDIS_447_08	9	218	100	1.0	1210	1	70	7	64	324
HDIS_448_08	23	25	30	0.2	1830	<1	290	19	106	57
HDIS_468_08	6	136	<10	<0.1	670	<1	270	17	391	184
HDIS_469_08	57	180	10	0.1	950	<1	210	24	280	52
*Rep HDIS_469_08A	54	175	10	0.1	980	<1	200	23	297	53
HDIS_475_08	14	288	630	0.9	2880	10	20	7	413	182
HDIS_476_08	10	53	120	0.4	1260	<1	510	21	121	54
HDIS_477_08	8	59	110	0.3	1420	2	310	15	147	228
HDIS_487_08	6	286	150	<0.1	1650	11	20	13	175	89
HDIS_488_08	10	223	20	<0.1	830	<1	160	7	160	62
HDIS_489_08	5	273	<10	<0.1	420	<1	<10	6	18	55
HDIS_490_08	40	39	<10	<0.1	800	<1	660	6	56	13
HDIS_491_08	1	92	<10	<0.1	620	<1	270	59	17	104
HDIS_493_08	18	41	<10	<0.1	2810	<1	390	4	176	76
HDIS_494_08	1	188	<10	<0.1	1000	<1	190	14	60	82
HDIS_495_08	3	258	<10	<0.1	1150	<1	80	7	232	72
HDIS_499_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
*Rep HDIS_499_08A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
HDIS_504_08	29	53	70	0.4	1300	<1	410	32	241	268
HDIS_513_08	6	263	170	0.4	2200	4	30	7	547	221
HDIS_514_08	6	>300	70	0.2	920	1	10	11	206	188
HDIS_515_08	41	24	<10	0.1	1490	<1	840	27	47	71
HDIS_516_08	<1	79	<10	<0.1	390	<1	560	16	30	56
HDIS_517_08	52	51	<10	0.1	980	<1	370	7	222	23

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_518_08	29	26	<10	<0.1	500	<1	720	10	13	7
HDIS_519_08	1	274	<10	<0.1	460	<1	20	14	40	41
HDIS_521_08	54	118	<10	0.1	3690	<1	500	5	131	43
HDIS_543_08	9	148	<10	<0.1	1030	<1	250	8	198	30
HDIS_544_08	6	257	<10	<0.1	900	<1	110	14	123	89
HDIS_566_08	23	27	<10	<0.1	980	<1	590	6	62	41
*Rep HDIS_566_08A	21	24	<10	<0.1	940	<1	560	6	50	47
HDIS_567_08	28	233	20	<0.1	1090	<1	130	40	258	20
HDIS_588_08	11	272	<10	<0.1	1670	<1	40	19	128	326
HDIS_589_08	1	248	<10	<0.1	940	<1	110	12	201	161
HDIS_608_08	2	115	<10	<0.1	1950	<1	390	12	44	35
HDIS_466_08	11	190	<10	<0.1	570	<1	150	10	133	131
*Std MMISRM16	19	50	10	26.7	70	<1	230	4	19	59
*Std MMISRM16	23	53	20	33.9	80	<1	260	4	18	64
*Std MMISRM16	23	54	20	34.1	90	<1	270	4	20	64
*Blk BLANK	<1	<1	<10	<0.1	10	<1	<10	<1	<5	<5
*Blk BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
CHYS_1281_08	<100	250	94	40.1	31.6	76	127	176	<5	19
*Rep CHYS_1281_08	<100	260	96	40.0	32.4	72	127	172	<5	22
HDIS_264_08	<100	420	45	16.4	8.2	46	44	31	<5	<1
HDIS_265_08	<100	190	21	9.8	3.5	120	17	10	<5	3
HDIS_266_08	<100	380	13	5.6	3.3	85	14	18	<5	<1
HDIS_267_08	100	120	20	7.1	7.1	69	27	37	<5	<1
HDIS_292_08	<100	290	50	20.9	14.6	25	73	43	<5	61
HDIS_293_08	<100	100	29	14.3	5.2	116	25	10	<5	3
HDIS_294_08	<100	410	167	65.1	44.5	37	208	59	<5	6
HDIS_295_08	<100	40	27	11.3	6.4	23	31	25	<5	21
HDIS_320_08	<100	80	67	27.8	20.6	58	85	41	<5	9
HDIS_321_08	<100	590	70	31.9	16.6	102	75	49	<5	<1
HDIS_322_08	<100	70	54	24.3	12.0	43	58	32	<5	3
HDIS_323_08	<100	140	20	7.5	6.1	32	27	19	<5	<1
*Rep HDIS_323_08	<100	140	18	6.9	5.1	40	22	17	<5	<1
HDIS_324_08	<100	120	19	11.2	1.9	122	9	6	<5	3
HDIS_348_08	<100	60	71	29.7	18.5	42	88	38	<5	9
HDIS_349_08	<100	120	57	28.5	6.5	64	35	11	<5	4
HDIS_350_08	<100	60	22	9.4	2.9	51	13	9	<5	1
HDIS_351_08	<100	310	60	23.2	19.7	27	96	63	<5	9
HDIS_352_08	<100	20	22	8.7	7.1	15	29	13	<5	8
HDIS_353_08	<100	90	22	13.6	1.8	77	10	4	<5	<1
HDIS_360_08	<100	170	40	17.4	12.1	19	54	47	<5	21
HDIS_361_08	<100	740	44	24.9	7.4	79	35	29	<5	64
HDIS_362_08	<100	540	6	5.4	1.0	345	4	9	<5	4
HDIS_375_08	<100	130	42	27.2	3.0	69	16	6	5	4
HDIS_376_08	<100	120	51	30.3	3.5	65	17	7	6	2
*Rep HDIS_376_08	<100	130	66	36.8	5.5	69	27	8	<5	2
HDIS_377_08	<100	60	34	23.5	2.6	87	13	8	<5	2
HDIS_378_08	<100	80	22	9.7	5.1	108	24	12	6	11
HDIS_379_08	<100	40	22	10.4	5.6	67	25	12	8	14
HDIS_380_08	<100	250	27	11.7	6.4	208	31	19	<5	15
HDIS_382_08	<100	330	90	38.7	27.7	43	116	46	<5	14
HDIS_388_08	<100	950	154	68.7	43.6	57	192	98	<5	10
HDIS_389_08	<100	170	29	12.7	5.5	179	27	16	<5	1
HDIS_390_08	<100	170	9	4.9	2.5	33	10	18	<5	5
HDIS_391_08	200	3550	207	103	64.3	283	273	479	<5	3
HDIS_402_08	<100	30	6	5.7	0.8	174	4	8	<5	1
HDIS_403_08	<100	200	57	19.8	22.0	41	94	76	<5	17
HDIS_404_08	<100	110	114	53.0	29.1	19	140	32	<5	15
*Rep HDIS_404_08	<100	120	25	13.1	6.4	20	27	13	7	10
HDIS_406_08	<100	120	32	16.0	7.6	76	33	14	6	6
HDIS_407_08	<100	120	19	9.8	3.9	92	18	16	<5	10

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_408_08	<100	430	172	66.7	63.2	18	261	82	<5	17
HDIS_409_08	<100	370	83	45.4	17.1	59	79	30	<5	10
HDIS_410_08	<100	200	50	21.7	10.8	65	50	31	<5	1
HDIS_415_08	<100	2370	31	14.8	9.7	161	39	50	<5	14
HDIS_416_08	<100	200	181	74.3	73.0	23	339	342	<5	19
HDIS_417_08	<100	530	51	25.1	9.1	92	42	38	<5	<1
HDIS_418_08	300	720	39	14.8	13.0	346	53	98	<5	<1
HDIS_431_08	<100	180	65	25.5	28.2	39	104	56	<5	9
HDIS_432_08	<100	160	49	32.7	6.5	293	32	16	<5	12
HDIS_433_08	<100	450	76	37.2	20.7	64	85	43	<5	14
*Rep HDIS_433_08	<100	250	73	36.4	20.3	78	84	45	<5	13
HDIS_434_08	<100	180	57	27.4	13.8	119	61	31	<5	8
HDIS_435_08	<100	170	56	22.1	15.9	54	72	50	<5	8
HDIS_436_08	<100	110	110	40.5	28.1	30	166	90	<5	<1
HDIS_436_08A	<100	50	15	9.8	2.5	187	11	8	<5	15
HDIS_438_08	<100	370	75	30.1	29.8	24	123	49	<5	11
HDIS_439_08	<100	280	86	38.6	21.0	35	97	83	<5	<1
HDIS_445_08	<100	500	129	53.9	48.9	84	215	304	<5	10
HDIS_446_08	<100	650	9	6.0	1.6	175	7	14	<5	<1
HDIS_447_08	<100	230	18	9.6	3.8	231	16	22	<5	1
HDIS_448_08	<100	760	41	16.6	15.7	34	73	32	11	47
HDIS_468_08	<100	5710	106	51.2	31.9	51	134	98	<5	7
HDIS_469_08	<100	250	105	41.1	36.4	32	151	108	<5	6
*Rep HDIS_469_08A	<100	230	105	40.4	36.6	30	152	114	5	7
HDIS_475_08	300	930	68	28.1	23.4	348	92	141	<5	1
HDIS_476_08	<100	790	28	13.1	11.2	96	43	38	<5	30
HDIS_477_08	<100	1470	43	21.2	14.2	294	65	55	<5	13
HDIS_487_08	200	350	49	26.1	10.4	226	47	80	<5	2
HDIS_488_08	<100	210	44	18.7	12.4	53	52	52	<5	4
HDIS_489_08	<100	60	10	7.6	1.2	91	5	7	<5	<1
HDIS_490_08	<100	170	28	11.1	12.4	11	48	20	<5	8
HDIS_491_08	<100	40	18	12.1	5.0	79	20	5	6	11
HDIS_493_08	<100	220	118	42.0	50.7	7	218	49	<5	17
HDIS_494_08	<100	70	28	11.8	7.2	97	33	15	<5	11
HDIS_495_08	<100	210	90	37.4	24.1	58	116	46	<5	4
HDIS_499_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
*Rep HDIS_499_08A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
HDIS_504_08	<100	1520	27	13.4	10.5	100	39	51	21	11
HDIS_513_08	200	390	85	36.2	28.8	121	126	251	<5	2
HDIS_514_08	<100	250	53	22.4	16.5	77	71	72	<5	1
HDIS_515_08	<100	200	17	7.4	7.0	7	28	12	<5	7
HDIS_516_08	<100	150	15	9.2	4.1	27	17	11	<5	4
HDIS_517_08	<100	160	80	30.0	40.9	8	158	62	<5	11

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_518_08	<100	200	8	3.5	3.6	12	15	11	<5	3
HDIS_519_08	<100	120	43	17.6	8.5	61	45	10	<5	3
HDIS_521_08	<100	770	141	54.8	46.7	8	202	54	<5	18
HDIS_543_08	<100	160	165	65.3	67.4	35	287	85	<5	10
HDIS_544_08	<100	90	25	10.5	7.1	89	34	27	5	4
HDIS_566_08	<100	170	47	18.5	23.9	7	85	10	<5	12
*Rep HDIS_566_08A	<100	160	42	16.9	21.2	7	76	9	<5	10
HDIS_567_08	<100	90	59	21.9	22.1	53	99	57	6	7
HDIS_568_08	<100	170	80	39.8	15.9	70	65	41	<5	2
HDIS_589_08	<100	150	77	34.4	21.5	44	112	46	<5	8
HDIS_608_08	<100	50	21	9.7	6.3	37	28	11	7	15
HDIS_466_08	<100	60	55	25.2	17.6	32	70	64	<5	3
*Std MMISRM16	<100	620	3	1.0	1.2	3	5	4	<5	36
*Std MMISRM16	<100	630	3	1.0	1.1	3	5	4	<5	42
*Std MMISRM16	<100	640	3	1.0	1.2	3	5	4	<5	44
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1281_08	6	3.7	385	403	160	<1	80	<1	157	2
*Rep CHYS_1281_08	<5	2.0	379	404	160	<1	78	<1	159	2
HDIS_264_08	<5	2.9	82	87	220	<1	15	<1	135	<1
HDIS_265_08	<5	3.4	25	143	360	<1	4	<1	104	<1
HDIS_266_08	5	2.3	33	104	710	<1	7	<1	192	1
HDIS_267_08	<5	3.1	70	85	790	<1	14	<1	269	1
HDIS_292_08	5	0.8	131	145	140	<1	22	<1	69	1
HDIS_293_08	<5	2.6	30	95	520	<1	5	<1	98	<1
HDIS_294_08	<5	0.8	275	105	670	<1	42	<1	148	<1
HDIS_295_08	<5	<0.5	67	85	150	<1	12	<1	49	<1
HDIS_320_08	<5	0.5	149	186	830	<1	25	<1	114	2
HDIS_321_08	<5	0.5	130	321	1170	<1	24	<1	150	10
HDIS_322_08	<5	<0.5	83	139	510	<1	15	<1	36	<1
HDIS_323_08	<5	2.3	50	47	370	<1	9	<1	219	<1
*Rep HDIS_323_08	<5	2.3	42	53	380	<1	8	<1	217	<1
HDIS_324_08	<5	0.9	12	165	410	<1	2	<1	106	<1
HDIS_348_08	<5	<0.5	127	76	420	<1	20	<1	32	<1
HDIS_349_08	<5	1.1	37	95	840	<1	6	<1	113	<1
HDIS_350_08	<5	0.9	19	105	640	<1	4	<1	264	<1
HDIS_351_08	<5	<0.5	178	176	450	<1	33	<1	203	4
HDIS_352_08	<5	<0.5	44	92	120	<1	7	<1	45	<1
HDIS_353_08	<5	0.8	11	86	580	<1	2	<1	167	<1
HDIS_360_08	<5	<0.5	108	200	1130	<1	20	<1	161	4
HDIS_361_08	<5	<0.5	55	458	1350	<1	11	<1	50	43
HDIS_362_08	<5	3.9	10	87	90	<1	2	<1	33	4
HDIS_375_08	<5	1.3	16	98	440	<1	3	<1	77	<1
HDIS_376_08	<5	1.2	17	123	850	<1	3	<1	126	2
*Rep HDIS_376_08	<5	0.8	25	116	730	<1	4	<1	79	1
HDIS_377_08	<5	1.9	17	77	780	<1	3	<1	103	3
HDIS_378_08	<5	1.3	37	120	720	<1	6	<1	121	<1
HDIS_379_08	<5	0.9	38	61	250	<1	6	<1	51	<1
HDIS_380_08	5	1.3	50	299	750	<1	9	<1	88	6
HDIS_382_08	<5	<0.5	192	354	770	<1	31	<1	129	1
HDIS_388_08	<5	<0.5	309	1030	3680	<1	53	<1	94	31
HDIS_389_08	<5	2.6	43	124	3040	<1	8	<1	226	25
HDIS_390_08	12	<0.5	29	256	270	<1	6	<1	33	4
HDIS_391_08	14	5.9	862	150	1770	<1	195	<1	113	89
HDIS_402_08	<5	1.4	9	63	330	<1	2	<1	69	<1
HDIS_403_08	<5	1.1	223	255	380	<1	41	<1	138	4
HDIS_404_08	<5	<0.5	156	130	480	<1	23	<1	89	<1
*Rep HDIS_404_08	<5	0.9	38	152	560	<1	7	<1	60	2
HDIS_406_08	<5	0.7	46	151	480	<1	8	<1	79	2
HDIS_407_08	<5	0.8	33	152	930	<1	6	<1	220	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_408_08	<5	<0.5	407	345	730	<1	62	<1	51	4
HDIS_409_08	<5	<0.5	96	505	2650	<1	16	<1	65	3
HDIS_410_08	<5	1.1	93	309	2250	<1	16	<1	157	3
HDIS_415_08	<5	0.8	102	228	3650	<1	21	<1	117	148
HDIS_416_08	<5	<0.5	804	319	1370	<1	148	<1	179	19
HDIS_417_08	<5	1.4	75	161	1050	<1	15	<1	178	20
HDIS_418_08	8	5.9	135	96	910	<1	31	<1	268	46
HDIS_431_08	<5	<0.5	193	291	220	<1	32	<1	44	2
HDIS_432_08	<5	0.9	44	107	700	<1	8	<1	76	<1
HDIS_433_08	<5	<0.5	139	331	280	<1	24	<1	93	2
*Rep HDIS_433_08	<5	<0.5	140	371	320	<1	25	<1	106	2
HDIS_434_08	<5	0.6	99	267	790	<1	17	<1	151	2
HDIS_435_08	<5	0.7	138	315	1280	<1	25	<1	280	2
HDIS_436_08	<5	0.6	273	94	1610	<1	48	<1	356	1
HDIS_436_08A	<5	1.0	17	100	480	<1	3	<1	99	<1
HDIS_438_08	<5	<0.5	207	451	620	<1	32	<1	104	5
HDIS_439_08	<5	1.4	225	95	1810	<1	43	<1	182	8
HDIS_445_08	<5	1.3	563	419	3080	<1	117	<1	200	71
HDIS_446_08	<5	0.8	19	80	70	<1	4	<1	199	2
HDIS_447_08	<5	1.2	36	174	8160	<1	8	<1	155	67
HDIS_448_08	<5	<0.5	110	288	380	<1	18	<1	78	11
HDIS_468_08	<5	<0.5	292	322	510	<1	54	<1	126	2
HDIS_469_08	<5	<0.5	328	242	1750	<1	61	<1	157	7
*Rep HDIS_469_08A	<5	<0.5	335	233	1720	<1	63	<1	159	6
HDIS_475_08	6	4.9	234	148	3150	<1	51	<1	243	107
HDIS_476_08	<5	<0.5	96	279	1920	<1	17	<1	46	41
HDIS_477_08	8	0.5	133	346	750	<1	26	<1	54	79
HDIS_487_08	<5	5.9	108	170	260	<1	23	<1	86	4
HDIS_488_08	<5	0.7	113	227	970	<1	22	<1	126	4
HDIS_489_08	<5	0.8	10	73	460	<1	2	<1	71	<1
HDIS_490_08	<5	<0.5	84	143	240	<1	13	<1	15	2
HDIS_491_08	<5	<0.5	18	33	460	<1	3	<1	9	2
HDIS_493_08	<5	<0.5	323	214	240	<1	44	<1	103	<1
HDIS_494_08	<5	0.6	51	196	600	<1	8	<1	184	<1
HDIS_495_08	<5	0.7	190	173	410	<1	32	<1	274	<1
HDIS_499_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
*Rep HDIS_499_08A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
HDIS_504_08	7	0.7	118	320	250	<1	24	<1	70	14
HDIS_513_08	8	5.5	373	68	350	<1	83	<1	183	7
HDIS_514_08	<5	2.4	157	107	570	<1	30	<1	162	4
HDIS_515_08	<5	<0.5	47	212	60	<1	7	<1	18	2
HDIS_516_08	<5	<0.5	28	95	350	<1	5	<1	11	<1
HDIS_517_08	<5	<0.5	270	144	130	<1	41	<1	55	1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_518_08	<5	<0.5	32	147	30	<1	5	<1	31	<1
HDIS_519_08	<5	<0.5	44	143	910	<1	6	<1	104	<1
HDIS_521_08	<5	<0.5	245	173	580	<1	37	<1	167	<1
HDIS_543_08	<5	<0.5	391	200	310	<1	60	<1	147	1
HDIS_544_08	<5	0.9	64	109	3600	<1	12	<1	166	2
HDIS_566_08	<5	<0.5	92	118	70	<1	11	<1	78	<1
*Rep HDIS_566_08A	<5	<0.5	86	112	60	<1	10	<1	75	<1
HDIS_567_08	<5	0.9	196	160	7980	<1	34	<1	240	14
HDIS_588_08	<5	0.8	102	235	1040	<1	19	<1	201	2
HDIS_589_08	<5	0.7	146	233	660	<1	25	<1	214	<1
HDIS_608_08	<5	<0.5	43	100	310	<1	7	<1	72	1
HDIS_466_08	<5	<0.5	147	109	350	<1	28	<1	183	<1
*Std MMISRM16	54	<0.5	17	215	110	27	3	<1	325	<1
*Std MMISRM16	53	<0.5	16	223	110	30	3	<1	354	<1
*Std MMISRM16	55	<0.5	17	218	110	31	3	<1	362	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	9	<10	<1	<1	<1	<5	<1

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1281_08	86	106	2	610	5	18	<10	37.1	244	1.3
*Rep CHYS_1281_08	85	107	<1	680	3	18	<10	33.2	213	1.2
HDIS_264_08	50	31	<1	20	2	8	<10	25.2	394	0.6
HDIS_265_08	34	11	<1	100	1	3	<10	33.1	881	<0.5
HDIS_266_08	37	11	<1	10	<1	2	<10	45.2	821	1.1
HDIS_267_08	34	23	<1	30	<1	4	<10	35.0	814	2.2
HDIS_292_08	20	51	<1	2540	<1	10	<10	9.1	104	<0.5
HDIS_293_08	44	15	<1	110	<1	5	<10	21.3	566	0.7
HDIS_294_08	59	139	<1	310	<1	31	<10	34.6	318	<0.5
HDIS_295_08	29	23	<1	1670	<1	5	<10	10.0	27	<0.5
HDIS_320_08	47	60	<1	560	<1	13	<10	29.3	105	<0.5
HDIS_321_08	74	51	<1	690	<1	12	<10	27.5	119	0.9
HDIS_322_08	32	34	<1	1080	<1	9	<10	11.4	30	<0.5
HDIS_323_08	39	21	<1	<10	<1	4	<10	37.6	778	1.1
*Rep HDIS_323_08	37	18	<1	10	<1	3	<10	36.9	844	1.0
HDIS_324_08	29	5	<1	150	<1	2	<10	17.1	271	0.6
HDIS_348_08	37	56	<1	840	<1	13	<10	13.0	63	<0.5
HDIS_349_08	53	19	<1	200	<1	8	<10	22.9	253	0.7
HDIS_350_08	31	7	<1	70	<1	3	<10	20.1	289	2.0
HDIS_351_08	20	73	<1	660	<1	12	<10	43.0	95	1.4
HDIS_352_08	9	20	<1	1320	<1	4	<10	6.1	8	<0.5
HDIS_353_08	27	5	<1	40	<1	3	<10	13.6	169	1.5
HDIS_360_08	18	39	<1	1680	<1	8	<10	11.9	16	0.9
HDIS_361_08	50	21	<1	2900	<1	6	<10	12.8	11	<0.5
HDIS_362_08	36	3	<1	110	<1	<1	<10	27.3	1230	<0.5
HDIS_375_08	79	8	<1	190	<1	5	<10	14.1	489	0.5
HDIS_376_08	67	8	<1	150	<1	5	<10	25.0	364	1.0
*Rep HDIS_376_08	59	13	<1	230	<1	8	<10	23.6	253	0.7
HDIS_377_08	41	7	<1	140	<1	4	<10	17.1	444	1.0
HDIS_378_08	42	16	<1	560	<1	4	<10	36.1	386	<0.5
HDIS_379_08	37	15	<1	1250	<1	4	<10	10.5	257	<0.5
HDIS_380_08	35	20	<1	860	<1	5	<10	25.5	382	<0.5
HDIS_382_08	22	84	<1	1030	<1	17	<10	28.9	69	0.6
HDIS_388_08	54	130	<1	1320	<1	28	<10	50.5	121	<0.5
HDIS_389_08	30	17	<1	90	<1	5	<10	31.0	872	1.5
HDIS_390_08	24	9	<1	990	<1	2	<10	3.4	156	1.1
HDIS_391_08	314	230	3	160	3	38	<10	121	3770	1.8
HDIS_402_08	22	3	<1	90	1	<1	<10	13.2	387	0.6
HDIS_403_08	41	80	<1	430	1	12	<10	65.5	376	1.9
HDIS_404_08	48	83	<1	1260	<1	10	<10	23.0	30	<0.5
*Rep HDIS_404_08	42	17	<1	900	<1	4	<10	22.2	103	<0.5
HDIS_406_08	48	21	<1	650	<1	5	<10	32.7	183	<0.5
HDIS_407_08	47	12	<1	230	<1	3	<10	23.8	318	0.7

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_408_08	12	178	<1	1290	<1	34	<10	27.4	14	<0.5
HDIS_409_08	50	45	<1	1380	<1	13	<10	29.1	54	<0.5
HDIS_410_08	66	38	<1	60	<1	8	<10	67.3	580	0.7
HDIS_415_08	46	30	4	1080	<1	6	<10	23.4	276	0.9
HDIS_416_08	40	265	<1	1060	<1	39	<10	29.3	153	1.3
HDIS_417_08	83	28	<1	30	<1	8	<10	53.0	873	1.5
HDIS_418_08	109	45	2	50	<1	8	<10	177	3420	1.8
HDIS_431_08	18	81	<1	1040	<1	13	<10	20.1	47	<0.5
HDIS_432_08	33	19	<1	750	<1	6	<10	19.0	410	0.5
HDIS_433_08	83	58	<1	1180	<1	13	<10	22.6	27	0.7
*Rep HDIS_433_08	89	59	<1	1180	<1	13	<10	24.1	39	0.9
HDIS_434_08	76	42	<1	600	<1	10	<10	54.0	245	0.9
HDIS_435_08	60	53	<1	360	<1	11	<10	63.0	369	1.7
HDIS_436_08	75	113	<1	40	<1	23	<10	62.6	237	1.8
HDIS_436_08A	50	7	<1	570	<1	2	<10	33.0	444	<0.5
HDIS_438_08	10	88	<1	1240	<1	15	<10	33.7	27	0.7
HDIS_439_08	116	73	<1	30	<1	15	<10	59.5	740	1.4
HDIS_445_08	101	174	2	390	<1	27	<10	89.3	723	2.1
HDIS_446_08	62	5	<1	30	<1	1	<10	25.2	520	0.8
HDIS_447_08	54	12	<1	310	<1	3	<10	39.7	677	1.1
HDIS_448_08	13	51	<1	1690	<1	9	<10	29.9	77	<0.5
HDIS_468_08	74	103	<1	490	<1	19	<10	49.7	127	1.1
HDIS_469_08	70	117	<1	360	<1	20	<10	85.0	252	0.9
*Rep HDIS_469_08A	69	121	<1	370	<1	21	<10	84.4	240	1.0
HDIS_475_08	130	76	2	90	<1	13	<10	201	3590	2.0
HDIS_476_08	23	33	<1	2450	<1	6	<10	17.4	49	<0.5
HDIS_477_08	73	48	<1	1430	<1	9	<10	43.0	177	<0.5
HDIS_487_08	98	34	<1	100	<1	8	<10	92.8	1180	0.9
HDIS_488_08	69	40	<1	210	<1	8	<10	70.0	353	0.8
HDIS_489_08	27	3	<1	30	<1	1	<10	13.9	282	0.6
HDIS_490_08	6	37	<1	2530	<1	6	<10	13.1	11	<0.5
HDIS_491_08	14	11	<1	740	<1	3	<10	6.6	110	<0.5
HDIS_493_08	11	156	<1	1690	<1	26	<10	45.9	<3	0.6
HDIS_494_08	41	22	<1	400	<1	5	<10	31.3	248	<0.5
HDIS_495_08	52	85	<1	150	<1	17	<10	52.4	337	0.7
HDIS_499_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
*Rep HDIS_499_08A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
HDIS_504_08	26	35	<1	1860	<1	5	<10	24.7	112	0.5
HDIS_513_08	157	106	1	90	<1	17	<10	88.3	3940	1.2
HDIS_514_08	84	55	<1	50	<1	10	<10	64.3	1430	0.6
HDIS_515_08	8	20	<1	1370	<1	3	<10	13.3	24	<0.5
HDIS_516_08	9	11	<1	1180	<1	3	<10	5.9	55	<0.5
HDIS_517_08	11	129	<1	1060	<1	17	<10	49.8	11	<0.5

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_518_08	6	12	<1	1620	<1	2	<10	11.3	15	<0.5
HDIS_519_08	48	27	<1	70	<1	8	<10	36.0	166	0.5
HDIS_521_08	16	130	<1	2310	<1	27	<10	13.9	3	0.6
HDIS_543_08	60	215	<1	540	<1	34	<10	58.3	163	<0.5
HDIS_544_08	45	25	<1	190	<1	5	<10	54.2	415	0.7
HDIS_566_08	11	55	<1	3680	<1	10	<10	22.6	4	<0.5
*Rep HDIS_566_08A	11	50	<1	3470	<1	9	<10	21.6	<3	<0.5
HDIS_567_08	64	82	<1	210	<1	12	<10	74.1	488	1.1
HDIS_588_08	105	44	<1	180	<1	12	<10	59.3	430	1.6
HDIS_589_08	103	78	<1	140	<1	15	<10	111	350	0.7
HDIS_608_08	15	19	<1	1030	<1	4	<10	10.3	112	<0.5
HDIS_466_08	70	52	<1	210	<1	10	<10	27.9	227	0.7
*Std MMISRM16	13	5	<1	490	<1	<1	<10	28.3	<3	<0.5
*Std MMISRM16	13	5	<1	530	<1	<1	<10	27.2	<3	<0.5
*Std MMISRM16	14	5	<1	540	<1	<1	<10	28.3	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1281_08	12	1	453	27	370	53
*Rep CHYS_1281_08	12	<1	464	27	420	49
HDIS_264_08	13	<1	147	10	320	59
HDIS_265_08	9	<1	78	6	670	78
HDIS_266_08	13	<1	42	4	370	116
HDIS_267_08	10	<1	72	5	200	98
HDIS_292_08	34	<1	238	13	1020	24
HDIS_293_08	7	<1	122	10	540	53
HDIS_294_08	26	<1	755	38	490	67
HDIS_295_08	12	<1	120	7	70	23
HDIS_320_08	10	<1	308	18	770	40
HDIS_321_08	41	<1	337	22	330	66
HDIS_322_08	12	<1	298	15	130	20
HDIS_323_08	14	<1	69	5	120	96
*Rep HDIS_323_08	13	<1	61	5	140	98
HDIS_324_08	4	<1	107	7	590	31
HDIS_348_08	9	<1	361	17	950	27
HDIS_349_08	11	<1	242	18	650	35
HDIS_350_08	7	<1	89	6	150	37
HDIS_351_08	24	<1	245	15	150	73
HDIS_352_08	7	<1	98	5	260	12
HDIS_353_08	4	<1	90	9	160	25
HDIS_360_08	33	<1	179	11	180	29
HDIS_361_08	388	<1	258	18	110	50
HDIS_362_08	13	<1	26	5	190	73
HDIS_375_08	13	<1	193	20	830	28
HDIS_376_08	8	<1	220	23	580	45
*Rep HDIS_376_08	8	<1	321	25	450	36
HDIS_377_08	10	<1	155	16	560	39
HDIS_378_08	8	<1	98	6	1540	49
HDIS_379_08	8	<1	112	7	930	35
HDIS_380_08	16	<1	126	8	1260	84
HDIS_382_08	35	<1	389	26	970	88
HDIS_388_08	90	<1	770	48	580	114
HDIS_389_08	9	<1	130	9	300	86
HDIS_390_08	28	<1	43	4	80	21
HDIS_391_08	65	1	1040	84	600	321
HDIS_402_08	6	<1	25	6	130	23
HDIS_403_08	15	<1	213	12	200	97
HDIS_404_08	26	<1	573	32	860	45
*Rep HDIS_404_08	19	1	125	9	1020	63
HDIS_406_08	16	<1	154	11	1720	63
HDIS_407_08	9	<1	83	6	1700	58

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_408_08	30	<1	820	36	220	56
HDIS_409_08	37	<1	491	30	1280	83
HDIS_410_08	18	<1	182	15	1430	97
HDIS_415_08	47	<1	146	12	220	63
HDIS_416_08	13	<1	934	45	240	43
HDIS_417_08	25	<1	227	17	130	111
HDIS_418_08	26	2	130	11	300	442
HDIS_431_08	18	<1	300	17	340	34
HDIS_432_08	26	<1	267	18	480	39
HDIS_433_08	87	<1	413	26	90	80
*Rep HDIS_433_08	90	<1	403	26	110	77
HDIS_434_08	23	<1	268	19	690	65
HDIS_435_08	15	<1	207	14	310	105
HDIS_436_08	22	<1	517	24	310	130
HDIS_436_08A	8	<1	70	8	2950	43
HDIS_438_08	48	<1	370	18	590	59
HDIS_439_08	26	<1	386	26	580	116
HDIS_445_08	15	<1	642	37	690	153
HDIS_446_08	21	<1	39	5	270	61
HDIS_447_08	16	<1	79	7	420	65
HDIS_448_08	59	<1	195	11	430	43
HDIS_468_08	60	<1	525	37	500	99
HDIS_469_08	35	<1	440	27	1070	108
*Rep HDIS_469_08A	34	<1	438	26	1080	104
HDIS_475_08	29	2	247	21	420	413
HDIS_476_08	110	<1	153	10	170	32
HDIS_477_08	167	<1	211	17	380	129
HDIS_487_08	25	<1	194	19	480	219
HDIS_488_08	17	<1	196	13	370	185
HDIS_489_08	5	<1	44	6	280	33
HDIS_490_08	11	<1	139	7	90	14
HDIS_491_08	4	<1	108	10	2240	22
HDIS_493_08	39	<1	537	24	290	54
HDIS_494_08	12	<1	117	8	2090	49
HDIS_495_08	22	<1	379	24	770	81
HDIS_499_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
*Rep HDIS_499_08A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
HDIS_504_08	97	<1	151	12	1790	51
HDIS_513_08	34	2	371	23	200	230
HDIS_514_08	21	<1	220	15	350	133
HDIS_515_08	12	<1	87	5	110	13
HDIS_516_08	8	<1	78	7	1360	14
HDIS_517_08	26	<1	363	19	220	63

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Final : TO101884 Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_518_08	8	<1	44	3	150	8
HDIS_519_08	7	<1	153	11	960	51
HDIS_521_08	92	<1	695	31	320	45
HDIS_543_08	48	<1	726	42	170	135
HDIS_544_08	14	<1	94	7	970	107
HDIS_566_08	62	<1	237	11	80	35
*Rep HDIS_566_08A	59	1	212	10	80	34
HDIS_567_08	18	<1	230	14	660	115
HDIS_568_08	44	<1	354	26	180	113
HDIS_569_08	26	<1	311	24	850	193
HDIS_608_08	12	<1	93	6	2000	31
HDIS_466_08	11	<1	262	18	180	50
*Std MMISRM16	47	<1	11	<1	260	16
*Std MMISRM16	48	<1	11	<1	230	16
*Std MMISRM16	50	<1	12	<1	250	16
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	1	<5	<1	<20	<5
*Blk BLANK	<1	1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101886

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 11, 2008

P.O. No.	:	Heidi
Project No.	:	DEFAULT
No. Of Samples		60
Date Submitted		Jul 22, 2008
Report Comprises		Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 60 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R. = Listed not received
n.a. = Not applicable
I.S. = Insufficient Sample
-- = No result
*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion
Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element	Ag	Al	As	Au	Ba	B	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_315_08	1	198	<10	0.1	1610	<1	80	5	60	218
*Rep HDIS_315_08	1	208	<10	<0.1	1330	<1	70	6	74	157
HDIS_316_08	<1	253	20	<0.1	1530	1	20	5	43	242
HDIS_317_08	2	174	<10	<0.1	3230	<1	220	4	141	25
HDIS_318_08	<1	263	<10	<0.1	640	<1	<10	5	113	19
HDIS_319_08	13	206	10	<0.1	5270	<1	140	12	639	49
HDIS_344_08	5	>300	20	<0.1	1330	<1	10	16	97	95
HDIS_345_08	5	>300	10	<0.1	1360	<1	10	4	133	102
HDIS_346_08	4	103	10	<0.1	3410	<1	150	3	198	22
HDIS_347_08	4	228	<10	<0.1	1740	<1	70	17	42	15
HDIS_359_08	9	174	140	0.2	880	<1	230	6	28	22
HDIS_372_08	9	104	<10	0.1	7780	<1	430	7	79	19
HDIS_373_08	3	288	<10	<0.1	2690	<1	50	9	53	122
HDIS_383_08	26	95	<10	0.2	1410	<1	400	8	94	21
*Rep HDIS_383_08	20	95	<10	0.1	1090	<1	380	8	84	22
HDIS_384_08	10	157	10	<0.1	780	<1	270	13	148	26
HDIS_385_08	122	224	250	1.5	570	2	70	116	274	102
HDIS_386_08	1	158	30	0.1	1050	1	70	48	42	327
HDIS_387_08	76	160	80	2.6	1450	<1	150	117	140	248
HDIS_392_08	2	244	50	0.2	2290	1	70	7	177	276
HDIS_393_08	3	214	60	0.5	4750	2	70	3	1400	218
HDIS_394_08	1	101	<10	<0.1	1390	<1	300	173	22	75
HDIS_395_08	6	265	40	<0.1	1600	1	40	74	36	101
HDIS_396_08	5	267	20	<0.1	1360	<1	50	26	108	162
HDIS_397_08	7	157	10	0.2	2120	<1	120	4	85	412
HDIS_398_08	1	215	<10	<0.1	2340	<1	130	13	78	110
HDIS_399_08	3	172	30	0.2	1500	1	10	4	112	147
*Rep HDIS_399_08	3	168	30	0.3	1390	<1	<10	4	110	167
HDIS_420_08	4	133	30	0.2	4320	2	150	7	261	169
HDIS_422_08	11	224	<10	<0.1	1070	<1	200	4	37	30
HDIS_423_08	2	158	20	0.3	690	<1	<10	<1	48	23
HDIS_424_08	<1	55	<10	<0.1	480	<1	410	8	13	53
HDIS_425_08	5	72	30	<0.1	1990	<1	430	29	145	122
HDIS_426_08	4	274	10	0.1	600	<1	130	15	41	146
HDIS_427_08	1	279	20	<0.1	1310	<1	20	41	45	151
HDIS_428_08	1	265	10	<0.1	710	<1	10	23	21	96
HDIS_429_08	3	109	<10	<0.1	800	<1	340	16	84	52
HDIS_440_08	57	177	90	0.3	1670	<1	170	99	232	60
HDIS_444_08	15	106	30	0.7	850	<1	470	14	55	115
HDIS_449_08	4	215	20	<0.1	1730	<1	160	5	254	107
*Rep HDIS_449_08	5	211	10	<0.1	1700	<1	150	4	259	74
HDIS_450_08	<1	103	20	0.1	4630	<1	120	5	30	176
HDIS_451_08	10	148	20	0.1	3300	1	60	2	104	272
HDIS_452_08	3	131	10	<0.1	1430	<1	30	2	16	110
HDIS_453_08	1	134	50	0.1	2330	2	30	2	58	463

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_454_08	8	145	20	<0.1	1960	<1	190	10	153	152
HDIS_455_08	5	276	100	<0.1	520	5	<10	22	26	140
HDIS_470_08	<1	138	<10	<0.1	960	<1	220	50	13	310
HDIS_474_08	21	64	20	0.6	510	<1	440	80	64	316
HDIS_478_08	<1	108	20	0.1	2270	1	50	<1	45	360
HDIS_479_08	5	105	30	0.2	3480	2	190	5	126	217
HDIS_480_08	4	110	160	0.4	4720	4	130	15	1230	372
HDIS_481_08	4	121	40	0.3	2640	1	50	<1	39	142
*Rep HDIS_481_08	6	137	40	0.3	2540	<1	40	<1	46	121
HDIS_484_08	1	135	110	0.1	640	3	<10	<1	24	20
HDIS_485_08	3	>300	620	0.2	1240	15	10	5	301	51
HDIS_486_08	9	>300	160	0.1	530	9	<10	5	101	179
HDIS_600_08	1	127	40	0.1	840	1	<10	<1	48	89
HDIS_601_08	2	142	20	<0.1	730	<1	<10	<1	41	116
HDIS_602_08	5	248	50	0.3	2020	1	40	4	379	147
HDIS_603_08	5	256	30	0.3	840	<1	<10	4	127	397
HDIS_604_08	7	230	10	<0.1	1440	<1	80	7	356	65
HDIS_605_08	6	62	<10	<0.1	610	<1	540	5	43	8
HDIS_606_08	2	281	10	<0.1	650	<1	40	13	63	170
[illegible]IS_607_08	2	289	<10	<0.1	710	<1	30	13	69	56
[illegible]d MMISRM16	20	53	20	36.7	100	<1	270	4	21	65
*Std MMISRM16	14	52	20	28.0	40	<1	230	3	20	57
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_315_08	<100	400	82	42.6	12.8	132	68	24	<5	12
*Rep HDIS_315_08	<100	370	101	47.0	17.7	76	95	29	<5	9
HDIS_316_08	<100	350	21	9.3	4.8	203	24	14	<5	4
HDIS_317_08	<100	410	66	25.0	19.1	23	106	44	<5	24
HDIS_318_08	<100	230	76	31.5	14.8	36	71	39	<5	<1
HDIS_319_08	<100	240	189	76.4	69.4	41	301	339	<5	4
HDIS_344_08	<100	170	29	9.6	8.5	76	40	26	<5	2
HDIS_345_08	<100	600	57	19.9	19.0	75	92	46	<5	2
HDIS_346_08	<100	250	69	21.6	25.1	22	134	67	<5	37
HDIS_347_08	<100	140	45	21.5	7.9	77	40	15	<5	4
HDIS_359_08	<100	150	22	11.0	3.8	49	20	9	<5	10
HDIS_372_08	<100	310	75	30.8	25.4	21	121	52	<5	17
HDIS_373_08	<100	130	61	27.4	11.0	82	61	16	<5	10
HDIS_383_08	<100	240	49	20.2	17.0	21	69	35	<5	14
*Rep HDIS_383_08	<100	190	45	19.0	15.2	22	63	31	<5	13
HDIS_384_08	<100	300	107	45.2	30.5	51	127	57	<5	12
HDIS_385_08	<100	360	117	50.6	37.2	79	156	101	<5	2
HDIS_386_08	<100	320	46	26.1	5.9	257	26	20	<5	3
HDIS_387_08	<100	900	105	51.9	25.0	186	109	64	<5	5
HDIS_392_08	<100	370	34	16.1	8.8	206	40	63	<5	5
HDIS_393_08	<100	720	247	126	70.5	153	328	509	<5	7
HDIS_394_08	<100	70	6	3.6	1.2	51	6	8	<5	24
HDIS_395_08	<100	120	14	7.2	2.8	126	12	12	<5	5
HDIS_396_08	<100	260	38	15.9	10.9	69	52	32	<5	4
HDIS_397_08	<100	920	26	13.0	6.9	234	26	29	<5	4
HDIS_398_08	<100	240	114	62.0	17.5	147	85	27	<5	21
HDIS_399_08	<100	950	20	11.2	4.9	370	21	44	<5	2
*Rep HDIS_399_08	<100	1000	22	12.4	5.0	340	22	43	<5	1
HDIS_420_08	<100	2610	116	56.6	27.3	266	130	90	<5	15
HDIS_422_08	<100	100	8	3.4	2.1	48	10	15	<5	46
HDIS_423_08	<100	400	8	4.9	1.7	332	7	20	<5	1
HDIS_424_08	<100	110	6	3.5	1.6	40	7	5	<5	19
HDIS_425_08	<100	290	48	19.6	18.6	40	79	42	6	16
HDIS_426_08	<100	70	11	5.3	2.9	47	13	11	<5	9
HDIS_427_08	<100	100	26	13.3	5.4	81	22	12	<5	2
HDIS_428_08	<100	100	21	12.1	2.5	148	13	7	<5	3
HDIS_429_08	<100	40	17	6.8	5.8	31	25	31	<5	9
HDIS_440_08	<100	300	144	61.9	55.3	49	218	201	<5	2
HDIS_444_08	<100	850	18	7.8	5.9	26	24	21	<5	21
HDIS_449_08	<100	640	45	16.8	14.0	56	66	72	<5	11
*Rep HDIS_449_08	<100	640	45	15.3	14.2	47	66	76	<5	10
HDIS_450_08	<100	790	20	10.0	3.9	267	20	12	<5	24
HDIS_451_08	<100	1320	42	25.5	8.2	397	36	42	<5	9
HDIS_452_08	<100	610	4	2.5	0.5	372	3	6	<5	5
HDIS_453_08	<100	700	7	3.1	1.7	564	7	21	<5	4

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Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_454_08	<100	140	31	15.4	8.5	174	34	48	<5	2
HDIS_455_08	<100	160	19	12.9	1.8	123	9	10	<5	<1
HDIS_470_08	<100	50	6	4.3	1.3	178	5	4	<5	11
HDIS_474_08	<100	430	20	9.2	7.2	71	27	17	6	10
HDIS_478_08	<100	900	19	8.6	4.9	303	25	16	<5	15
HDIS_479_08	<100	2130	55	24.4	16.0	235	80	60	<5	23
HDIS_480_08	<100	2980	115	48.3	36.2	425	161	340	<5	4
HDIS_481_08	<100	1170	6	3.1	1.4	493	6	16	<5	8
*Rep HDIS_481_08	<100	1090	7	3.7	1.5	458	7	19	<5	6
HDIS_484_08	<100	680	5	2.9	0.8	392	4	11	<5	2
HDIS_485_08	<100	280	44	17.7	13.0	136	57	121	<5	<1
HDIS_486_08	<100	340	26	11.5	5.0	44	23	46	<5	<1
HDIS_600_08	<100	1130	6	3.4	1.5	494	7	19	<5	1
HDIS_601_08	<100	530	7	3.7	1.5	424	6	17	<5	<1
HDIS_602_08	<100	360	135	64.1	38.3	140	168	162	<5	3
HDIS_603_08	<100	460	36	19.6	10.0	162	44	46	<5	<1
HDIS_604_08	<100	110	63	22.2	23.2	45	111	90	<5	3
HDIS_605_08	<100	40	40	15.2	18.8	26	67	17	<5	4
HDIS_606_08	<100	190	32	14.1	8.5	124	35	17	<5	2
HDIS_607_08	<100	100	34	14.7	9.5	49	35	14	<5	2
*Std MMISRM16	<100	600	2	0.9	1.2	2	5	5	<5	42
*Std MMISRM16	<100	520	2	1.0	1.1	3	5	4	<5	33
*Blk BLANK	<100	<10	1	<0.5	<0.5	1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	2	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_315_08	<5	0.7	77	179	600	<1	14	<1	81	<1
*Rep HDIS_315_08	<5	0.7	103	153	630	<1	17	<1	79	<1
HDIS_316_08	<5	2.6	31	195	360	<1	6	<1	66	<1
HDIS_317_08	<5	<0.5	141	108	610	<1	25	<1	173	<1
HDIS_318_08	<5	1.1	119	56	520	<1	22	<1	90	<1
HDIS_319_08	<5	1.2	762	146	450	<1	151	<1	139	1
HDIS_344_08	<5	1.6	72	147	740	<1	13	<1	234	1
HDIS_345_08	<5	1.6	129	131	350	<1	23	<1	114	<1
HDIS_346_08	<5	<0.5	201	238	470	<1	36	<1	135	<1
HDIS_347_08	<5	0.7	57	79	450	<1	10	<1	20	<1
HDIS_359_08	<5	<0.5	28	224	700	<1	5	<1	50	3
HDIS_372_08	<5	<0.5	182	215	270	<1	30	<1	56	<1
HDIS_373_08	<5	0.9	84	109	460	<1	14	<1	27	<1
HDIS_383_08	<5	<0.5	111	202	890	<1	19	<1	95	4
*Rep HDIS_383_08	<5	<0.5	99	191	880	<1	17	<1	93	4
HDIS_384_08	<5	<0.5	181	611	870	<1	33	<1	89	<1
HDIS_385_08	<5	0.8	295	306	14900	<1	55	<1	204	104
HDIS_386_08	<5	<0.5	38	256	1640	<1	8	<1	75	4
HDIS_387_08	<5	<0.5	170	786	8070	<1	33	<1	111	43
DIS_392_08	5	5.2	97	148	350	<1	21	<1	147	3
IS_393_08	6	5.3	976	135	490	<1	207	<1	147	4
HDIS_394_08	<5	0.6	13	56	270	<1	3	<1	32	<1
HDIS_395_08	<5	2.7	25	103	600	<1	5	<1	61	5
HDIS_396_08	<5	1.2	83	209	520	<1	16	<1	121	1
HDIS_397_08	<5	0.9	58	116	120	<1	13	<1	139	1
HDIS_398_08	<5	0.6	107	93	600	<1	18	<1	23	<1
HDIS_399_08	<5	4.5	56	115	150	<1	13	<1	115	3
*Rep HDIS_399_08	<5	3.8	57	106	210	<1	14	<1	129	3
HDIS_420_08	7	1.4	230	407	740	<1	44	<1	79	3
HDIS_422_08	<5	1.2	22	106	580	<1	5	<1	13	<1
HDIS_423_08	<5	4.0	24	82	20	<1	6	<1	122	<1
HDIS_424_08	<5	<0.5	10	66	180	<1	2	<1	6	<1
HDIS_425_08	<5	<0.5	135	350	380	<1	23	<1	76	3
HDIS_426_08	<5	0.7	25	109	630	<1	5	<1	60	1
HDIS_427_08	<5	1.8	35	153	370	<1	7	<1	52	<1
HDIS_428_08	<5	1.9	14	78	2870	<1	3	<1	44	2
HDIS_429_08	<5	<0.5	59	84	390	<1	12	<1	83	<1
HDIS_440_08	<5	1.9	489	94	3070	<1	97	<1	140	52
HDIS_444_08	<5	<0.5	47	167	1490	<1	9	<1	68	10
HDIS_449_08	<5	1.2	167	254	550	<1	34	<1	113	<1
*Rep HDIS_449_08	<5	0.9	176	237	540	<1	35	<1	112	<1
HDIS_450_08	8	0.9	34	238	100	<1	7	<1	46	<1
HDIS_451_08	<5	1.0	74	501	280	<1	16	<1	38	3
HDIS_452_08	<5	1.6	7	101	10	<1	2	<1	22	<1
HDIS_453_08	6	4.9	24	194	50	<1	6	<1	117	1

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Order:

Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_454_08	<5	1.2	83	136	210	<1	18	<1	54	2
HDIS_455_08	<5	1.7	15	105	430	<1	3	<1	110	1
HDIS_470_08	<5	1.3	8	82	250	<1	2	<1	62	1
HDIS_474_08	<5	<0.5	56	755	710	<1	10	<1	25	24
HDIS_478_08	6	0.6	41	232	60	<1	8	<1	84	<1
HDIS_479_08	7	1.4	166	237	430	<1	31	<1	78	2
HDIS_480_08	28	6.9	509	213	1260	<1	117	<1	110	22
HDIS_481_08	6	2.1	18	164	30	<1	5	<1	100	2
*Rep HDIS_481_08	<5	1.8	21	161	20	<1	5	<1	99	2
HDIS_484_08	<5	3.2	11	97	20	<1	3	<1	68	2
HDIS_485_08	6	7.3	185	56	210	<1	42	<1	171	12
HDIS_486_08	<5	1.9	57	66	170	<1	14	<1	136	2
HDIS_600_08	<5	4.9	20	94	30	<1	5	<1	118	2
HDIS_601_08	<5	4.1	19	94	20	<1	5	<1	141	1
HDIS_602_08	5	6.2	380	74	400	<1	75	<1	164	3
HDIS_603_08	<5	4.0	91	74	340	<1	19	<1	206	2
HDIS_604_08	<5	1.6	216	97	810	<1	42	<1	228	2
HDIS_605_08	<5	<0.5	89	134	90	<1	14	<1	31	<1
HDIS_606_08	<5	1.6	47	149	390	<1	8	<1	130	<1
HDIS_607_08	<5	1.0	52	98	940	<1	9	<1	113	<1
*Std MMISRM16	54	<0.5	16	235	120	24	3	<1	298	<1
*Std MMISRM16	51	<0.5	15	222	100	19	3	<1	262	<1
*Blk BLANK	<5	<0.5	<1	10	<10	<1	1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_315_08	59	39	<1	410	<1	13	<10	30.9	192	0.6
*Rep HDIS_315_08	53	54	<1	320	<1	17	<10	29.7	199	0.5
HDIS_316_08	38	16	<1	90	<1	4	<10	38.6	933	<0.5
HDIS_317_08	49	68	<1	390	<1	15	<10	37.5	113	<0.5
HDIS_318_08	55	48	<1	50	<1	13	<10	16.9	323	0.7
HDIS_319_08	140	244	<1	320	<1	41	<10	71.8	509	0.8
HDIS_344_08	36	31	<1	60	<1	6	<10	55.1	706	0.7
HDIS_345_08	42	66	<1	40	<1	13	<10	46.3	806	<0.5
HDIS_346_08	41	97	<1	460	<1	17	<10	44.7	92	<0.5
HDIS_347_08	49	25	<1	310	<1	8	<10	29.9	246	<0.5
HDIS_359_08	20	11	<1	760	<1	4	<10	7.1	20	<0.5
HDIS_372_08	12	83	<1	940	<1	16	<10	11.8	21	<0.5
HDIS_373_08	32	36	<1	370	<1	10	<10	10.3	425	<0.5
HDIS_383_08	11	49	<1	1350	<1	10	<10	14.4	34	<0.5
*Rep HDIS_383_08	11	42	<1	1320	<1	9	<10	13.4	34	<0.5
HDIS_384_08	59	85	<1	760	<1	20	<10	64.0	51	<0.5
HDIS_385_08	97	111	<1	150	<1	23	<10	112	383	1.3
HDIS_386_08	43	14	<1	580	<1	6	<10	34.9	192	0.7
HDIS_387_08	86	70	<1	620	<1	19	<10	109	71	2.7
HDIS_392_08	67	31	<1	250	<1	7	<10	72.6	2220	0.9
HDIS_393_08	287	265	<1	250	<1	48	<10	106	2610	1.0
HDIS_394_08	15	4	<1	820	<1	<1	<10	7.6	158	<0.5
HDIS_395_08	36	9	<1	190	<1	2	<10	27.5	1280	<0.5
HDIS_396_08	46	38	<1	120	<1	8	<10	57.0	558	<0.5
HDIS_397_08	52	19	<1	390	<1	4	<10	29.1	408	0.8
HDIS_398_08	60	49	<1	590	<1	18	<10	39.5	248	<0.5
HDIS_399_08	66	16	<1	70	<1	4	<10	55.3	1680	0.6
*Rep HDIS_399_08	69	18	<1	50	<1	4	<10	55.6	1530	0.7
HDIS_420_08	136	90	<1	500	<1	22	<10	100	468	<0.5
HDIS_422_08	7	7	<1	660	<1	2	<10	15.1	557	<0.5
HDIS_423_08	39	6	<1	70	<1	1	<10	32.1	930	<0.5
HDIS_424_08	<5	4	<1	1620	<1	1	<10	1.3	45	<0.5
HDIS_425_08	11	58	<1	930	<1	10	<10	25.6	111	<0.5
HDIS_426_08	15	9	<1	350	<1	2	<10	27.8	351	<0.5
HDIS_427_08	39	15	<1	100	<1	4	<10	37.8	580	<0.5
HDIS_428_08	37	7	<1	60	<1	3	<10	31.2	564	<0.5
HDIS_429_08	8	20	<1	700	<1	3	<10	16.6	148	<0.5
HDIS_440_08	133	173	<1	220	<1	30	<10	114	994	0.6
HDIS_444_08	7	17	<1	1810	<1	3	<10	7.9	38	<0.5
HDIS_449_08	32	56	<1	270	<1	10	<10	53.0	487	<0.5
*Rep HDIS_449_08	30	58	<1	240	<1	10	<10	51.1	383	<0.5
HDIS_450_08	47	15	<1	720	<1	3	<10	18.0	254	<0.5
HDIS_451_08	72	26	<1	500	<1	7	<10	76.9	308	<0.5
HDIS_452_08	14	2	<1	270	<1	<1	<10	14.8	524	<0.5
HDIS_453_08	17	6	<1	190	<1	1	<10	39.6	1430	<0.5

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_454_08	70	26	<1	570	<1	6	<10	40.6	549	<0.5
HDIS_455_08	35	6	<1	40	<1	2	<10	33.4	409	<0.5
HDIS_470_08	25	3	<1	730	<1	<1	<10	15.3	364	<0.5
HDIS_474_08	14	21	<1	1900	<1	4	<10	21.2	32	<0.5
HDIS_478_08	43	18	<1	390	<1	4	<10	20.5	200	<0.5
HDIS_479_08	84	62	<1	610	<1	12	<10	56.7	486	<0.5
HDIS_480_08	144	134	<1	410	<1	24	<10	147	2860	<0.5
HDIS_481_08	27	5	<1	350	<1	1	<10	34.1	546	0.6
*Rep HDIS_481_08	32	6	<1	290	<1	1	<10	39.0	533	0.7
HDIS_484_08	19	3	<1	60	<1	<1	<10	27.9	681	<0.5
HDIS_485_08	77	49	<1	30	<1	9	<10	125	3270	0.9
HDIS_486_08	36	18	<1	10	<1	4	<10	47.3	711	1.2
HDIS_600_08	26	6	<1	40	<1	1	<10	49.2	1120	0.6
HDIS_601_08	18	6	<1	30	<1	1	<10	32.1	834	0.7
HDIS_602_08	176	129	<1	120	<1	26	<10	95.0	2890	1.0
HDIS_603_08	105	34	<1	20	<1	7	<10	71.0	2060	1.1
HDIS_604_08	70	93	<1	120	<1	15	<10	122	727	0.9
HDIS_605_08	<5	45	<1	1380	<1	9	<10	7.4	12	<0.5
HDIS_606_08	40	25	<1	140	<1	6	<10	59.4	671	0.5
HDIS_607_08	43	25	<1	70	<1	6	<10	64.6	354	0.6
*Std MMISRM16	12	5	<1	480	<1	<1	<10	29.8	4	<0.5
*Std MMISRM16	9	5	<1	380	<1	<1	<10	28.0	10	<0.5
*Blk BLANK	<5	1	<1	<10	<1	<1	<10	0.8	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_315_08	40	<1	390	27	150	53
*Rep HDIS_315_08	35	<1	468	30	160	50
HDIS_316_08	9	<1	81	7	1110	64
HDIS_317_08	31	<1	275	16	230	95
HDIS_318_08	12	<1	286	20	200	49
HDIS_319_08	29	<1	1120	51	320	88
HDIS_344_08	11	<1	88	6	880	75
HDIS_345_08	16	<1	199	13	480	74
HDIS_346_08	27	<1	234	14	230	75
HDIS_347_08	15	<1	212	14	630	32
HDIS_359_08	59	<1	123	7	180	9
HDIS_372_08	20	<1	356	19	230	23
HDIS_373_08	6	<1	308	19	450	13
HDIS_383_08	43	<1	226	13	160	36
*Rep HDIS_383_08	41	<1	206	12	160	34
HDIS_384_08	118	<1	506	31	140	43
HDIS_385_08	41	<1	506	36	1580	163
HDIS_386_08	31	<1	198	17	760	42
HDIS_387_08	63	<1	537	38	1660	109
HDIS_392_08	17	1	148	12	380	126
HDIS_393_08	59	3	1590	95	200	189
HDIS_394_08	5	<1	26	3	8260	20
HDIS_395_08	6	<1	64	5	830	47
HDIS_396_08	13	<1	144	11	460	64
HDIS_397_08	21	<1	123	9	90	44
HDIS_398_08	33	<1	602	43	230	30
HDIS_399_08	28	<1	89	9	100	93
*Rep HDIS_399_08	28	<1	92	10	90	95
HDIS_420_08	74	1	552	42	480	138
HDIS_422_08	3	<1	38	2	120	30
HDIS_423_08	14	<1	32	4	<20	71
HDIS_424_08	4	<1	39	2	1610	7
HDIS_425_08	41	<1	213	14	840	37
HDIS_426_08	3	<1	54	3	480	28
HDIS_427_08	7	<1	108	10	1070	56
HDIS_428_08	8	<1	93	9	1090	57
HDIS_429_08	8	<1	69	5	1230	28
HDIS_440_08	30	1	688	47	910	140
HDIS_444_08	37	<1	94	6	110	18
HDIS_449_08	12	<1	154	10	310	52
*Rep HDIS_449_08	11	<1	149	10	300	49
HDIS_450_08	41	<1	89	9	90	28
HDIS_451_08	120	<1	223	20	70	95
HDIS_452_08	13	<1	16	2	40	23
HDIS_453_08	11	1	26	2	60	61

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_454_08	20	<1	152	12	120	61
HDIS_455_08	8	<1	81	10	120	39
HDIS_470_08	8	<1	34	4	2780	43
HDIS_474_08	27	<1	99	8	710	40
HDIS_478_08	40	<1	82	6	40	35
HDIS_479_08	52	<1	246	18	430	102
HDIS_480_08	87	4	489	35	340	305
HDIS_481_08	23	<1	25	2	30	54
*Rep HDIS_481_08	23	<1	27	3	20	57
HDIS_484_08	11	<1	17	2	<20	47
HDIS_485_08	25	2	168	13	120	224
HDIS_486_08	17	<1	97	7	140	75
HDIS_600_08	16	<1	23	3	30	88
HDIS_601_08	9	<1	26	3	30	59
HDIS_602_08	40	2	652	47	330	183
HDIS_603_08	33	1	157	15	180	138
HDIS_604_08	19	<1	228	15	250	128
HDIS_605_08	8	<1	197	9	300	11
HDIS_606_08	16	<1	125	10	960	85
HDIS_607_08	11	<1	124	10	810	80
Std MMISRM16	45	<1	10	<1	200	13
Std MMISRM16	43	<1	10	<1	290	14
*Blk BLANK	<1	<1	6	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101887

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 04, 2008

P.O. No. :	Heidi / Cheyenne
Project No. :	DEFAULT
No. Of Samples	60
Date Submitted	Jul 22, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 60 Soils

Certified By :
Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	–	= No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted

Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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SGS

Order:

Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
CHYS_1279_08	4	40	10	0.4	2110	<1	410	6	13	116
*Rep CHYS_1279_08	2	41	30	0.3	2180	<1	430	3	18	161
HDIS_150_08	4	256	<10	<0.1	1370	<1	60	5	413	46
HDIS_151_08	6	292	<10	<0.1	830	<1	40	8	68	56
HDIS_177_08	12	63	<10	<0.1	3620	<1	370	3	18	17
HDIS_178_08	5	300	<10	<0.1	2850	<1	10	10	93	77
HDIS_202_08	1	132	<10	<0.1	1080	<1	270	15	100	14
HDIS_287_08	3	>300	<10	<0.1	720	<1	10	17	94	86
HDIS_288_08	3	253	<10	<0.1	1300	<1	50	15	98	68
HDIS_289_08	2	160	<10	<0.1	10200	<1	190	6	43	63
HDIS_290_08	5	203	30	0.1	2270	1	40	3	336	51
HDIS_291_08	3	251	10	0.1	1840	<1	10	5	71	169
HDIS_609_08	3	>300	20	0.2	1450	<1	20	10	213	217
HDIS_610_08	8	36	<10	<0.1	5900	<1	560	3	103	46
*Rep HDIS_610_08	8	42	<10	<0.1	5440	<1	530	3	143	38
HDIS_611_08	3	137	<10	<0.1	2480	<1	220	4	59	49
HDIS_612_08	12	94	<10	<0.1	2220	<1	450	14	61	45
HDIS_613_08	74	78	50	1.7	2860	<1	200	15	353	530
HDIS_614_08	7	63	<10	0.2	1080	<1	460	6	85	67
HDIS_615_08	4	270	<10	<0.1	1250	<1	20	10	66	76
S_616_08	7	159	30	0.3	3390	1	50	4	120	197
DIS_617_08	6	140	20	0.2	1030	1	10	<1	73	18
HDIS_618_08	4	223	<10	0.2	990	<1	10	2	59	44
HDIS_619_08	2	>300	30	<0.1	2200	1	10	11	160	127
HDIS_620_08	4	263	<10	0.2	810	<1	10	5	124	244
HDIS_621_08	3	>300	<10	<0.1	1030	<1	10	16	117	82
HDIS_622_08	2	263	<10	<0.1	1300	<1	30	14	69	48
*Rep HDIS_622_08	4	281	10	<0.1	1870	<1	30	10	123	61
HDIS_623_08	10	161	<10	<0.1	1070	<1	170	18	140	45
HDIS_624_08	7	133	<10	<0.1	2490	<1	190	13	133	189
HDIS_625_08	37	111	<10	0.1	3480	<1	270	26	307	177
HDIS_626_08	3	215	<10	<0.1	2170	<1	60	10	53	437
HDIS_628_08	6	115	30	0.2	5890	<1	180	31	741	167
HDIS_629_08	5	258	<10	<0.1	1120	<1	<10	17	83	232
HDIS_630_08	2	280	<10	<0.1	670	<1	30	10	19	66
HDIS_631_08	6	249	30	<0.1	6320	2	30	25	242	238
HDIS_636_08	8	274	10	<0.1	1840	1	20	11	158	85
HDIS_637_08	7	48	<10	0.1	940	<1	540	11	36	16
HDIS_638_08	6	127	<10	<0.1	4380	<1	370	14	168	73
HDIS_639_08	13	239	<10	<0.1	1930	<1	40	6	196	192
*Rep HDIS_639_08	12	243	<10	<0.1	1400	<1	40	4	148	137
HDIS_640_08	6	140	10	0.1	3160	4	120	3	37	104
CHYS_384_08	161	20	<10	6.2	240	<1	510	50	83	12
CHYS_1146_08	5	292	<10	<0.1	1610	<1	30	36	19	142
CHYS_1189_08	4	269	<10	<0.1	340	<1	<10	8	102	9
CHYS_1207_08	2	186	<10	<0.1	350	<1	120	51	64	455

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1222_08	5	231	20	<0.1	260	<1	<10	7	32	24
CHYS_1235_08	12	266	20	<0.1	1190	<1	60	172	308	189
Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R	L.N.R.	L.N.R.	L.N.R.	L.N R.	L.N R.
CHYS_1255_08	6	136	<10	<0.1	1000	4	180	96	43	202
CHYS_1256_08	9	264	30	0.2	2020	2	10	12	108	81
CHYS_1273_08	2	106	10	0.2	2050	<1	450	232	24	397
CHYS_1280_08	9	219	<10	<0.1	1070	2	20	16	31	242
*Rep CHYS_1280_08	11	198	20	<0.1	1870	2	20	17	60	426
HDIS_204_08	15	11	<10	0.2	17400	<1	370	2	41	145
HDIS_205_08	4	270	<10	<0.1	1860	<1	10	6	184	21
HDIS_231_08	1	108	<10	<0.1	3290	<1	290	14	76	64
HDIS_233_08	6	>300	30	0.2	1060	1	10	8	261	78
HDIS_234_08	3	152	<10	<0.1	570	<1	<10	<1	15	69
HDIS_259_08	2	264	<10	<0.1	730	<1	20	11	20	111
HDIS_260_08	2	253	<10	<0.1	430	<1	10	8	16	59
HDIS_261_08	8	186	<10	<0.1	3620	<1	120	8	160	25
HDIS_262_08	4	245	<10	<0.1	2680	<1	20	4	28	72
HDIS_263_08	5	>300	10	<0.1	1220	<1	20	6	58	125
CHYS_1246_08	20	196	<10	<0.1	3910	<1	210	19	348	21
*Std MMISRM16	21	55	10	35.7	80	<1	200	5	19	67
*Std MMISRM16	22	56	10	36.2	120	<1	200	4	21	68
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
CHYS_1279_08	<100	1560	5	3.2	1.3	221	5	6	<5	31
*Rep CHYS_1279_08	<100	1150	4	2.4	1.3	158	5	7	<5	34
HDIS_150_08	<100	150	165	57.0	37.1	41	239	116	<5	12
HDIS_151_08	<100	90	35	12.4	7.1	82	42	17	<5	11
HDIS_177_08	<100	510	93	31.7	37.4	9	183	16	<5	35
HDIS_178_08	<100	600	86	34.0	13.7	54	76	39	6	2
HDIS_202_08	<100	470	64	32.1	13.3	15	65	50	<5	7
HDIS_287_08	<100	270	48	18.2	9.4	57	46	25	<5	2
HDIS_288_08	<100	110	52	21.3	12.9	81	62	30	<5	4
HDIS_289_08	<100	3300	412	239	67.3	48	378	53	<5	43
HDIS_290_08	<100	150	69	30.0	28.3	63	116	138	<5	6
HDIS_291_08	<100	830	31	17.0	5.7	155	25	37	<5	2
HDIS_609_08	100	300	53	19.3	13.9	143	65	66	8	2
HDIS_610_08	<100	80	94	34.3	25.8	8	160	26	13	50
*Rep HDIS_610_08	<100	80	117	42.0	32.3	10	196	36	11	48
HDIS_611_08	<100	60	20	8.8	6.1	43	27	17	7	20
HDIS_612_08	<100	50	23	10.2	7.7	37	35	22	6	8
HDIS_613_08	<100	1030	28	11.6	9.6	133	36	37	<5	16
HDIS_614_08	<100	120	39	16.6	11.4	43	53	23	<5	17
HDIS_615_08	<100	160	49	27.8	6.0	152	28	24	<5	3
HDIS_616_08	<100	910	33	19.9	6.5	341	25	49	<5	2
HDIS_617_08	<100	760	9	5.8	2.2	412	9	32	<5	1
HDIS_618_08	<100	290	18	12.3	2.3	208	9	25	<5	1
HDIS_619_08	<100	200	65	30.5	12.1	191	54	56	6	3
HDIS_620_08	<100	370	24	11.1	5.1	83	22	42	<5	1
HDIS_621_08	<100	180	59	23.8	12.7	49	60	36	5	2
HDIS_622_08	<100	150	55	24.2	10.6	84	45	20	<5	3
*Rep HDIS_622_08	<100	180	52	21.7	12.9	99	52	34	<5	3
HDIS_623_08	<100	170	99	41.8	27.9	23	124	38	<5	4
HDIS_624_08	<100	250	35	15.3	10.3	64	43	31	<5	7
HDIS_625_08	<100	360	68	33.4	18.7	22	81	53	<5	3
HDIS_626_08	<100	190	16	9.1	3.5	103	14	11	<5	6
HDIS_628_08	<100	900	202	102	58.8	82	260	320	<5	14
HDIS_629_08	<100	150	63	35.2	8.4	226	37	27	<5	<1
HDIS_630_08	<100	90	27	13.1	3.4	116	16	6	<5	5
HDIS_631_08	100	260	77	38.8	16.9	225	76	113	<5	7
HDIS_636_08	<100	170	67	32.7	10.8	181	47	39	12	2
HDIS_637_08	<100	60	21	9.0	7.7	16	31	14	<5	7
HDIS_638_08	<100	110	161	72.5	33.5	20	191	55	<5	17
HDIS_639_08	<100	670	411	190	68.2	104	319	52	<5	2
*Rep HDIS_639_08	<100	640	409	194	63.2	82	290	37	<5	2
HDIS_640_08	<100	1690	11	10.3	2.9	386	11	15	<5	4
CHYS_384_08	<100	420	30	20.3	5.8	3	40	75	<5	174
CHYS_1146_08	<100	180	14	7.4	1.5	83	7	17	11	8
CHYS_1189_08	<100	160	29	12.9	6.6	25	26	35	<5	<1
CHYS_1207_08	<100	2680	35	21.3	6.8	22	26	27	<5	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1222_08	<100	210	22	12.8	2.6	78	12	13	<5	<1
CHYS_1235_08	<100	1460	109	52.1	19.3	120	84	79	<5	11
Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	<100	710	79	62.4	8.4	168	44	18	9	25
CHYS_1256_08	<100	360	49	24.9	7.4	210	33	42	<5	2
CHYS_1273_08	<100	70	6	3.5	1.4	88	6	9	<5	42
CHYS_1280_08	<100	420	22	12.2	1.9	211	10	12	<5	3
*Rep CHYS_1280_08	<100	600	20	11.3	2.7	274	13	20	<5	4
HDIS_204_08	<100	3090	30	11.0	16.8	7	59	7	<5	37
HDIS_205_08	<100	270	102	38.0	20.9	29	112	57	<5	1
HDIS_231_08	<100	60	28	14.0	7.2	43	33	23	<5	36
HDIS_233_08	<100	550	108	40.4	28.7	90	127	77	<5	1
HDIS_234_08	<100	260	2	1.3	0.7	403	3	7	<5	2
HDIS_259_08	<100	260	8	5.9	1.1	114	5	8	6	7
HDIS_260_08	<100	60	12	8.8	1.1	146	5	5	<5	1
HDIS_261_08	<100	1670	467	221	85.5	29	386	69	<5	7
[illegible]S_262_08	<100	240	75	41.4	7.0	101	40	10	<5	3
[illegible]IS_263_08	<100	270	21	7.1	4.2	85	21	20	<5	7
CHYS_1246_08	<100	1400	166	76.0	34.7	47	164	125	<5	27
*Std MMISRM16	<100	640	3	1.2	1.4	2	5	4	<5	34
*Std MMISRM16	<100	640	4	1.3	1.5	2	6	5	<5	34
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1279_08	25	<0.5	11	281	80	<1	3	<1	11	10
*Rep CHYS_1279_08	36	<0.5	14	345	40	<1	3	<1	8	6
HDIS_150_08	<5	0.9	349	272	1170	<1	63	<1	213	<1
HDIS_151_08	<5	1.6	51	178	1080	<1	9	<1	184	<1
HDIS_177_08	<5	<0.5	151	71	150	<1	18	<1	168	<1
HDIS_178_08	5	2.8	95	153	340	<1	17	<1	206	<1
HDIS_202_08	<5	<0.5	129	140	430	<1	24	<1	125	<1
HDIS_287_08	<5	2.4	68	149	560	<1	12	<1	181	<1
HDIS_288_08	<5	1.8	93	142	870	<1	15	<1	133	<1
HDIS_289_08	<5	<0.5	293	240	710	<1	42	<1	67	<1
HDIS_290_08	<5	4.8	324	32	600	<1	65	<1	196	3
HDIS_291_08	6	4.2	53	81	210	<1	12	<1	105	<1
HDIS_609_08	<5	3.1	136	212	480	<1	27	<1	296	4
HDIS_610_08	<5	<0.5	192	150	530	<1	23	<1	78	<1
*Rep HDIS_610_08	<5	<0.5	260	148	650	<1	33	<1	83	<1
HDIS_611_08	<5	<0.5	47	138	1120	<1	9	<1	166	<1
HDIS_612_08	<5	<0.5	65	280	620	<1	11	<1	92	<1
HDIS_613_08	6	2.2	95	283	560	<1	19	<1	118	7
HDIS_614_08	<5	<0.5	88	213	430	<1	15	<1	54	<1
HDIS_615_08	<5	2.4	46	166	700	<1	9	<1	104	<1
DIS_616_08	5	3.0	69	251	200	<1	16	<1	123	3
DIS_617_08	<5	4.9	31	55	20	<1	8	<1	139	1
HDIS_618_08	<5	4.7	30	71	100	<1	7	<1	148	<1
HDIS_619_08	6	8.0	111	119	610	<1	22	<1	240	3
HDIS_620_08	<5	1.7	56	92	540	<1	13	<1	203	<1
HDIS_621_08	<5	3.2	102	124	460	<1	18	<1	184	<1
HDIS_622_08	<5	2.6	68	111	410	<1	11	<1	66	<1
*Rep HDIS_622_08	<5	3.7	89	132	380	<1	16	<1	152	2
HDIS_623_08	<5	0.5	177	219	530	<1	27	<1	147	<1
HDIS_624_08	<5	1.2	86	158	810	<1	16	<1	142	1
HDIS_625_08	<5	<0.5	156	261	200	<1	29	<1	149	1
HDIS_626_08	<5	0.9	27	244	140	<1	5	<1	213	<1
HDIS_628_08	<5	1.2	651	555	740	<1	133	<1	47	3
HDIS_629_08	<5	1.5	62	138	620	<1	12	<1	307	2
HDIS_630_08	<5	2.1	19	81	550	<1	3	<1	97	<1
HDIS_631_08	<5	6.2	181	226	650	<1	39	<1	55	2
HDIS_636_08	<5	3.1	81	163	750	<1	16	<1	186	3
HDIS_637_08	<5	<0.5	50	154	70	<1	8	<1	24	<1
HDIS_638_08	<5	<0.5	228	209	580	<1	35	<1	227	<1
HDIS_639_08	<5	0.5	327	328	1410	<1	47	<1	159	1
*Rep HDIS_639_08	<5	<0.5	278	380	1400	<1	38	<1	151	<1
HDIS_640_08	<5	2.6	25	325	190	<1	5	<1	77	6
CHYS_384_08	35	<0.5	78	42	390	<1	14	<1	23	2
CHYS_1146_08	<5	1.0	14	163	820	<1	3	<1	278	<1
CHYS_1189_08	<5	0.6	78	44	560	<1	17	<1	98	<1
CHYS_1207_08	<5	<0.5	65	610	720	<1	13	<1	61	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1222_08	<5	4.3	27	45	200	<1	5	<1	196	2
CHYS_1235_08	9	0.9	179	1020	260	<1	36	<1	418	3
Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	<5	0.6	55	276	790	<1	10	<1	141	2
CHYS_1256_08	7	6.1	74	104	310	<1	15	<1	147	5
CHYS_1273_08	6	0.9	16	72	120	<1	4	<1	80	<1
CHYS_1280_08	<5	3.1	17	111	420	<1	4	<1	174	3
*Rep CHYS_1280_08	5	4.1	30	167	390	<1	7	<1	223	5
HDIS_204_08	<5	<0.5	60	263	110	<1	7	<1	69	<1
HDIS_205_08	<5	1.8	183	87	440	<1	32	<1	118	<1
HDIS_231_08	<5	<0.5	72	46	180	<1	13	<1	87	<1
HDIS_233_08	7	3.7	234	108	830	<1	42	<1	224	1
HDIS_234_08	<5	4.4	7	96	40	<1	2	<1	92	<1
HDIS_259_08	6	2.5	10	143	110	<1	2	<1	76	<1
HDIS_260_08	<5	1.9	8	59	310	<1	2	<1	49	<1
HDIS_261_08	<5	<0.5	409	356	820	<1	60	<1	159	<1
[illegible]S_262_08	<5	1.6	35	86	560	<1	6	<1	103	<1
[illegible]IS_263_08	<5	3.4	32	116	290	<1	7	<1	154	<1
CHYS_1246_08	<5	<0.5	360	249	480	<1	65	<1	63	1
*Std MMISRM16	54	<0.5	18	260	140	31	3	<1	329	<1
*Std MMISRM16	55	<0.5	19	274	140	30	3	<1	337	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1279_08	36	4	<1	2250	<1	<1	<10	4.3	51	<0.5
*Rep CHYS_1279_08	27	4	<1	2320	<1	<1	<10	4.8	51	<0.5
HDIS_150_08	136	147	<1	290	<1	35	<10	92.9	276	0.8
HDIS_151_08	38	26	<1	260	<1	7	<10	52.4	552	0.7
HDIS_177_08	9	115	<1	2410	<1	21	<10	20.7	<3	0.5
HDIS_178_08	77	44	<1	80	<1	14	<10	41.1	932	0.7
HDIS_202_08	38	46	<1	650	<1	11	<10	15.7	124	<0.5
HDIS_287_08	64	31	<1	50	<1	8	<10	37.9	711	0.8
HDIS_288_08	45	45	<1	150	<1	10	<10	52.3	716	1.1
HDIS_289_08	109	193	<1	1410	<1	63	<10	28.7	8	<0.5
HDIS_290_08	123	101	<1	130	<1	14	<10	39.0	2270	0.6
HDIS_291_08	36	20	<1	60	<1	5	<10	22.9	1410	0.7
HDIS_609_08	61	52	<1	60	<1	10	<10	81.8	1050	1.7
HDIS_610_08	10	95	<1	3420	<1	19	<10	93.8	8	0.5
*Rep HDIS_610_08	10	124	<1	3120	<1	24	<10	102	<3	0.5
HDIS_611_08	21	20	<1	820	<1	4	<10	24.9	122	0.6
HDIS_612_08	14	26	<1	1550	<1	5	<10	9.0	30	<0.5
HDIS_613_08	34	30	<1	960	<1	5	<10	57.7	571	1.6
HDIS_614_08	10	37	<1	1670	<1	7	<10	10.1	15	<0.5
HDIS_615_08	63	18	<1	110	<1	7	<10	41.2	641	<0.5
HDIS_616_08	86	21	<1	270	<1	5	<10	63.8	985	0.8
HDIS_617_08	40	8	<1	50	<1	1	<10	33.9	927	0.8
HDIS_618_08	57	8	<1	40	<1	2	<10	52.1	856	0.8
HDIS_619_08	94	40	1	80	<1	10	<10	77.1	3210	1.2
HDIS_620_08	47	17	<1	40	<1	4	<10	42.0	668	1.5
HDIS_621_08	72	44	<1	50	<1	10	<10	56.4	1220	1.1
HDIS_622_08	77	30	<1	160	<1	9	<10	40.0	831	0.8
*Rep HDIS_622_08	89	39	<1	120	<1	9	<10	82.9	1400	1.3
HDIS_623_08	61	92	<1	320	<1	18	<10	41.2	242	0.6
HDIS_624_08	30	34	<1	630	<1	6	<10	38.3	516	0.7
HDIS_625_08	33	58	<1	780	<1	12	<10	17.6	50	1.1
HDIS_626_08	36	12	<1	380	<1	3	<10	35.0	339	1.3
HDIS_628_08	187	204	<1	720	<1	37	<10	96.8	560	<0.5
HDIS_629_08	72	26	<1	50	<1	8	<10	61.9	360	0.7
HDIS_630_08	41	9	<1	180	<1	4	<10	24.3	856	<0.5
HDIS_631_08	118	58	<1	190	<1	13	<10	99.7	1840	<0.5
HDIS_636_08	116	32	<1	70	<1	10	<10	114	927	1.0
HDIS_637_08	6	22	<1	1480	<1	4	<10	6.6	15	<0.5
HDIS_638_08	42	118	<1	810	<1	29	<10	24.2	60	0.5
HDIS_639_08	159	180	<1	280	<1	65	<10	75.4	204	0.9
*Rep HDIS_639_08	165	181	<1	280	<1	63	<10	61.4	112	0.8
HDIS_640_08	42	9	<1	820	<1	2	<10	49.7	649	1.0
CHYS_384_08	14	23	<1	2830	<1	5	<10	20.6	<3	1.9
CHYS_1146_08	23	4	<1	300	<1	2	<10	17.8	283	1.3
CHYS_1189_08	41	21	<1	30	<1	5	<10	33.2	164	0.9
CHYS_1207_08	14	18	<1	520	<1	5	<10	6.0	33	0.6

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1222_08	45	8	<1	20	<1	3	<10	23.7	1560	2.0
CHYS_1235_08	93	60	<1	350	<1	17	<10	68.1	349	1.3
Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	68	23	<1	880	<1	9	<10	15.8	173	<0.5
CHYS_1256_08	94	24	<1	100	<1	7	<10	52.1	1980	1.3
CHYS_1273_08	31	5	<1	2460	<1	<1	<10	8.5	230	0.7
CHYS_1280_08	43	6	<1	120	<1	3	<10	38.5	991	0.8
*Rep CHYS_1280_08	57	10	<1	130	<1	3	<10	52.9	1540	1.2
HDIS_204_08	14	40	<1	1310	<1	7	<10	18.6	3	<0.5
HDIS_205_08	88	73	<1	60	<1	19	<10	15.6	442	1.0
HDIS_231_08	57	26	<1	2240	<1	5	<10	7.5	100	<0.5
HDIS_233_08	133	97	<1	40	<1	20	<10	85.8	1380	1.1
HDIS_234_08	15	2	<1	50	<1	<1	<10	11.3	1280	0.6
HDIS_259_08	34	4	<1	100	<1	1	<10	23.8	901	<0.5
HDIS_260_08	36	3	<1	50	<1	1	<10	12.3	342	0.8
HDIS_261_08	139	220	<1	700	<1	74	<10	43.2	19	0.5
[illegible]S_262_08	93	21	<1	140	<1	10	<10	21.6	439	0.7
[illegible]IS_263_08	31	14	<1	270	<1	4	<10	32.0	1250	1.0
CHYS_1246_08	117	118	1	890	<1	28	<10	36.9	39	<0.5
*Std MMISRM16	14	6	<1	460	<1	<1	<10	31.0	<3	<0.5
*Std MMISRM16	15	6	<1	480	<1	<1	<10	31.2	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1279_08	32	<1	34	2	120	12
*Rep CHYS_1279_08	26	<1	26	2	90	13
HDIS_150_08	32	<1	649	35	190	185
HDIS_151_08	15	<1	120	8	700	91
HDIS_177_08	52	<1	377	18	100	44
HDIS_178_08	30	<1	347	21	550	97
HDIS_202_08	26	<1	359	22	1030	44
HDIS_287_08	14	<1	178	11	870	96
HDIS_288_08	14	<1	230	14	940	81
HDIS_289_08	160	1	2700	157	280	72
HDIS_290_08	22	<1	328	23	110	101
HDIS_291_08	15	1	134	12	310	92
HDIS_609_08	20	<1	181	12	840	215
HDIS_610_08	33	<1	361	16	230	11
*Rep HDIS_610_08	31	<1	454	19	360	14
HDIS_611_08	13	<1	86	6	560	83
HDIS_612_08	54	<1	119	7	870	31
HDIS_613_08	21	<1	109	9	460	114
HDIS_614_08	30	<1	195	11	550	18
HDIS_615_08	12	<1	230	20	420	70
HDIS_616_08	33	<1	148	15	160	124
HDIS_617_08	13	<1	34	6	<20	85
HDIS_618_08	16	<1	74	10	150	98
HDIS_619_08	18	1	272	20	400	184
HDIS_620_08	12	<1	91	7	210	82
HDIS_621_08	20	1	233	15	490	101
HDIS_622_08	16	<1	225	16	920	90
*Rep HDIS_622_08	22	<1	196	15	580	178
HDIS_623_08	23	<1	482	26	400	73
HDIS_624_08	20	<1	150	10	770	91
HDIS_625_08	60	<1	348	24	170	70
HDIS_626_08	11	<1	65	6	300	52
HDIS_628_08	55	1	1120	79	540	169
HDIS_629_08	29	<1	262	23	440	93
HDIS_630_08	7	<1	121	9	310	48
HDIS_631_08	24	2	379	25	1090	169
HDIS_636_08	27	<1	272	24	720	160
HDIS_637_08	11	<1	110	6	600	8
HDIS_638_08	36	<1	746	47	320	72
HDIS_639_08	82	<1	2470	122	180	78
*Rep HDIS_639_08	76	<1	2450	128	160	54
HDIS_640_08	31	<1	52	10	30	105
CHYS_384_08	108	<1	164	14	490	<5
CHYS_1146_08	6	<1	53	5	2640	33
CHYS_1189_08	25	<1	130	9	70	52
CHYS_1207_08	17	<1	267	15	830	10

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1222_08	29	<1	114	9	110	66
CHYS_1235_08	79	<1	495	37	570	162
Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	23	<1	476	52	1180	29
CHYS_1256_08	27	1	217	16	360	152
CHYS_1273_08	6	<1	26	4	1020	26
CHYS_1280_08	14	<1	93	8	480	58
*Rep CHYS_1280_08	19	<1	84	8	450	83
HDIS_204_08	28	<1	144	7	60	28
HDIS_205_08	23	<1	411	23	180	46
HDIS_231_08	9	<1	134	9	900	12
HDIS_233_08	32	1	414	27	500	230
HDIS_234_08	4	<1	9	1	150	37
HDIS_259_08	7	<1	34	5	1610	82
HDIS_260_08	5	<1	51	8	1020	30
HDIS_261_08	99	<1	3190	137	180	55
[illegible]S_262_08	18	<1	295	26	460	41
[illegible]S_263_08	14	<1	64	4	290	83
CHYS_1246_08	18	<1	911	45	970	36
*Std MMISRM16	52	<1	12	<1	240	15
*Std MMISRM16	54	<1	14	<1	220	16
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO102012

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 08, 2008

P.O. No.	:	Heidi
Project No.	:	DEFAULT
No. Of Samples		66
Date Submitted		Jul 28, 2008
Report Comprises		Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 66 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	–	= No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_50_08	167	106	50	0.7	1060	<1	190	32	183	40
*Rep HDIS_50_08	303	113	60	0.8	1070	<1	200	24	164	31
HDIS_51_08	42	103	30	0.2	2440	<1	160	15	247	274
HDIS_52_08	7	109	<10	<0.1	1780	<1	260	5	208	40
HDIS_53_08	<1	74	<10	<0.1	860	<1	320	19	15	27
HDIS_54_08	2	148	10	<0.1	1410	1	50	6	64	234
HDIS_67_08	10	>300	40	<0.1	1060	<1	170	10	116	53
HDIS_68_08	2	>300	<10	<0.1	960	<1	10	7	49	298
HDIS_69_08	214	75	<10	0.1	1110	<1	240	25	127	28
HDIS_70_08	15	55	<10	<0.1	990	<1	360	8	99	30
HDIS_71_08	2	>300	10	<0.1	530	<1	20	12	40	135
HDIS_72_08	3	97	50	0.2	900	2	50	14	103	1180
HDIS_73_08	25	>300	240	0.6	1050	1	10	7	180	234
HDIS_89_08	205	57	10	0.2	920	<1	300	24	125	20
*Rep HDIS_89_08	203	53	10	0.2	860	<1	290	24	121	24
HDIS_90_08	30	96	30	<0.1	1570	<1	160	8	483	87
HDIS_91_08	9	52	20	<0.1	1040	<1	390	9	75	44
HDIS_92_08	39	>300	90	9.1	1290	<1	100	35	251	184
HDIS_93_08	6	>300	20	<0.1	870	<1	70	16	88	60
HDIS_94_08	<1	79	<10	<0.1	580	<1	200	19	23	163
...IS_111_08	59	90	250	3.9	1000	<1	270	427	96	209
...DIS_112_08	69	109	120	0.4	1250	<1	260	36	188	81
HDIS_113_08	28	151	40	0.3	1220	<1	230	24	100	37
HDIS_114_08	7	93	30	0.3	840	<1	270	19	215	155
HDIS_115_08	21	106	20	0.1	1120	<1	310	7	99	23
HDIS_116_08	8	17	<10	<0.1	580	<1	530	7	29	23
HDIS_135_08	482	79	50	7.5	470	<1	350	317	68	12
*Rep HDIS_135_08	492	81	50	7.3	430	<1	320	293	61	11
HDIS_136_08	138	127	20	0.5	1640	<1	250	366	163	19
HDIS_137_08	62	126	90	0.3	900	<1	160	186	108	14
HDIS_138_08	41	>300	40	0.1	890	<1	90	40	93	22
HDIS_139_08	7	116	20	<0.1	1290	<1	270	16	372	128
HDIS_140_08	13	93	<10	<0.1	1680	<1	340	8	82	16
HDIS_141_08	<1	>300	<10	<0.1	710	<1	50	20	26	194
HDIS_162_08	3	>300	<10	<0.1	650	<1	20	22	38	65
HDIS_163_08	91	>300	770	14.0	230	1	20	184	192	315
HDIS_164_08	22	119	60	1.2	720	<1	150	46	168	532
HDIS_165_08	574	20	20	5.3	610	<1	370	272	38	164
HDIS_166_08	106	57	20	2.3	850	<1	380	127	38	14
HDIS_167_08	12	118	10	0.4	2030	<1	260	7	60	250
*Rep HDIS_167_08	11	115	20	0.4	2000	<1	250	8	63	341
HDIS_168_08	7	>300	40	0.3	1530	1	80	5	248	57
HDIS_190_08	704	24	150	0.8	820	<1	260	35	58	62
HDIS_191_08	3	60	60	1.8	820	<1	380	162	41	112
HDIS_192_08	3	110	<10	<0.1	1380	<1	320	39	297	104
HDIS_193_08	3	107	<10	<0.1	2210	<1	380	15	51	17

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Order:

	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_194_08	<1	110	<10	<0.1	550	2	40	8	11	91
HDIS_195_08	14	>300	150	0.5	2490	2	60	9	595	172
Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_196B_08	166	>300	20	6.8	3210	<1	70	18	137	30
HDIS_216_08	54	77	50	0.3	1060	<1	150	18	211	12
HDIS_218_08	3	>300	10	<0.1	1270	<1	30	207	96	113
HDIS_219_08	5	>300	10	0.2	530	<1	<10	22	42	31
HDIS_220_08	5	146	190	0.1	490	3	30	4	106	100
*Rep HDIS_220_08	4	120	150	<0.1	650	3	40	4	96	85
HDIS_221_08	268	41	10	3.0	790	<1	470	13	37	51
HDIS_222_08	8	>300	70	0.5	1120	2	10	7	361	84
HDIS_223_08	3	158	10	0.1	2240	<1	80	11	58	289
HDIS_245_08	8	139	30	0.3	850	<1	10	8	400	28
HDIS_246_08	4	>300	<10	<0.1	840	<1	40	12	71	74
HDIS_247_08	3	154	20	<0.1	1150	<1	120	394	83	105
HDIS_248_08	506	117	60	1.3	570	<1	190	61	428	14
HDIS_249_08	75	13	50	0.4	1170	<1	270	53	64	88
HDIS_250_08	122	71	20	3.8	1100	<1	550	93	46	17
HDIS_251_08	147	76	10	3.1	1570	<1	530	16	59	28
HDIS_252_08	1	123	10	<0.1	560	2	120	131	91	121
HDIS_273_08	20	142	20	0.2	1520	<1	180	11	366	149
*Rep HDIS_273_08	20	145	20	0.2	1420	<1	180	10	291	158
HDIS_274_08	33	33	470	0.3	190	<1	460	7	32	10
HDIS_276_08	201	43	20	0.9	810	<1	370	177	263	47
HDIS_277_08	67	17	40	0.4	980	<1	390	92	53	126
HDIS_278_08	146	29	30	1.4	1320	<1	440	145	135	278
HDIS_279_08	4	>300	30	0.3	1780	1	40	3	269	219
*Std MMISRM16	21	52	20	31.2	70	<1	220	4	23	54
*Std MMISRM16	21	56	20	32.4	70	<1	230	4	25	60
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_50_08	<100	130	83	29.9	28.4	24	136	44	<5	18
*Rep HDIS_50_08	<100	190	83	30.0	29.4	27	140	44	<5	19
HDIS_51_08	<100	1010	60	27.8	19.0	127	79	69	<5	7
HDIS_52_08	<100	650	111	39.1	43.0	16	217	39	<5	28
HDIS_53_08	<100	80	34	20.6	6.1	70	32	7	<5	6
HDIS_54_08	<100	500	61	36.0	7.8	227	39	22	<5	3
HDIS_67_08	<100	150	37	14.7	12.5	71	60	53	<5	3
HDIS_68_08	<100	230	11	6.5	2.3	135	9	11	<5	2
HDIS_69_08	<100	310	188	68.0	67.8	19	326	55	<5	22
HDIS_70_08	<100	100	32	11.2	14.6	27	58	25	<5	6
HDIS_71_08	<100	190	15	9.8	2.2	131	11	11	<5	2
HDIS_72_08	<100	4160	80	45.1	20.9	279	91	36	<5	6
HDIS_73_08	<100	550	51	26.4	13.8	107	61	60	<5	1
HDIS_89_08	<100	420	112	40.2	61.7	14	224	53	<5	12
*Rep HDIS_89_08	<100	430	107	37.9	60.1	14	218	53	<5	12
HDIS_90_08	<100	480	267	102	117	62	514	121	<5	15
HDIS_91_08	<100	210	68	29.7	22.0	48	109	34	<5	15
HDIS_92_08	<100	1890	304	178	53.2	85	237	78	<5	11
HDIS_93_08	<100	130	66	26.4	17.7	86	78	43	<5	6
HDIS_94_08	<100	30	17	11.7	3.3	112	15	5	12	27
HDIS_111_08	<100	790	47	23.1	14.7	114	64	34	<5	14
HDIS_112_08	<100	520	107	51.1	27.6	67	128	65	<5	6
HDIS_113_08	<100	160	71	32.4	18.4	52	88	47	<5	5
HDIS_114_08	<100	250	57	22.8	19.4	76	88	53	<5	19
HDIS_115_08	<100	170	52	20.0	19.2	29	84	49	<5	8
HDIS_116_08	<100	150	10	3.8	4.1	11	18	9	<5	21
HDIS_135_08	<100	260	71	31.5	24.6	33	106	46	<5	6
*Rep HDIS_135_08	<100	280	64	28.1	22.2	30	96	40	<5	6
HDIS_136_08	<100	160	72	30.5	22.2	27	100	75	<5	18
HDIS_137_08	<100	120	43	18.5	15.0	52	59	48	<5	4
HDIS_138_08	<100	50	66	28.2	18.8	51	63	33	<5	5
HDIS_139_08	<100	270	131	52.7	38.6	35	172	79	<5	20
HDIS_140_08	<100	250	50	17.5	20.6	23	99	32	<5	21
HDIS_141_08	<100	170	22	12.6	3.1	152	14	8	<5	8
HDIS_162_08	<100	110	32	12.8	6.1	97	32	9	<5	7
HDIS_163_08	100	310	44	14.7	18.0	206	69	56	<5	1
HDIS_164_08	<100	1180	39	18.2	10.6	88	45	27	<5	9
HDIS_165_08	<100	490	29	14.3	8.3	22	37	9	10	55
HDIS_166_08	<100	290	47	20.7	15.6	14	68	22	9	70
HDIS_167_08	<100	730	28	14.7	5.4	160	26	25	<5	7
*Rep HDIS_167_08	<100	1010	26	14.0	5.4	174	25	25	<5	7
HDIS_168_08	<100	520	69	30.2	17.6	94	78	94	<5	6
HDIS_190_08	<100	470	43	16.5	18.7	11	80	22	<5	25
HDIS_191_08	<100	160	28	14.9	8.0	34	34	16	<5	48
HDIS_192_08	<100	360	114	55.3	28.0	37	118	66	<5	9
HDIS_193_08	<100	40	17	6.8	5.5	16	26	12	<5	48

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_194_08	<100	50	5	3.7	1.0	183	5	4	<5	12
HDIS_195_08	200	730	95	44.3	31.9	239	135	218	<5	2
Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_196B_08	<100	960	313	176	37.7	33	189	48	<5	13
HDIS_216_08	<100	260	111	43.8	42.1	15	188	75	<5	18
HDIS_218_08	<100	180	68	32.8	13.9	54	63	22	<5	4
HDIS_219_08	<100	200	64	38.2	10.6	72	47	11	<5	2
HDIS_220_08	<100	160	18	7.7	5.4	132	23	34	<5	2
*Rep HDIS_220_08	<100	140	17	7.4	5.2	108	22	32	<5	5
HDIS_221_08	<100	1130	58	26.2	16.3	8	68	11	14	76
HDIS_222_08	<100	770	143	76.9	35.5	131	164	113	<5	<1
HDIS_223_08	<100	570	45	25.9	7.9	169	41	21	<5	22
HDIS_245_08	<100	220	64	23.8	26.3	29	112	97	<5	1
HDIS_246_08	<100	250	46	17.9	11.3	33	55	16	<5	7
HDIS_247_08	<100	70	31	16.1	7.9	70	33	17	<5	9
HDIS_248_08	<100	260	277	132	87.7	57	339	149	<5	6
HDIS_249_08	<100	480	38	14.9	16.6	8	65	23	6	12
HDIS_250_08	<100	180	35	15.4	10.1	43	45	17	6	32
HDIS_251_08	<100	540	57	27.2	14.6	20	68	24	<5	98
HDIS_252_08	<100	2560	100	78.9	7.1	36	40	28	<5	20
HDIS_273_08	<100	580	37	14.9	13.9	63	52	73	<5	8
*Rep HDIS_273_08	<100	530	39	16.1	14.0	64	56	68	<5	8
HDIS_274_08	<100	170	10	4.4	3.7	13	17	18	<5	3
HDIS_276_08	<100	400	107	41.6	46.4	17	180	64	<5	16
HDIS_277_08	<100	600	24	10.0	10.8	21	42	19	6	10
HDIS_278_08	<100	650	42	17.6	17.9	32	71	36	13	15
HDIS_279_08	<100	630	101	37.9	28.3	88	137	95	<5	3
*Std MMISRM16	<100	700	3	0.9	1.1	3	5	6	<5	41
*Std MMISRM16	<100	710	3	1.1	1.3	4	6	6	<5	46
*Blk BLANK	<100	20	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_50_08	<5	<0.5	209	348	740	<1	31	<1	190	8
*Rep HDIS_50_08	<5	<0.5	211	291	800	<1	32	<1	212	11
HDIS_51_08	<5	0.8	198	558	170	<1	36	<1	157	5
HDIS_52_08	<5	<0.5	240	213	280	<1	33	<1	249	<1
HDIS_53_08	<5	<0.5	31	90	330	<1	5	<1	8	<1
HDIS_54_08	<5	0.9	54	272	850	<1	10	<1	125	1
HDIS_67_08	<5	1.5	123	145	390	<1	22	<1	197	6
HDIS_68_08	<5	1.9	22	129	150	<1	4	<1	180	<1
HDIS_69_08	<5	<0.5	436	225	2820	<1	56	<1	138	4
HDIS_70_08	<5	<0.5	105	145	290	<1	17	<1	123	<1
HDIS_71_08	<5	1.4	20	134	530	<1	4	<1	149	2
HDIS_72_08	<5	<0.5	136	1360	650	<1	22	<1	162	7
HDIS_73_08	<5	2.7	120	243	3100	<1	24	<1	262	59
HDIS_89_08	<5	<0.5	336	334	430	<1	45	<1	109	4
*Rep HDIS_89_08	<5	<0.5	330	332	420	<1	44	<1	127	4
HDIS_90_08	<5	<0.5	877	1060	750	2	121	<1	195	9
HDIS_91_08	<5	<0.5	133	652	600	<1	21	<1	54	3
HDIS_92_08	<5	<0.5	300	1350	27400	1	48	<1	185	49
HDIS_93_08	<5	1.1	140	192	650	<1	23	<1	335	2
HDIS_94_08	<5	<0.5	20	37	1020	<1	3	<1	60	<1
HDIS_111_08	<5	<0.5	115	720	5510	<1	19	<1	111	194
HDIS_112_08	<5	<0.5	202	843	1570	<1	34	<1	112	15
HDIS_113_08	<5	<0.5	144	226	1330	<1	24	<1	186	11
HDIS_114_08	<5	<0.5	168	244	1130	<1	28	<1	120	24
HDIS_115_08	<5	<0.5	156	153	810	<1	26	<1	182	2
HDIS_116_08	<5	<0.5	34	206	80	<1	5	<1	50	<1
HDIS_135_08	<5	<0.5	170	317	1220	<1	27	<1	78	10
*Rep HDIS_135_08	<5	<0.5	157	302	1130	<1	25	<1	78	10
HDIS_136_08	<5	<0.5	197	371	7280	<1	36	<1	232	21
HDIS_137_08	<5	0.7	128	205	3300	<1	24	<1	264	83
HDIS_138_08	<5	<0.5	98	147	620	<1	17	<1	159	1
HDIS_139_08	<5	<0.5	315	641	860	<1	52	<1	123	1
HDIS_140_08	<5	<0.5	147	177	590	<1	21	<1	160	<1
HDIS_141_08	<5	0.9	21	94	770	<1	4	<1	104	<1
HDIS_162_08	<5	0.7	37	238	1730	<1	5	<1	180	2
HDIS_163_08	<5	1.7	149	107	780	1	27	<1	148	205
HDIS_164_08	<5	<0.5	89	266	2650	<1	16	<1	262	71
HDIS_165_08	<5	<0.5	40	732	4150	<1	6	<1	40	80
HDIS_166_08	<5	<0.5	90	477	3690	<1	13	<1	59	13
HDIS_167_08	<5	<0.5	51	172	460	<1	10	<1	123	3
*Rep HDIS_167_08	<5	<0.5	52	185	350	<1	10	<1	131	4
HDIS_168_08	<5	1.1	176	118	540	<1	36	<1	183	6
HDIS_190_08	<5	<0.5	124	258	7380	<1	17	<1	131	107
HDIS_191_08	<5	<0.5	55	345	3960	<1	9	<1	37	79
HDIS_192_08	<5	<0.5	195	381	890	<1	33	<1	156	<1
HDIS_193_08	<5	<0.5	43	136	640	<1	7	<1	93	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_194_08	<5	<0.5	9	99	440	<1	2	<1	28	<1
HDIS_195_08	<5	3.9	383	132	1100	<1	82	<1	194	71
Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_196B_08	<5	<0.5	216	730	36700	<1	34	<1	155	21
HDIS_216_08	<5	<0.5	366	42	770	<1	54	<1	326	10
HDIS_218_08	<5	0.6	98	347	1530	<1	15	<1	212	3
HDIS_219_08	<5	1.1	55	103	3590	<1	8	<1	137	3
HDIS_220_08	<5	<0.5	65	89	1850	<1	13	<1	280	32
*Rep HDIS_220_08	<5	<0.5	62	88	1810	<1	12	<1	260	25
HDIS_221_08	<5	<0.5	59	709	390	<1	8	<1	25	4
HDIS_222_08	<5	3.3	344	77	1150	<1	61	<1	234	22
HDIS_223_08	<5	<0.5	49	786	500	<1	9	<1	133	1
HDIS_245_08	<5	0.7	281	46	590	<1	51	<1	357	4
HDIS_246_08	<5	<0.5	85	222	2710	<1	12	<1	201	<1
HDIS_247_08	<5	<0.5	56	200	2190	<1	10	<1	217	5
HDIS_248_08	<5	<0.5	593	719	3520	<1	97	<1	100	37
HDIS_249_08	<5	<0.5	109	286	430	<1	15	<1	97	6
HDIS_250_08	<5	<0.5	61	643	1440	<1	10	<1	42	12
HDIS_251_08	<5	<0.5	87	228	9050	<1	14	<1	57	15
HDIS_252_08	<5	<0.5	58	469	700	<1	12	<1	9	11
HDIS_273_08	<5	0.6	159	193	230	<1	31	<1	104	1
*Rep HDIS_273_08	<5	0.5	150	201	280	<1	30	<1	104	1
HDIS_274_08	<5	<0.5	47	260	10	<1	8	<1	34	<1
HDIS_276_08	<5	<0.5	301	699	1290	<1	43	<1	59	11
HDIS_277_08	<5	<0.5	77	551	480	<1	11	<1	75	25
HDIS_278_08	<5	<0.5	126	1380	950	<1	20	<1	35	36
HDIS_279_08	<5	0.6	230	299	2850	<1	42	<1	230	12
*Std MMISRM16	58	<0.5	19	267	110	27	3	<1	378	<1
*Std MMISRM16	59	<0.5	19	278	120	28	3	<1	378	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_50_08	20	104	<1	560	<1	18	<10	40.1	148	1.3
*Rep HDIS_50_08	21	104	<1	560	<1	18	<10	38.5	158	1.2
HDIS_51_08	77	63	<1	620	<1	11	<10	48.4	289	2.4
HDIS_52_08	15	146	<1	820	<1	25	<10	28.6	27	0.9
HDIS_53_08	11	17	<1	1760	<1	5	<10	4.4	36	<0.5
HDIS_54_08	69	22	<1	480	<1	8	<10	44.9	365	0.7
HDIS_67_08	26	47	<1	310	<1	8	<10	40.5	629	0.7
HDIS_68_08	32	8	<1	70	<1	2	<10	33.5	645	1.5
HDIS_69_08	12	213	<1	950	<1	40	<10	25.6	46	0.9
HDIS_70_08	7	46	<1	1170	<1	7	<10	20.9	17	0.6
HDIS_71_08	43	7	<1	90	<1	2	<10	41.8	533	0.9
HDIS_72_08	149	64	<1	340	<1	14	<10	91.9	196	1.4
HDIS_73_08	70	45	1	60	<1	9	<10	75.9	1180	2.6
HDIS_89_08	8	175	<1	980	<1	26	<10	30.4	14	0.5
*Rep HDIS_89_08	8	170	<1	960	<1	24	<10	34.6	8	0.6
HDIS_90_08	87	435	<1	670	<1	59	<10	141	82	1.0
HDIS_91_08	12	70	<1	2010	<1	14	<10	14.1	18	0.5
HDIS_92_08	222	144	<1	770	<1	46	<10	181	27	3.4
HDIS_93_08	34	52	<1	340	<1	12	<10	31.3	490	0.8
HDIS_94_08	15	9	<1	1080	<1	3	<10	14.9	97	<0.5
HDIS_111_08	38	46	1	1360	<1	9	<10	31.3	45	1.8
HDIS_112_08	52	82	<1	1290	<1	19	<10	43.1	65	1.9
HDIS_113_08	46	58	<1	710	<1	13	<10	38.9	143	0.6
HDIS_114_08	22	65	<1	910	<1	12	<10	20.3	82	0.7
HDIS_115_08	14	61	<1	900	<1	11	<10	15.6	45	0.8
HDIS_116_08	<5	13	<1	2460	<1	2	<10	7.0	8	<0.5
HDIS_135_08	9	70	<1	1510	<1	14	<10	13.8	8	0.6
*Rep HDIS_135_08	8	63	<1	1430	<1	13	<10	13.5	9	0.6
HDIS_136_08	45	74	<1	790	<1	14	<10	44.3	61	0.9
HDIS_137_08	30	45	<1	430	<1	8	<10	47.0	393	1.1
HDIS_138_08	36	41	<1	510	<1	11	<10	26.6	142	<0.5
HDIS_139_08	31	119	<1	1100	<1	25	<10	37.7	51	0.7
HDIS_140_08	7	74	<1	1250	<1	11	<10	12.4	14	<0.5
HDIS_141_08	35	8	<1	440	<1	3	<10	24.5	286	0.5
HDIS_162_08	23	20	<1	160	<1	5	<10	31.1	324	0.5
HDIS_163_08	40	60	3	90	<1	10	<10	107	523	3.5
HDIS_164_08	35	33	<1	610	<1	7	<10	29.6	110	2.9
HDIS_165_08	6	19	<1	1970	<1	5	<10	21.8	4	1.1
HDIS_166_08	5	43	<1	2350	<1	9	<10	4.9	9	0.5
HDIS_167_08	46	17	<1	1160	<1	5	<10	17.4	72	0.9
*Rep HDIS_167_08	47	17	<1	1140	<1	4	<10	17.9	85	1.0
HDIS_168_08	49	57	<1	380	<1	12	<10	55.7	589	1.4
HDIS_190_08	9	56	<1	1400	<1	9	<10	33.9	16	0.7
HDIS_191_08	9	22	<1	2220	<1	5	<10	7.9	26	<0.5
HDIS_192_08	47	76	<1	1330	<1	19	<10	32.2	34	<0.5
HDIS_193_08	7	18	<1	2670	<1	3	<10	7.5	17	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_194_08	20	3	<1	350	<1	<1	<10	7.3	54	<0.5
HDIS_195_08	107	111	<1	220	<1	19	<10	105	2060	1.4
Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_196B_08	117	97	<1	770	<1	43	<10	94.7	22	2.0
HDIS_216_08	43	150	<1	650	<1	23	<10	54.6	94	1.1
HDIS_218_08	61	42	<1	160	<1	11	<10	54.4	271	0.7
HDIS_219_08	64	28	<1	70	<1	10	<10	40.3	178	1.2
HDIS_220_08	27	19	<1	110	<1	3	<10	56.9	178	2.5
*Rep HDIS_220_08	24	18	<1	150	<1	3	<10	50.0	98	2.4
HDIS_221_08	9	34	<1	2660	<1	10	<10	12.1	<3	<0.5
HDIS_222_08	141	119	<1	50	<1	24	<10	78.0	1520	1.4
HDIS_223_08	78	24	<1	980	<1	7	<10	54.6	165	0.6
HDIS_245_08	53	99	<1	30	<1	14	<10	87.1	235	1.9
HDIS_246_08	35	38	<1	260	<1	9	<10	32.1	153	1.0
HDIS_247_08	40	23	<1	540	<1	5	<10	56.9	189	0.8
HDIS_248_08	68	230	<1	700	<1	50	<10	86.7	77	0.8
HDIS_249_08	10	45	<1	1700	<1	8	<10	27.7	<3	0.8
[illegible]S_250_08	7	28	<1	2980	<1	7	<10	8.2	6	<0.5
[illegible]IS_251_08	17	40	<1	3910	<1	10	<10	31.0	<3	<0.5
HDIS_252_08	46	22	<1	860	<1	10	<10	6.7	64	0.6
HDIS_273_08	24	46	<1	800	<1	8	<10	50.2	284	1.3
*Rep HDIS_273_08	26	44	<1	740	<1	8	<10	54.1	287	1.5
HDIS_274_08	5	14	<1	720	<1	2	<10	9.8	14	<0.5
HDIS_276_08	8	131	<1	2110	<1	22	<10	45.8	7	<0.5
HDIS_277_08	6	30	<1	1810	<1	5	<10	27.9	21	0.5
HDIS_278_08	7	50	<1	2200	<1	9	<10	29.9	13	<0.5
HDIS_279_08	102	92	<1	220	<1	20	<10	92.0	362	1.3
*Std MMISRM16	12	5	<1	550	<1	<1	<10	29.0	3	<0.5
*Std MMISRM16	12	6	<1	560	<1	<1	<10	30.9	4	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_50_08	26	<1	347	19	590	112
*Rep HDIS_50_08	27	<1	355	19	400	114
HDIS_51_08	43	<1	288	22	160	146
HDIS_52_08	43	<1	450	24	180	73
HDIS_53_08	4	<1	236	15	580	11
HDIS_54_08	39	<1	350	24	380	81
HDIS_67_08	17	<1	184	10	560	112
HDIS_68_08	9	<1	49	5	620	80
HDIS_69_08	28	<1	816	38	1120	79
HDIS_70_08	10	<1	146	7	420	27
HDIS_71_08	11	<1	70	8	670	114
HDIS_72_08	73	<1	470	38	680	222
HDIS_73_08	33	<1	259	19	380	179
HDIS_89_08	37	<1	565	25	350	48
*Rep HDIS_89_08	35	<1	529	23	380	54
HDIS_90_08	74	<1	1220	73	880	465
HDIS_91_08	30	<1	346	20	610	42
HDIS_92_08	189	<1	1920	119	2100	237
HDIS_93_08	14	<1	347	16	1090	66
HDIS_94_08	7	<1	87	11	3910	18
HDIS_111_08	56	<1	270	18	5960	146
HDIS_112_08	55	<1	591	36	1180	136
HDIS_113_08	42	<1	385	21	940	78
HDIS_114_08	35	<1	273	15	1350	55
HDIS_115_08	21	<1	247	13	560	44
HDIS_116_08	27	<1	60	2	320	6
HDIS_135_08	46	<1	398	20	3900	42
*Rep HDIS_135_08	46	<1	363	18	3470	43
HDIS_136_08	38	<1	366	20	4730	59
HDIS_137_08	16	<1	215	13	3000	112
HDIS_138_08	7	<1	348	18	710	28
HDIS_139_08	48	<1	643	33	920	74
HDIS_140_08	26	<1	231	11	170	26
HDIS_141_08	9	<1	112	8	1190	76
HDIS_162_08	7	<1	129	7	1780	42
HDIS_163_08	25	<1	159	9	1950	419
HDIS_164_08	45	<1	189	13	550	87
HDIS_165_08	46	<1	174	9	2590	24
HDIS_166_08	139	<1	280	13	1310	17
HDIS_167_08	62	<1	164	10	150	41
*Rep HDIS_167_08	67	<1	156	10	130	44
HDIS_168_08	30	<1	357	18	170	108
HDIS_190_08	23	<1	242	10	390	35
HDIS_191_08	37	<1	179	11	870	18
HDIS_192_08	62	<1	695	36	860	54
HDIS_193_08	7	<1	86	4	260	13

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_194_08	3	<1	27	5	950	13
HDIS_195_08	33	1	477	32	290	255
Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_196B_08	249	<1	2110	121	490	60
HDIS_216_08	32	<1	515	30	350	162
HDIS_218_08	22	<1	326	23	2940	109
HDIS_219_08	13	<1	340	29	850	70
HDIS_220_08	17	<1	81	6	650	193
*Rep HDIS_220_08	13	<1	80	5	670	180
HDIS_221_08	141	<1	319	17	190	14
HDIS_222_08	32	1	853	54	300	197
HDIS_223_08	87	<1	235	19	460	122
HDIS_245_08	22	<1	246	17	200	222
HDIS_246_08	16	<1	196	11	280	69
HDIS_247_08	13	<1	160	12	5570	79
HDIS_248_08	42	<1	1600	93	1450	166
HDIS_249_08	22	<1	220	9	640	33
[illegible]S_250_08	52	<1	190	10	870	23
[illegible]S_251_08	97	<1	287	18	200	83
HDIS_252_08	345	<1	610	58	140	18
HDIS_273_08	21	<1	161	11	210	88
*Rep HDIS_273_08	21	<1	167	11	220	86
HDIS_274_08	9	<1	61	3	130	10
HDIS_276_08	46	<1	590	26	1280	72
HDIS_277_08	31	<1	141	7	1640	37
HDIS_278_08	53	<1	252	12	1430	41
HDIS_279_08	88	<1	396	23	150	179
*Std MMISRM16	45	<1	12	<1	250	15
*Std MMISRM16	48	<1	13	<1	260	15
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO102013

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 11, 2008

P.O. No.	:	Heidi
Project No.	:	DEFAULT
No. Of Samples		78
Date Submitted		Jul 28, 2008
Report Comprises		Pages 1 to 16 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 78 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R. = Listed not received
n.a. = Not applicable
I.S. = Insufficient Sample
– = No result

*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion
Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_77_08	8	>300	10	<0.1	870	<1	<10	5	51	48
*Rep HDIS_77_08	6	>300	20	<0.1	1020	<1	10	7	58	89
HDIS_78_08	4	277	<10	<0.1	440	<1	<10	3	28	125
HDIS_79_08	5	70	<10	<0.1	750	<1	420	9	33	14
HDIS_80_08	5	>300	<10	<0.1	1100	<1	20	5	95	82
HDIS_099_08	4	>300	10	<0.1	500	<1	<10	5	105	39
HDIS_100_08	3	>300	20	<0.1	2760	1	30	2	117	119
HDIS_101_08	5	>300	20	<0.1	760	<1	<10	8	101	86
HDIS_102_08	3	230	10	<0.1	1530	1	100	10	148	105
HDIS_103_08	5	149	10	<0.1	6260	<1	130	2	250	118
HDIS_117_08	1	194	<10	<0.1	2280	<1	40	5	<5	112
HDIS_118_08	5	128	10	<0.1	1810	<1	160	16	114	165
HDIS_119_08	3	243	<10	<0.1	1120	<1	40	7	67	44
HDIS_120_08	11	74	<10	<0.1	5470	<1	270	189	81	42
*Rep HDIS_120_08	8	71	<10	<0.1	5460	<1	250	173	73	45
HDIS_124_08	5	>300	<10	<0.1	1300	1	30	7	87	66
HDIS_125_08	3	289	10	<0.1	1970	<1	30	8	85	49
HDIS_126_08	5	>300	20	<0.1	1050	<1	10	6	107	87
HDIS_127_08	3	277	<10	<0.1	610	<1	<10	12	19	115
HDIS_142_08	3	266	<10	<0.1	780	<1	<10	9	35	132
HDIS_143_08	1	142	<10	<0.1	1630	<1	230	62	84	46
HDIS_144_08	3	86	<10	<0.1	1380	<1	450	6	28	45
HDIS_145_08	4	269	<10	<0.1	1420	<1	40	15	15	141
HDIS_146_08	3	282	10	<0.1	1990	<1	50	7	52	105
HDIS_147_08	3	>300	20	<0.1	2550	<1	30	9	70	228
HDIS_148_08	4	>300	<10	<0.1	1250	<1	10	7	171	56
HDIS_171_08	3	>300	20	<0.1	1300	<1	20	19	62	151
*Rep HDIS_171_08	3	>300	20	<0.1	1080	<1	10	14	99	118
HDIS_172_08	2	270	10	<0.1	3260	<1	40	16	51	173
HDIS_173_08	2	270	10	<0.1	3210	<1	70	11	98	192
HDIS_174_08	3	>300	20	<0.1	1660	<1	40	6	183	78
HDIS_198_08	18	133	<10	0.2	10800	<1	520	61	755	52
HDIS_199_08	3	>300	30	0.1	2580	<1	10	4	132	175
HDIS_200_08	2	257	10	<0.1	2070	<1	100	9	38	118
HDIS_201_08	5	>300	10	<0.1	400	<1	<10	3	198	30
HDIS_226_08	3	265	<10	<0.1	2270	<1	60	15	71	61
HDIS_227_08	2	157	<10	<0.1	3940	<1	310	20	105	87
HDIS_228_08	<1	34	<10	<0.1	1400	<1	490	6	6	34
HDIS_229_08	3	>300	<10	<0.1	950	<1	60	9	130	96
HDIS_230_08	5	>300	10	<0.1	1200	<1	<10	8	110	88
*Rep HDIS_230_08	5	>300	10	<0.1	1150	<1	<10	7	114	84
HDIS_253_08	3	285	30	<0.1	4250	1	50	21	457	273
HDIS_254_08	3	291	<10	<0.1	2350	<1	40	20	35	56
HDIS_255_08	2	256	<10	<0.1	1600	<1	50	23	42	189
HDIS_256_08	1	206	<10	<0.1	3680	<1	120	9	36	258

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Order:

Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_257_08	4	270	20	<0.1	1950	<1	100	11	165	79
HDIS_258_08	3	274	20	0.1	1520	2	50	14	187	86
HDIS_281_08	6	>300	30	0.5	3000	1	50	7	341	103
HDIS_282_08	2	253	<10	0.3	2130	<1	70	22	54	72
HDIS_283_08	2	242	<10	<0.1	1350	<1	50	18	20	108
HDIS_284_08	2	279	<10	<0.1	2970	<1	40	16	59	156
HDIS_285_08	3	229	<10	<0.1	2430	1	50	28	48	229
HDIS_286_08	2	195	<10	<0.1	1810	<1	150	24	41	132
*Rep HDIS_286_08	3	180	<10	<0.1	1710	<1	190	17	50	82
HDIS_309_08	4	293	<10	<0.1	920	<1	10	22	24	130
HDIS_310_08	2	259	10	<0.1	2310	<1	130	21	161	129
HDIS_311_08	3	275	<10	<0.1	1600	<1	20	13	68	132
HDIS_313_08	7	>300	20	<0.1	1190	<1	40	13	179	62
HDIS_314_08	3	>300	<10	<0.1	460	<1	<10	7	59	71
HDIS_338_08	3	296	20	<0.1	1140	<1	<10	8	43	220
HDIS_339_08	4	259	<10	<0.1	1250	<1	20	17	45	137
HDIS_342_08	3	295	10	<0.1	1510	<1	50	19	41	152
HDIS_343_08	7	>300	<10	<0.1	410	<1	<10	4	105	19
HDIS_366_08	2	>300	10	<0.1	1500	<1	80	15	15	546
DIS_367_08	9	>300	20	<0.1	870	<1	30	16	88	162
)IS_370_08	3	>300	10	<0.1	850	<1	10	19	36	139
*Rep HDIS_370_08	2	294	<10	<0.1	780	<1	10	21	18	186
HDIS_371_08	8	>300	20	0.5	690	<1	<10	8	242	48
HDIS_421_08	3	54	40	0.2	1790	<1	320	16	101	270
HDIS_482_08	7	172	30	0.2	900	<1	10	<1	23	41
HDIS_483_08	1	205	20	<0.1	660	1	<10	6	11	160
HDIS_509_08	4	99	20	0.2	1750	1	200	7	98	357
HDIS_510_08	5	125	60	0.2	1150	2	10	<1	60	95
HDIS_511_08	3	158	110	0.2	950	2	<10	1	59	113
HDIS_512_08	8	262	300	0.6	4700	6	30	5	1060	278
HDIS_535_08	4	125	40	0.2	1230	1	10	<1	40	54
HDIS_536_08	6	142	60	0.3	2120	1	20	1	56	207
HDIS_537_08	4	>300	110	0.1	1920	3	20	6	217	147
HDIS_538_08	4	>300	60	0.1	1310	1	<10	5	243	65
*Rep HDIS_538_08	3	283	40	0.1	940	<1	<10	8	73	88
HDIS_561_08	9	296	100	0.1	1710	2	70	15	218	147
HDIS_562_08	4	33	10	<0.1	770	<1	460	15	39	112
HDIS_563_08	2	>300	<10	<0.1	760	<1	50	20	38	110
HDIS_564_08	1	83	<10	<0.1	580	<1	470	8	18	62
HDIS_565_08	4	155	<10	0.6	1170	<1	350	13	27	39
*Std MMISRM16	21	69	20	35.5	120	<1	220	5	29	81
*Std MMISRM16	20	74	20	35.8	120	<1	230	5	27	86
*Std MMISRM16	21	74	20	36.2	60	<1	230	5	28	87
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
*Blk BLANK	<1	2	<10	0.3	<10	<1	<10	<1	<5	<5

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Order:

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_77_08	<100	260	35	15.2	5.4	53	27	18	<5	2
*Rep HDIS_77_08	<100	240	32	14.3	5.0	70	25	22	<5	2
HDIS_78_08	<100	200	17	11.1	1.7	67	9	12	<5	2
HDIS_79_08	<100	170	27	11.0	8.3	8	42	11	<5	10
HDIS_80_08	<100	180	50	19.3	9.9	47	58	25	<5	5
HDIS_099_08	<100	400	57	21.4	12.1	36	63	32	<5	<1
HDIS_100_08	100	490	46	18.6	11.4	177	62	39	<5	5
HDIS_101_08	<100	380	36	14.9	8.4	42	44	29	<5	1
HDIS_102_08	<100	150	71	25.4	18.7	70	113	49	6	18
HDIS_103_08	<100	1270	92	32.3	31.3	46	158	72	<5	27
HDIS_117_08	<100	<10	<1	1.0	<0.5	188	<1	2	<5	14
HDIS_118_08	<100	700	30	14.6	6.3	92	31	44	<5	7
HDIS_119_08	<100	330	62	25.6	10.4	99	52	19	<5	3
HDIS_120_08	<100	150	87	32.0	20.8	10	113	47	<5	53
*Rep HDIS_120_08	<100	150	83	29.4	20.3	10	111	47	<5	54
HDIS_124_08	<100	350	38	14.0	7.6	61	42	26	<5	6
HDIS_125_08	<100	660	120	47.5	25.4	70	142	29	5	8
HDIS_126_08	<100	520	33	12.0	9.1	78	43	29	<5	1
HDIS_127_08	<100	100	23	11.8	1.8	101	12	7	<5	2
HDIS_142_08	<100	190	23	12.5	2.6	84	13	14	<5	2
HDIS_143_08	<100	310	46	25.8	7.2	46	34	18	<5	11
HDIS_144_08	<100	50	9	3.8	2.0	17	11	6	<5	15
HDIS_145_08	<100	120	18	11.3	1.4	113	9	6	<5	8
HDIS_146_08	<100	370	28	11.9	5.3	81	27	14	8	10
HDIS_147_08	<100	1390	28	13.2	4.6	98	25	24	9	9
HDIS_148_08	<100	660	127	47.6	28.6	33	148	39	<5	2
HDIS_171_08	<100	320	38	17.6	4.5	99	26	18	15	7
*Rep HDIS_171_08	<100	350	57	22.6	8.9	83	51	28	16	5
HDIS_172_08	<100	590	55	33.8	6.2	111	35	16	16	10
HDIS_173_08	<100	710	100	46.9	21.2	101	106	24	7	16
HDIS_174_08	<100	200	75	26.6	22.5	40	108	50	5	6
HDIS_198_08	<100	13000	189	85.2	52.8	22	268	433	<5	67
HDIS_199_08	<100	11300	62	24.5	19.0	67	81	38	6	2
HDIS_200_08	<100	270	20	9.8	3.3	129	18	15	6	13
HDIS_201_08	<100	1190	109	41.3	23.9	25	127	55	<5	<1
HDIS_226_08	<100	120	57	22.4	11.6	94	57	24	<5	11
HDIS_227_08	<100	240	85	39.2	18.6	39	94	38	<5	17
HDIS_228_08	<100	20	3	1.6	<0.5	3	3	2	<5	6
HDIS_229_08	<100	380	53	18.9	9.5	53	51	27	5	6
HDIS_230_08	<100	450	54	23.4	10.4	63	52	34	9	2
*Rep HDIS_230_08	<100	450	55	22.4	11.1	59	55	34	9	2
HDIS_253_08	<100	200	133	52.4	34.9	123	168	171	<5	10
HDIS_254_08	<100	70	44	21.7	5.0	119	29	12	<5	9
HDIS_255_08	<100	100	43	33.2	3.7	146	22	15	<5	11
HDIS_256_08	<100	1360	137	79.8	15.5	151	80	13	<5	12

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_257_08	<100	580	58	22.7	14.8	74	73	59	<5	5
HDIS_258_08	<100	480	47	14.5	13.7	44	71	71	<5	6
HDIS_281_08	200	240	97	35.4	28.6	98	135	127	<5	7
HDIS_282_08	<100	80	100	38.9	16.6	98	86	23	<5	8
HDIS_283_08	<100	120	36	20.8	3.4	127	20	7	<5	11
HDIS_284_08	<100	310	55	27.3	9.0	129	43	14	<5	7
HDIS_285_08	<100	370	70	42.1	6.8	187	38	20	<5	11
HDIS_286_08	<100	340	40	17.9	8.1	43	45	17	<5	33
*Rep HDIS_286_08	<100	330	40	16.1	9.3	33	50	18	<5	32
HDIS_309_08	<100	150	29	15.2	2.3	131	13	9	<5	4
HDIS_310_08	<100	90	59	22.1	14.7	72	71	57	<5	14
HDIS_311_08	<100	410	128	57.6	21.8	140	106	23	<5	5
HDIS_313_08	<100	560	145	59.2	37.7	89	177	76	<5	2
HDIS_314_08	<100	540	26	11.2	4.6	48	22	18	<5	1
HDIS_338_08	<100	190	24	13.0	3.2	140	16	16	<5	3
HDIS_339_08	<100	230	64	30.8	7.8	105	40	15	<5	4
HDIS_342_08	<100	120	30	14.3	5.1	112	26	14	<5	11
HDIS_343_08	<100	100	28	9.7	7.8	33	36	30	<5	<1
HDIS_366_08	<100	100	12	6.4	1.3	113	7	5	7	29
HDIS_367_08	<100	140	21	8.6	4.6	44	20	30	<5	7
HDIS_370_08	<100	100	26	12.8	3.6	122	17	12	<5	4
*Rep HDIS_370_08	<100	90	15	11.3	1.3	146	7	6	<5	4
HDIS_371_08	<100	250	72	24.5	19.2	67	90	80	<5	<1
HDIS_421_08	<100	1730	28	13.4	8.4	248	35	35	<5	17
HDIS_482_08	<100	550	5	3.1	0.7	267	3	10	<5	2
HDIS_483_08	<100	80	4	5.2	<0.5	227	1	5	<5	4
HDIS_509_08	<100	1710	60	31.2	12.6	296	56	35	6	12
HDIS_510_08	<100	1240	10	6.4	2.0	348	9	26	<5	3
HDIS_511_08	<100	810	8	4.5	2.1	385	9	25	<5	3
HDIS_512_08	200	500	201	91.3	66.5	175	294	549	<5	3
HDIS_535_08	<100	1090	7	4.6	1.5	375	6	17	<5	2
HDIS_536_08	<100	960	10	5.8	2.1	371	9	23	<5	4
HDIS_537_08	200	260	35	14.7	9.6	198	42	80	<5	4
HDIS_538_08	<100	440	95	37.3	22.0	108	100	82	<5	2
*Rep HDIS_538_08	<100	390	75	37.0	9.5	133	48	24	<5	2
HDIS_561_08	<100	530	79	35.3	19.8	154	89	67	<5	1
HDIS_562_08	<100	190	11	5.0	4.4	25	18	13	12	36
HDIS_563_08	<100	100	22	11.1	3.8	120	19	13	<5	6
HDIS_564_08	<100	30	23	12.9	6.4	31	28	9	<5	2
HDIS_565_08	<100	50	14	5.7	3.5	28	18	8	<5	27
*Std MMISRM16	100	700	4	1.6	1.7	3	7	7	<5	36
*Std MMISRM16	100	710	4	1.4	1.7	3	8	7	<5	41
*Std MMISRM16	<100	740	4	1.5	1.7	3	7	6	<5	39
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_77_08	<5	2.5	41	130	430	<1	7	<1	170	<1
*Rep HDIS_77_08	5	2.9	40	146	390	<1	8	<1	151	<1
HDIS_78_08	<5	0.6	18	179	470	<1	4	<1	72	<1
HDIS_79_08	<5	<0.5	49	137	40	<1	7	<1	78	<1
HDIS_80_08	<5	1.0	74	155	350	<1	13	<1	207	<1
HDIS_099_08	<5	2.2	82	94	190	<1	15	<1	182	<1
HDIS_100_08	<5	3.9	89	225	350	<1	17	<1	237	1
HDIS_101_08	7	2.6	63	113	110	<1	12	<1	221	1
HDIS_102_08	<5	1.6	152	230	590	<1	27	<1	175	<1
HDIS_103_08	<5	<0.5	234	275	350	<1	43	<1	227	<1
HDIS_117_08	<5	1.2	2	70	20	<1	<1	<1	21	<1
HDIS_118_08	6	0.8	85	193	50	<1	18	<1	83	<1
HDIS_119_08	<5	1.2	74	102	880	<1	12	<1	189	<1
HDIS_120_08	<5	<0.5	157	157	760	<1	25	<1	251	<1
*Rep HDIS_120_08	<5	<0.5	154	161	760	<1	25	<1	256	<1
HDIS_124_08	<5	1.9	56	155	750	<1	10	<1	277	<1
HDIS_125_08	<5	1.8	131	199	210	<1	20	<1	144	<1
HDIS_126_08	<5	3.5	68	105	210	<1	13	<1	205	<1
HDIS_127_08	<5	1.7	13	106	400	<1	3	<1	204	<1
HDIS_142_08	<5	1.5	22	137	240	<1	5	<1	147	<1
HDIS_143_08	<5	<0.5	51	83	950	<1	9	<1	38	<1
HDIS_144_08	<5	<0.5	17	121	40	<1	3	<1	61	<1
HDIS_145_08	<5	1.2	11	103	120	<1	2	<1	113	<1
HDIS_146_08	<5	1.8	34	282	430	<1	6	<1	179	<1
HDIS_147_08	7	3.7	43	200	420	<1	9	<1	117	<1
HDIS_148_08	<5	1.4	197	165	1120	<1	30	<1	233	<1
HDIS_171_08	6	3.1	30	212	320	<1	6	<1	150	<1
*Rep HDIS_171_08	6	3.2	58	238	320	<1	11	<1	164	<1
HDIS_172_08	5	2.3	42	183	190	<1	7	<1	122	<1
HDIS_173_08	<5	2.1	122	194	570	<1	18	<1	138	<1
HDIS_174_08	<5	2.8	185	138	380	<1	32	<1	179	1
HDIS_198_08	<5	<0.5	807	413	220	<1	174	<1	63	<1
HDIS_199_08	<5	2.6	114	79	80	<1	20	<1	152	<1
HDIS_200_08	<5	2.1	29	188	550	<1	6	<1	111	<1
HDIS_201_08	<5	1.6	210	24	360	<1	35	<1	194	<1
HDIS_226_08	<5	1.3	83	148	550	<1	14	<1	86	<1
HDIS_227_08	<5	0.6	127	147	170	<1	22	<1	75	<1
HDIS_228_08	<5	<0.5	6	15	50	<1	1	<1	10	<1
HDIS_229_08	<5	1.6	87	185	320	<1	15	<1	224	<1
HDIS_230_08	<5	2.5	80	173	490	<1	15	<1	236	<1
*Rep HDIS_230_08	<5	2.3	87	170	470	<1	16	<1	232	<1
HDIS_253_08	<5	3.9	359	185	790	<1	71	<1	185	2
HDIS_254_08	<5	1.3	35	114	470	<1	6	<1	128	<1
HDIS_255_08	<5	1.7	29	80	480	<1	6	<1	79	<1
HDIS_256_08	<5	0.7	67	104	670	<1	10	<1	23	<1

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Order:

Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_257_08	<5	2.0	147	216	440	<1	28	<1	193	<1
HDIS_258_08	<5	2.2	134	188	400	<1	27	<1	250	<1
HDIS_281_08	<5	4.5	293	82	380	<1	56	<1	268	2
HDIS_282_08	<5	<0.5	106	50	970	<1	16	<1	61	<1
HDIS_283_08	<5	1.0	20	84	370	<1	3	<1	161	<1
HDIS_284_08	<5	1.3	49	142	560	<1	8	<1	125	<1
HDIS_285_08	<5	1.4	47	138	520	<1	8	<1	86	<1
HDIS_286_08	<5	0.7	57	258	210	<1	9	<1	142	<1
*Rep HDIS_286_08	<5	0.6	66	245	180	<1	11	<1	136	<1
HDIS_309_08	<5	1.3	16	160	360	<1	3	<1	124	<1
HDIS_310_08	<5	1.2	133	132	820	<1	25	<1	96	<1
HDIS_311_08	<5	1.8	106	119	820	<1	16	<1	82	<1
HDIS_313_08	<5	1.6	279	228	640	<1	47	<1	206	<1
HDIS_314_08	<5	2.1	39	107	260	<1	8	<1	140	<1
HDIS_338_08	<5	4.4	28	110	410	<1	6	<1	117	1
HDIS_339_08	<5	1.8	46	134	580	<1	8	<1	94	<1
HDIS_342_08	<5	2.4	34	129	1570	<1	6	<1	94	<1
HDIS_343_08	<5	1.5	70	43	620	<1	14	<1	251	<1
HDIS_366_08	<5	1.7	12	143	860	<1	2	<1	21	<1
HDIS_367_08	<5	2.1	52	124	840	<1	11	<1	106	2
IS_370_08	<5	3.3	25	104	750	<1	5	<1	101	<1
*Rep HDIS_370_08	<5	2.2	11	96	600	<1	2	<1	88	<1
HDIS_371_08	<5	2.9	193	83	840	<1	37	<1	167	1
HDIS_421_08	11	1.0	84	572	250	<1	17	<1	30	9
HDIS_482_08	<5	1.9	11	87	10	<1	3	<1	121	<1
HDIS_483_08	<5	2.0	5	74	50	<1	1	<1	35	<1
HDIS_509_08	<5	0.6	85	510	650	<1	16	<1	53	4
HDIS_510_08	<5	2.5	29	158	30	<1	7	<1	153	1
HDIS_511_08	<5	6.1	31	121	30	<1	7	<1	102	3
HDIS_512_08	7	10.8	974	83	360	<1	224	<1	218	11
HDIS_535_08	<5	3.3	20	97	30	<1	5	<1	105	2
HDIS_536_08	<5	3.2	28	149	30	<1	7	<1	155	2
HDIS_537_08	7	9.7	115	112	420	<1	26	<1	211	5
HDIS_538_08	<5	5.0	200	130	350	<1	39	<1	192	2
*Rep HDIS_538_08	<5	3.9	60	120	380	<1	11	<1	132	1
HDIS_561_08	5	5.3	149	413	710	<1	29	<1	126	9
HDIS_562_08	<5	<0.5	33	257	310	<1	6	<1	36	8
HDIS_563_08	<5	1.4	32	110	630	<1	6	<1	57	<1
HDIS_564_08	<5	<0.5	32	45	220	<1	6	<1	14	<1
HDIS_565_08	<5	0.5	22	126	540	<1	4	<1	67	<1
*Std MMISRM16	69	<0.5	23	332	170	34	4	<1	343	<1
*Std MMISRM16	63	<0.5	23	354	170	33	4	<1	331	<1
*Std MMISRM16	64	<0.5	22	357	190	34	4	<1	350	<1
*Blk BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
*Blk BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_77_08	44	18	<1	100	<1	6	<10	37.0	944	0.9
*Rep HDIS_77_08	40	17	<1	120	<1	5	<10	38.8	1090	0.9
HDIS_78_08	9	6	<1	60	<1	2	<10	16.1	242	<0.5
HDIS_79_08	9	27	<1	930	<1	6	<10	10.8	16	<0.5
HDIS_80_08	47	36	<1	100	<1	10	<10	45.1	409	1.1
HDIS_099_08	48	41	<1	40	<1	11	<10	48.9	779	1.0
HDIS_100_08	65	42	<1	120	<1	10	<10	83.7	1010	1.1
HDIS_101_08	58	33	<1	50	<1	7	<10	85.2	1130	0.7
HDIS_102_08	44	75	<1	420	<1	15	<10	53.9	552	1.1
HDIS_103_08	100	117	<1	620	<1	22	<10	86.6	151	1.1
HDIS_117_08	25	<1	<1	430	<1	<1	<10	6.2	227	<0.5
HDIS_118_08	46	25	<1	350	<1	5	<10	21.5	233	1.1
HDIS_119_08	37	32	<1	200	<1	11	<10	27.1	393	0.7
HDIS_120_08	24	67	<1	910	<1	18	<10	36.6	21	1.2
*Rep HDIS_120_08	24	67	<1	920	<1	17	<10	38.9	23	1.3
HDIS_124_08	47	27	<1	130	<1	7	<10	75.4	599	1.4
HDIS_125_08	64	89	<1	210	<1	23	<10	89.2	618	0.8
HDIS_126_08	51	32	<1	50	<1	7	<10	81.5	1420	0.9
HDIS_127_08	33	6	<1	50	<1	3	<10	22.3	462	1.7
HDIS_142_08	32	9	<1	70	<1	3	<10	37.8	625	<0.5
HDIS_143_08	44	21	<1	760	<1	7	<10	23.4	138	<0.5
HDIS_144_08	<5	7	<1	950	<1	2	<10	7.1	40	<0.5
HDIS_145_08	33	5	<1	250	<1	2	<10	26.7	336	0.6
HDIS_146_08	36	18	<1	270	<1	5	<10	69.9	623	0.8
HDIS_147_08	51	17	<1	260	<1	5	<10	57.3	1180	0.9
HDIS_148_08	79	99	<1	80	<1	25	<10	62.3	571	0.7
HDIS_171_08	61	16	1	150	1	6	<10	74.1	983	2.5
*Rep HDIS_171_08	74	32	1	110	1	10	<10	85.0	1070	1.9
HDIS_172_08	57	22	<1	350	<1	7	<10	54.0	749	1.5
HDIS_173_08	97	73	<1	340	<1	17	<10	52.0	497	1.2
HDIS_174_08	80	83	<1	120	<1	15	<10	100	878	2.1
HDIS_198_08	176	227	<1	1910	<1	37	<10	38.0	15	1.2
HDIS_199_08	65	62	<1	70	<1	12	<10	92.5	1140	1.5
HDIS_200_08	36	11	<1	330	<1	3	<10	50.9	789	1.0
HDIS_201_08	74	90	<1	20	<1	21	<10	52.6	675	1.7
HDIS_226_08	43	37	<1	310	<1	10	<10	44.3	498	0.7
HDIS_227_08	42	60	<1	790	<1	15	<10	29.7	182	0.8
HDIS_228_08	<5	2	<1	660	<1	<1	<10	0.8	5	<0.5
HDIS_229_08	53	34	<1	170	<1	9	<10	51.0	647	1.0
HDIS_230_08	75	37	<1	70	<1	9	<10	77.1	905	1.5
*Rep HDIS_230_08	73	39	<1	60	<1	10	<10	81.3	889	1.5
HDIS_253_08	119	129	<1	250	<1	26	<10	144	1940	1.4
HDIS_254_08	37	15	<1	290	<1	6	<10	26.7	455	0.9
HDIS_255_08	32	13	<1	360	<1	5	<10	27.8	407	0.7
HDIS_256_08	51	40	<1	550	<1	19	<10	27.6	228	<0.5

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_257_08	70	56	<1	200	<1	11	<10	71.7	901	1.0
HDIS_258_08	59	54	<1	160	<1	10	<10	102	937	1.0
HDIS_281_08	117	105	4	220	<1	20	20	119	2570	2.4
HDIS_282_08	45	49	1	420	<1	17	<10	28.5	214	<0.5
HDIS_283_08	33	10	1	340	<1	5	<10	24.0	352	0.7
HDIS_284_08	44	25	1	290	<1	9	<10	37.7	527	0.6
HDIS_285_08	39	20	1	350	<1	9	<10	20.9	474	<0.5
HDIS_286_08	59	28	<1	580	<1	7	<10	33.1	293	0.7
*Rep HDIS_286_08	55	32	<1	590	<1	8	<10	32.9	246	0.6
HDIS_309_08	30	7	<1	110	<1	4	<10	21.7	392	<0.5
HDIS_310_08	35	51	<1	450	<1	11	<10	56.4	624	<0.5
HDIS_311_08	58	61	<1	170	<1	21	<10	40.4	560	<0.5
HDIS_313_08	66	121	<1	120	<1	27	<10	56.5	907	0.6
HDIS_314_08	48	15	<1	40	<1	4	<10	33.5	711	0.9
HDIS_338_08	42	11	<1	100	<1	4	<10	65.9	1480	0.8
HDIS_339_08	45	23	<1	150	<1	9	<10	38.1	707	0.5
HDIS_342_08	39	16	<1	290	<1	5	<10	42.2	1040	<0.5
HDIS_343_08	32	26	<1	30	<1	6	<10	36.4	604	1.4
HDIS_366_08	34	4	<1	640	<1	2	<10	40.9	743	<0.5
HDIS_367_08	30	16	<1	230	<1	4	<10	43.1	953	0.5
HDIS_370_08	46	11	<1	90	<1	4	<10	38.3	1510	0.5
*Rep HDIS_370_08	36	4	<1	80	<1	2	<10	26.9	997	<0.5
HDIS_371_08	60	70	<1	30	<1	14	<10	79.9	1390	1.0
HDIS_421_08	58	28	<1	1620	<1	5	<10	32.2	195	<0.5
HDIS_482_08	22	3	<1	110	<1	<1	<10	32.0	497	<0.5
HDIS_483_08	23	1	<1	110	<1	<1	<10	14.1	579	<0.5
HDIS_509_08	100	36	<1	1090	<1	10	<10	71.8	183	<0.5
HDIS_510_08	35	8	<1	140	<1	2	<10	35.3	655	0.7
HDIS_511_08	32	8	<1	100	<1	1	<10	49.7	1760	0.5
HDIS_512_08	203	256	2	100	1	39	<10	158	4820	1.8
HDIS_535_08	31	6	<1	110	<1	1	<10	37.8	921	0.9
HDIS_536_08	51	8	<1	150	<1	2	<10	54.2	1290	0.8
HDIS_537_08	81	35	1	100	<1	7	<10	130	3320	1.2
HDIS_538_08	104	71	<1	90	<1	18	<10	71.5	1880	0.9
*Rep HDIS_538_08	85	27	<1	80	<1	11	<10	50.9	1260	0.7
HDIS_561_08	94	60	<1	280	<1	14	<10	138	1790	0.7
HDIS_562_08	<5	13	<1	1850	<1	2	<10	12.7	36	<0.5
HDIS_563_08	27	12	<1	180	<1	3	<10	25.8	743	<0.5
HDIS_564_08	6	17	<1	840	<1	4	<10	3.6	35	<0.5
HDIS_565_08	16	11	<1	850	<1	3	<10	12.2	178	<0.5
*Std MMISRM16	15	8	<1	490	<1	<1	<10	45.1	3	<0.5
*Std MMISRM16	14	7	<1	460	<1	<1	<10	46.0	3	<0.5
*Std MMISRM16	15	7	<1	470	<1	<1	<10	44.1	<3	<0.5
*Blk BLANK	<5	<1	<1	10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
*Blk BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_77_08	21	<1	121	9	620	65
*Rep HDIS_77_08	19	<1	109	9	1030	75
HDIS_78_08	4	<1	64	9	1190	21
HDIS_79_08	9	<1	140	7	260	11
HDIS_80_08	26	<1	181	12	540	94
HDIS_099_08	27	<1	200	12	440	79
HDIS_100_08	21	<1	150	13	540	162
HDIS_101_08	53	<1	107	10	530	149
HDIS_102_08	31	<1	272	16	1520	114
HDIS_103_08	42	<1	324	22	800	141
HDIS_117_08	3	<1	<5	3	130	20
HDIS_118_08	51	2	151	11	220	51
HDIS_119_08	12	<1	261	15	350	61
HDIS_120_08	62	<1	368	18	650	53
*Rep HDIS_120_08	59	<1	350	16	640	57
HDIS_124_08	25	<1	138	9	1040	141
HDIS_125_08	35	<1	425	30	660	115
HDIS_126_08	21	<1	106	8	400	135
HDIS_127_08	12	<1	86	8	900	51
HDIS_142_08	12	<1	87	8	290	46
HDIS_143_08	21	<1	205	17	1970	40
HDIS_144_08	7	<1	37	2	630	13
HDIS_145_08	6	<1	77	8	1100	45
HDIS_146_08	19	<1	94	7	1050	93
HDIS_147_08	41	<1	97	9	1300	109
HDIS_148_08	37	<1	457	30	280	100
HDIS_171_08	33	4	115	12	1650	103
*Rep HDIS_171_08	40	3	175	16	1240	127
HDIS_172_08	24	2	217	25	1050	81
HDIS_173_08	20	1	369	34	460	94
HDIS_174_08	18	1	234	18	230	133
HDIS_198_08	45	2	873	57	430	44
HDIS_199_08	32	1	203	18	120	166
HDIS_200_08	12	<1	77	7	1220	72
HDIS_201_08	41	1	395	27	90	79
HDIS_226_08	17	<1	237	14	740	48
HDIS_227_08	28	<1	360	28	880	34
HDIS_228_08	<1	<1	16	1	2090	<5
HDIS_229_08	14	<1	188	11	620	53
HDIS_230_08	22	<1	181	16	370	113
*Rep HDIS_230_08	23	<1	182	16	370	113
HDIS_253_08	26	2	505	33	330	147
HDIS_254_08	9	<1	195	14	540	33
HDIS_255_08	12	<1	196	27	1100	47
HDIS_256_08	14	<1	659	54	450	42

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_257_08	23	<1	216	15	520	102
HDIS_258_08	27	<1	158	9	400	174
HDIS_281_08	31	2	388	23	580	168
HDIS_282_08	13	<1	439	23	580	24
HDIS_283_08	12	<1	163	15	1630	39
HDIS_284_08	13	<1	225	19	920	53
HDIS_285_08	15	<1	333	29	1210	39
HDIS_286_08	16	<1	161	13	1580	63
*Rep HDIS_286_08	15	<1	157	11	1510	55
HDIS_309_08	6	<1	117	10	340	25
HDIS_310_08	13	<1	250	13	630	51
HDIS_311_08	17	<1	528	37	370	39
HDIS_313_08	43	<1	640	38	330	79
HDIS_314_08	12	<1	92	8	310	100
HDIS_338_08	12	<1	100	9	320	95
HDIS_339_08	16	<1	271	20	270	42
HDIS_342_08	14	1	135	10	550	58
HDIS_343_08	7	<1	108	7	80	58
HDIS_366_08	8	<1	61	5	690	50
HDIS_367_08	10	<1	82	6	330	65
HDIS_370_08	13	<1	102	9	330	58
*Rep HDIS_370_08	9	<1	70	11	350	38
HDIS_371_08	23	<1	240	15	130	111
HDIS_421_08	98	<1	150	11	270	65
HDIS_482_08	14	<1	19	3	50	42
HDIS_483_08	4	<1	18	8	260	26
HDIS_509_08	132	<1	325	23	300	103
HDIS_510_08	22	<1	44	6	50	58
HDIS_511_08	16	1	34	4	80	94
HDIS_512_08	47	4	960	63	360	310
HDIS_535_08	14	<1	28	4	50	78
HDIS_536_08	25	<1	40	5	50	92
HDIS_537_08	21	2	142	10	460	255
HDIS_538_08	22	1	375	24	110	128
*Rep HDIS_538_08	15	<1	309	25	130	82
HDIS_561_08	37	1	355	27	510	214
HDIS_562_08	41	<1	60	4	380	14
HDIS_563_08	7	<1	102	8	1310	45
HDIS_564_08	6	<1	142	9	260	12
HDIS_565_08	10	<1	59	4	510	33
*Std MMISRM16	65	<1	17	1	250	20
*Std MMISRM16	62	<1	17	1	240	19
*Std MMISRM16	61	<1	16	1	260	20
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
*Blk BLANK	<1	<1	<5	<1	20	<5

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Certificate of Analysis

Work Order: TO102014

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 04, 2008

P.O. No. :	Heidi
Project No. :	DEFAULT
No. Of Samples	59
Date Submitted	Jul 28, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 59 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_3_08	4	>300	10	<0.1	1130	<1	20	10	74	89
*Rep HDIS_3_08	4	>300	20	<0.1	1100	<1	<10	8	92	76
HDIS_6_08	4	277	<10	<0.1	1820	<1	30	7	55	46
HDIS_9_08	2	288	<10	<0.1	820	<1	<10	12	36	108
HDIS_14_08	8	>300	10	0.2	760	<1	<10	3	201	22
HDIS_15_08	7	60	<10	<0.1	4680	<1	300	3	149	41
HDIS_18_08	2	269	<10	<0.1	930	<1	<10	8	13	43
HDIS_19_08	29	6	<10	<0.1	3500	<1	250	18	5	421
HDIS_23_08	22	122	<10	<0.1	1990	<1	500	4	62	9
HDIS_25_08	5	266	30	<0.1	2560	2	30	6	394	147
HDIS_26_08	2	296	<10	<0.1	830	<1	<10	8	27	98
HDIS_27_08	4	>300	<10	<0.1	660	<1	<10	5	34	43
HDIS_30_08	4	280	<10	<0.1	640	<1	10	12	57	49
HDIS_31_08	14	16	<10	<0.1	6020	<1	380	8	59	78
*Rep HDIS_31_08	16	14	<10	<0.1	6000	<1	380	8	54	81
HDIS_35_08	27	83	<10	<0.1	1070	<1	410	8	98	29
HDIS_36_08	11	93	<10	<0.1	1950	<1	340	8	207	57
HDIS_37_08	8	90	<10	<0.1	1160	<1	470	12	114	62
HDIS_38_08	15	86	<10	0.1	1380	<1	490	9	74	20
HDIS_41_08	4	231	<10	0.1	680	<1	20	4	108	276
HDIS_42_08	10	>300	<10	<0.1	1620	<1	<10	6	313	42
HDIS_43_08	2	>300	10	0.1	2880	<1	20	2	177	79
HDIS_46_08	3	284	<10	<0.1	760	<1	<10	7	14	60
HDIS_47_08	34	15	<10	<0.1	4810	<1	310	6	20	398
HDIS_60_08	4	248	30	<0.1	2830	<1	60	6	166	169
HDIS_61_08	4	291	<10	<0.1	940	<1	<10	3	185	21
HDIS_64_08	6	>300	<10	<0.1	700	<1	<10	6	155	55
*Rep HDIS_64_08	6	>300	<10	<0.1	500	<1	<10	7	103	41
HDIS_65_08	12	76	<10	<0.1	3760	<1	260	10	660	59
HDIS_66_08	340	49	20	0.3	1630	<1	400	60	205	19
HDIS_81_08	7	>300	<10	<0.1	1930	<1	10	4	127	48
HDIS_82_08	7	237	<10	0.1	4480	<1	50	3	130	9
HDIS_84_08	5	91	<10	0.2	13500	<1	160	4	491	45
HDIS_85_08	1	211	<10	<0.1	2320	<1	100	17	14	26
HDIS_104_08	4	>300	20	0.2	1830	<1	<10	4	300	28
HDIS_106_08	3	220	<10	<0.1	2890	1	20	5	8	91
HDIS_128_08	8	259	<10	<0.1	3610	<1	60	3	294	81
HDIS_280_08	5	195	70	0.3	11000	2	50	9	1380	268
HDIS_307_08	2	148	10	<0.1	2350	1	10	2	52	153
HDIS_312_08	2	145	<10	<0.1	1770	<1	190	9	109	167
*Rep HDIS_312_08	2	139	<10	<0.1	1410	<1	190	8	99	272
HDIS_341_08	1	161	<10	<0.1	2500	<1	270	23	94	165
HDIS_368_08	2	192	<10	<0.1	2870	<1	50	7	33	114
HDIS_369_08	1	184	<10	<0.1	3400	<1	110	26	95	268
HDIS_635_08	1	153	<10	<0.1	2070	<1	220	25	58	92
HDIS_641_08	2	237	<10	<0.1	1220	<1	<10	7	36	105

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Order:

	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_642_08	6	55	<10	<0.1	2140	<1	470	13	115	74
HDIS_643_08	5	253	20	0.1	1860	<1	20	12	85	362
Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_644_08	5	225	10	<0.1	3770	<1	120	13	135	162
HDIS_645_08	4	292	<10	<0.1	2260	<1	40	15	115	115
HDIS_646_08	3	285	<10	0.6	1240	<1	30	13	83	103
HDIS_648_08	4	227	40	<0.1	4410	3	50	13	302	689
HDIS_649_08	4	274	<10	<0.1	3790	<1	40	88	63	141
*Rep HDIS_649_08	3	282	<10	<0.1	3360	<1	40	71	49	141
HDIS_650_08	1	122	30	0.2	3060	1	40	2	102	111
HDIS_651_08	5	238	<10	0.2	2960	<1	20	5	234	308
HDIS_652_08	3	267	<10	<0.1	2300	<1	80	12	91	96
HDIS_653_08	3	260	<10	<0.1	2240	<1	80	33	90	54
HDIS_655_08	8	162	<10	0.2	2030	<1	20	<1	39	23
HDIS_656_08	6	196	20	0.1	4570	<1	110	27	474	231
HDIS_657_08	1	250	<10	<0.1	2070	<1	30	13	39	78
HDIS_658_08	2	282	<10	<0.1	800	<1	<10	11	80	83
HDIS_659_08	4	121	70	0.4	4530	2	60	3	232	182
HDIS_660_08	16	105	10	0.2	5760	<1	290	10	317	113
*Std MMISRM16	24	63	20	41.9	100	<1	250	4	22	76
*Std MMISRM16	25	63	20	40.0	100	<1	250	5	22	77
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_3_08	<100	960	53	22.8	11.8	83	57	21	<5	2
*Rep HDIS_3_08	<100	930	64	28.2	14.2	70	69	25	<5	1
HDIS_6_08	<100	100	39	16.6	8.1	56	38	15	<5	3
HDIS_9_08	<100	180	41	24.8	4.2	63	22	13	<5	1
HDIS_14_08	<100	420	76	26.6	22.5	45	103	56	<5	<1
HDIS_15_08	<100	180	90	28.5	28.4	11	168	46	11	60
HDIS_18_08	<100	120	39	26.5	2.3	81	12	4	<5	2
HDIS_19_08	<100	4710	13	5.0	4.1	3	19	<1	11	138
HDIS_23_08	<100	230	75	36.1	18.0	25	75	40	<5	5
HDIS_25_08	200	420	81	26.5	28.7	150	129	118	<5	4
HDIS_26_08	<100	130	15	7.9	1.9	85	9	10	<5	2
HDIS_27_08	<100	110	15	7.4	2.4	91	11	10	<5	<1
HDIS_30_08	<100	130	38	15.5	6.5	89	34	15	<5	4
HDIS_31_08	<100	410	49	17.7	18.7	7	85	11	6	45
*Rep HDIS_31_08	<100	430	46	15.8	17.7	6	81	11	6	44
HDIS_35_08	<100	140	50	21.0	17.3	34	75	38	<5	6
HDIS_36_08	<100	220	87	34.3	29.6	36	123	58	5	16
HDIS_37_08	<100	240	86	39.0	24.9	67	112	41	6	12
HDIS_38_08	<100	310	39	16.9	11.6	19	52	23	<5	27
HDIS_41_08	100	480	53	23.9	13.9	41	65	34	<5	6
HDIS_42_08	100	900	183	61.7	44.9	37	221	130	<5	<1
HDIS_43_08	100	670	80	26.1	29.6	55	133	65	<5	1
HDIS_46_08	<100	80	23	16.9	1.5	78	8	4	<5	<1
HDIS_47_08	<100	2750	17	6.9	7.8	5	29	2	17	94
HDIS_60_08	<100	1710	76	28.7	23.5	71	113	40	<5	10
HDIS_61_08	<100	530	107	43.7	21.1	29	109	62	<5	<1
HDIS_64_08	<100	260	77	29.3	20.4	33	97	36	<5	<1
*Rep HDIS_64_08	<100	300	72	29.3	15.3	32	76	23	<5	<1
HDIS_65_08	<100	330	271	102	115	19	419	152	<5	27
HDIS_66_08	<100	350	86	30.8	37.3	18	140	64	<5	12
HDIS_81_08	100	290	41	14.1	11.0	78	57	39	<5	1
HDIS_82_08	<100	1410	293	114	61.9	16	323	89	<5	2
HDIS_84_08	<100	350	194	75.0	59.0	11	292	101	<5	17
HDIS_85_08	<100	60	27	15.3	3.3	150	17	4	<5	16
HDIS_104_08	<100	920	75	24.2	21.3	41	100	92	<5	<1
HDIS_106_08	<100	100	7	8.8	0.8	199	3	3	5	5
HDIS_128_08	<100	320	187	63.2	49.1	94	301	71	<5	11
HDIS_280_08	200	400	169	62.9	51.1	174	241	770	<5	8
HDIS_307_08	<100	570	8	4.0	2.1	448	8	23	<5	4
HDIS_312_08	<100	220	158	77.2	27.5	101	113	43	<5	3
*Rep HDIS_312_08	<100	190	95	47.6	19.2	147	76	38	<5	3
HDIS_341_08	<100	80	53	25.3	13.3	54	57	37	<5	8
HDIS_368_08	<100	310	10	7.2	1.8	284	6	14	<5	7
HDIS_369_08	<100	250	112	63.7	15.9	167	75	35	<5	9
HDIS_635_08	<100	190	98	55.2	15.0	94	69	20	<5	8
HDIS_641_08	<100	130	10	10.8	1.5	220	6	15	<5	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_642_08	<100	180	60	26.2	24.5	46	88	37	5	15
HDIS_643_08	<100	290	17	8.8	4.4	276	17	28	<5	3
Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_644_08	<100	90	64	29.4	16.1	143	66	53	<5	5
HDIS_645_08	<100	170	50	20.6	11.1	57	49	26	<5	5
HDIS_646_08	<100	90	29	12.9	5.9	47	28	23	<5	4
HDIS_648_08	200	420	64	25.2	20.5	381	83	96	<5	14
HDIS_649_08	<100	150	60	30.4	8.2	133	40	18	<5	9
*Rep HDIS_649_08	<100	150	56	28.1	7.3	109	36	13	<5	9
HDIS_650_08	<100	650	19	9.1	5.0	529	20	43	<5	7
HDIS_651_08	<100	490	43	19.0	12.2	273	46	79	<5	2
HDIS_652_08	<100	80	67	30.1	13.9	86	65	36	<5	4
HDIS_653_08	<100	110	58	25.1	12.8	52	57	28	<5	8
HDIS_655_08	<100	700	7	3.9	1.9	364	7	16	<5	2
HDIS_656_08	<100	250	86	35.4	28.3	99	113	149	5	13
HDIS_657_08	<100	100	41	22.8	5.8	95	28	12	<5	5
HDIS_658_08	<100	240	41	23.7	6.4	95	31	23	<5	1
HDIS_659_08	<100	2240	31	14.6	8.5	511	32	92	<5	3
HDIS_660_08	<100	630	76	34.5	23.3	60	97	103	<5	13
*Std MMISRM16	<100	700	4	1.4	1.5	2	6	4	<5	36
*Std MMISRM16	<100	710	4	1.5	1.5	2	6	4	<5	36
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_3_08	<5	1.8	73	133	780	<1	12	<1	128	<1
*Rep HDIS_3_08	<5	2.0	88	148	580	<1	15	<1	175	<1
HDIS_6_08	<5	1.1	58	101	1320	<1	9	<1	162	<1
HDIS_9_08	<5	1.3	26	103	600	<1	5	<1	136	<1
HDIS_14_08	<5	2.5	197	43	1510	<1	33	<1	246	<1
HDIS_15_08	<5	<0.5	212	184	160	<1	30	<1	183	<1
HDIS_18_08	<5	0.5	9	84	2620	<1	2	<1	173	<1
HDIS_19_08	23	<0.5	9	533	5170	1	1	<1	45	<1
HDIS_23_08	<5	<0.5	111	271	480	<1	19	<1	92	<1
HDIS_25_08	<5	3.8	287	132	770	<1	55	<1	268	1
HDIS_26_08	<5	2.5	16	95	310	<1	3	<1	146	<1
HDIS_27_08	<5	2.2	19	106	580	<1	4	<1	260	<1
HDIS_30_08	<5	1.5	45	141	3240	<1	8	<1	165	<1
HDIS_31_08	<5	<0.5	94	182	260	<1	11	<1	165	<1
*Rep HDIS_31_08	<5	<0.5	92	176	310	<1	11	<1	156	<1
HDIS_35_08	<5	<0.5	146	248	250	<1	25	<1	67	<1
HDIS_36_08	<5	<0.5	227	260	440	<1	38	<1	113	<1
HDIS_37_08	<5	<0.5	151	438	610	<1	24	<1	46	<1
HDIS_38_08	<5	<0.5	76	317	400	<1	13	<1	54	<1
HDIS_41_08	10	1.2	113	188	100	<1	20	<1	275	<1
HDIS_42_08	<5	2.2	425	128	280	<1	73	<1	255	<1
HDIS_43_08	<5	3.0	233	87	150	<1	39	<1	200	<1
HDIS_46_08	<5	0.7	10	63	620	<1	2	<1	189	<1
HDIS_47_08	10	<0.5	25	567	170	<1	3	<1	67	<1
HDIS_60_08	9	2.0	165	192	500	<1	27	<1	208	1
HDIS_61_08	<5	1.4	211	56	420	<1	37	<1	87	<1
HDIS_64_08	<5	1.1	172	88	2910	<1	27	<1	388	<1
*Rep HDIS_64_08	<5	0.9	116	73	2480	<1	18	<1	388	<1
HDIS_65_08	<5	<0.5	763	664	1100	<1	118	<1	231	<1
HDIS_66_08	<5	<0.5	265	175	2670	<1	40	<1	117	13
HDIS_81_08	<5	3.2	91	76	390	<1	17	<1	236	<1
HDIS_82_08	<5	<0.5	442	42	960	<1	65	<1	153	<1
HDIS_84_08	<5	<0.5	461	134	590	<1	73	<1	266	<1
HDIS_85_08	<5	<0.5	16	87	510	<1	3	<1	53	<1
HDIS_104_08	<5	2.0	211	64	220	<1	40	<1	160	<1
HDIS_106_08	<5	3.1	3	83	590	<1	<1	<1	73	<1
HDIS_128_08	<5	0.8	343	342	550	<1	52	<1	251	<1
HDIS_280_08	6	6.7	890	152	690	<1	209	<1	219	5
HDIS_307_08	<5	4.5	27	201	30	<1	6	<1	55	<1
HDIS_312_08	<5	<0.5	149	140	600	<1	25	<1	86	<1
*Rep HDIS_312_08	<5	<0.5	110	156	470	<1	20	<1	71	<1
HDIS_341_08	<5	0.5	97	128	390	<1	18	<1	100	<1
HDIS_368_08	<5	2.0	17	138	40	<1	4	<1	80	<1
HDIS_369_08	<5	0.5	100	207	470	<1	18	<1	54	<1
HDIS_635_08	<5	<0.5	78	59	850	<1	12	<1	44	<1
HDIS_641_08	<5	3.0	17	99	150	<1	4	<1	100	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_642_08	<5	<0.5	136	357	250	<1	22	<1	52	<1
HDIS_643_08	<5	3.8	44	250	200	<1	9	<1	179	1
Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_644_08	<5	1.9	127	135	840	<1	23	<1	141	<1
HDIS_645_08	<5	1.7	80	179	820	<1	14	<1	185	<1
HDIS_646_08	<5	1.2	59	157	1060	<1	11	<1	125	<1
HDIS_648_08	5	2.8	189	325	1370	<1	38	<1	80	4
HDIS_649_08	<5	1.2	59	112	620	<1	10	<1	35	<1
*Rep HDIS_649_08	<5	1.1	47	96	640	<1	8	<1	31	<1
HDIS_650_08	<5	3.6	56	326	60	<1	13	<1	46	1
HDIS_651_08	<5	2.5	125	198	240	<1	28	<1	159	1
HDIS_652_08	<5	0.9	109	89	560	<1	19	<1	71	<1
HDIS_653_08	<5	0.8	98	113	570	<1	17	<1	105	<1
HDIS_655_08	<5	1.1	19	113	10	<1	5	<1	104	<1
HDIS_656_08	<5	1.9	305	245	550	<1	63	<1	63	1
HDIS_657_08	<5	1.1	40	78	550	<1	7	<1	37	<1
HDIS_658_08	<5	2.8	55	115	490	<1	10	<1	124	<1
HDIS_659_08	7	1.8	111	156	80	<1	27	<1	101	5
HDIS_660_08	<5	0.6	228	221	1240	<1	44	<1	91	2
*Std MMISRM16	62	<0.5	18	285	160	33	3	<1	366	<1
*Std MMISRM16	62	<0.5	18	279	160	34	3	<1	364	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_3_08	75	39	3	60	<1	10	<10	55.8	551	0.6
*Rep HDIS_3_08	86	48	<1	40	<1	12	<10	69.1	630	0.6
HDIS_6_08	38	27	<1	190	<1	7	<10	44.7	380	1.0
HDIS_9_08	63	13	<1	30	<1	5	<10	30.0	273	0.7
HDIS_14_08	97	80	<1	20	<1	15	<10	73.6	1050	1.3
HDIS_15_08	12	111	<1	1850	<1	20	<10	36.4	10	0.7
HDIS_18_08	53	6	<1	70	<1	4	<10	28.1	93	1.1
HDIS_19_08	13	8	<1	2090	<1	3	<10	3.2	<3	<0.5
HDIS_23_08	40	46	<1	1860	<1	12	<10	12.3	10	<0.5
HDIS_25_08	83	111	<1	90	<1	18	<10	118	1700	0.7
HDIS_26_08	35	6	<1	60	<1	2	<10	22.7	811	0.7
HDIS_27_08	33	8	<1	30	<1	2	<10	30.7	743	1.2
HDIS_30_08	48	21	<1	70	<1	6	<10	50.9	378	1.0
HDIS_31_08	16	54	<1	2300	<1	10	<10	32.0	4	0.6
*Rep HDIS_31_08	15	51	<1	2280	<1	10	<10	29.5	<3	0.5
HDIS_35_08	16	55	<1	1000	<1	10	<10	20.4	40	<0.5
HDIS_36_08	26	94	<1	940	<1	17	<10	33.5	37	<0.5
HDIS_37_08	53	72	<1	1990	<1	16	<10	15.1	14	<0.5
HDIS_38_08	18	34	<1	2690	<1	7	<10	5.5	7	<0.5
HDIS_41_08	113	54	<1	190	<1	10	<10	69.7	522	1.2
HDIS_42_08	133	161	<1	50	<1	35	<10	66.6	724	0.9
HDIS_43_08	60	107	<1	50	<1	17	<10	89.6	1230	0.9
HDIS_46_08	33	5	<1	40	<1	2	<10	27.1	199	1.1
HDIS_47_08	11	18	<1	2630	<1	4	<10	9.1	<3	1.5
HDIS_60_08	77	87	<1	260	<1	15	<10	73.6	950	0.9
HDIS_61_08	56	79	<1	40	<1	18	<10	22.8	392	0.8
HDIS_64_08	102	74	<1	10	<1	15	<10	81.8	288	1.5
*Rep HDIS_64_08	99	54	3	<10	<1	13	<10	66.1	223	1.4
HDIS_65_08	33	325	<1	1320	<1	56	<10	50.2	17	0.9
HDIS_66_08	9	108	<1	1090	<1	17	<10	31.7	11	0.7
HDIS_81_08	68	41	<1	50	<1	8	<10	74.4	1030	1.3
HDIS_82_08	133	205	<1	320	<1	52	<10	37.8	96	0.5
HDIS_84_08	110	210	<1	820	<1	40	<10	85.9	30	1.1
HDIS_85_08	23	9	<1	650	<1	4	<10	7.7	119	<0.5
HDIS_104_08	67	83	<1	50	<1	16	<10	76.3	818	0.9
HDIS_106_08	47	2	<1	110	<1	<1	<10	10.8	323	0.7
HDIS_128_08	113	192	<1	320	<1	41	<10	93.7	230	1.1
HDIS_280_08	137	201	<1	230	<1	34	<10	112	3120	1.4
HDIS_307_08	17	8	<1	140	<1	1	<10	25.0	906	<0.5
HDIS_312_08	80	64	<1	930	<1	23	<10	20.5	40	<0.5
*Rep HDIS_312_08	82	45	<1	840	<1	15	<10	25.8	62	<0.5
HDIS_341_08	43	37	<1	820	<1	9	<10	29.5	184	0.5
HDIS_368_08	36	5	<1	330	<1	1	<10	38.5	628	<0.5
HDIS_369_08	69	44	<1	570	<1	16	<10	36.3	163	<0.5
HDIS_635_08	69	38	<1	1030	<1	14	<10	27.8	58	<0.5
HDIS_641_08	43	5	<1	90	<1	1	<10	27.4	589	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_642_08	12	63	<1	1330	<1	12	<10	21.4	56	<0.5
HDIS_643_08	44	15	<1	150	<1	3	<10	60.1	1150	0.6
Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_644_08	62	49	<1	460	<1	11	<10	53.9	802	0.6
HDIS_645_08	51	35	<1	200	<1	9	<10	47.5	730	1.0
HDIS_646_08	40	20	<1	150	<1	5	<10	33.0	394	0.8
HDIS_648_08	90	69	<1	230	<1	13	<10	152	998	<0.5
HDIS_649_08	58	25	<1	340	<1	9	<10	34.2	375	<0.5
*Rep HDIS_649_08	53	21	<1	310	<1	8	<10	30.2	322	<0.5
HDIS_650_08	31	17	<1	300	<1	3	<10	31.0	982	<0.5
HDIS_651_08	82	41	<1	110	<1	8	<10	103	808	1.2
HDIS_652_08	49	44	<1	350	<1	11	<10	38.3	338	<0.5
HDIS_653_08	51	40	<1	410	<1	10	<10	26.4	244	<0.5
HDIS_655_08	25	6	<1	180	<1	1	<10	22.7	216	0.7
HDIS_656_08	93	100	<1	300	<1	16	<10	92.2	818	<0.5
HDIS_657_08	50	18	<1	240	<1	6	<10	27.7	282	<0.5
HDIS_658_08	69	21	<1	60	<1	6	<10	50.3	646	0.6
HDIS_659_08	73	30	<1	430	<1	5	<10	54.1	568	0.9
HDIS_660_08	64	76	<1	980	<1	14	<10	37.1	245	<0.5
*Std MMISRM16	15	6	<1	530	<1	<1	<10	34.4	<3	<0.5
*Std MMISRM16	15	6	<1	530	<1	<1	<10	33.6	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_3_08	32	1	192	16	520	139
*Rep HDIS_3_08	36	1	231	20	430	159
HDIS_6_08	18	1	157	10	630	61
HDIS_9_08	13	1	164	18	1000	70
HDIS_14_08	30	1	281	16	940	152
HDIS_15_08	60	1	372	14	260	37
HDIS_18_08	10	1	162	19	920	35
HDIS_19_08	79	1	62	3	1110	7
HDIS_23_08	60	1	469	22	50	28
HDIS_25_08	26	1	257	17	240	177
HDIS_26_08	9	1	54	5	970	48
HDIS_27_08	9	1	58	5	340	65
HDIS_30_08	9	1	135	10	1120	66
HDIS_31_08	39	1	233	10	450	30
*Rep HDIS_31_08	37	1	220	9	430	26
HDIS_35_08	23	1	236	14	190	31
HDIS_36_08	48	1	358	23	320	63
HDIS_37_08	56	1	469	25	570	34
HDIS_38_08	176	1	200	11	90	24
HDIS_41_08	54	1	211	15	120	101
DIS_42_08	29	1	784	35	920	97
HDIS_43_08	17	1	295	16	220	162
HDIS_46_08	6	1	110	12	160	40
HDIS_47_08	59	<1	87	4	200	13
HDIS_60_08	55	1	281	20	790	145
HDIS_61_08	20	1	476	26	290	50
HDIS_64_08	29	1	309	20	240	153
*Rep HDIS_64_08	26	1	305	20	170	139
HDIS_65_08	60	1	1240	61	210	96
HDIS_66_08	31	1	400	18	880	46
HDIS_81_08	31	1	136	9	270	163
HDIS_82_08	62	1	1740	68	210	85
HDIS_84_08	65	1	887	52	200	166
HDIS_85_08	5	1	151	9	1590	19
HDIS_104_08	25	1	259	14	190	120
HDIS_106_08	6	1	30	10	730	46
HDIS_128_08	62	1	737	39	420	178
HDIS_280_08	33	3	1000	33	390	235
HDIS_307_08	7	1	33	3	80	47
HDIS_312_08	31	1	910	44	230	28
*Rep HDIS_312_08	29	1	539	30	180	39
HDIS_341_08	13	1	280	16	620	42
HDIS_368_08	14	1	48	5	580	56
HDIS_369_08	22	1	594	39	530	40
HDIS_635_08	24	1	556	35	1210	46
HDIS_641_08	8	1	47	11	220	45

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Order:

	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_642_08	34	1	304	17	680	47
HDIS_643_08	19	1	68	6	990	104
Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_644_08	18	1	323	19	470	79
HDIS_645_08	15	1	204	13	540	91
HDIS_646_08	8	1	126	8	460	63
HDIS_648_08	17	1	242	16	710	171
HDIS_649_08	9	1	282	18	650	31
*Rep HDIS_649_08	8	1	262	16	700	25
HDIS_650_08	12	1	80	6	70	43
HDIS_651_08	16	2	160	14	180	123
HDIS_652_08	13	1	339	18	590	37
HDIS_653_08	8	1	267	15	900	40
HDIS_655_08	16	1	29	3	140	33
HDIS_656_08	17	1	376	24	840	111
HDIS_657_08	11	1	194	16	710	22
HDIS_658_08	15	1	176	19	1010	95
HDIS_659_08	80	1	129	10	70	103
HDIS_660_08	53	1	378	24	430	74
*Std MMISRM16	59	<1	15	1	260	15
*Std MMISRM16	57	<1	15	<1	270	16
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO102015

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Sep 03, 2008

P.O. No.	:	Heidi
Project No.	:	DEFAULT
No. Of Samples		25
Date Submitted		Jul 28, 2008
Report Comprises		Pages 1 to 6 (Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 25 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R. = Listed not received
n.a. = Not applicable
I.S. = Insufficient Sample
– = No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Order:

Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
HDIS_2_08	1	267	<10	<0.1	600	<1	10	3	114	23
*Rep HDIS_2_08	1	271	<10	<0.1	580	<1	10	3	109	20
HDIS_5_08	3	50	<10	<0.1	1280	<1	250	2	140	69
HDIS_7_08	2	120	<10	<0.1	2080	<1	180	13	140	30
HDIS_8_08	1	255	<10	<0.1	460	<1	10	3	73	18
HDIS_11_08	<1	90	<10	<0.1	3670	1	120	10	443	447
HDIS_12_08	13	45	<10	0.1	3560	<1	220	5	68	159
HDIS_13_08	3	143	10	<0.1	730	2	60	3	209	279
HDIS_16_08	4	70	<10	<0.1	3200	<1	150	3	215	12
HDIS_17_08	2	153	<10	<0.1	2310	<1	80	11	530	14
HDIS_20_08	1	97	<10	<0.1	7610	<1	180	6	61	54
HDIS_21_08	5	62	<10	0.6	1250	<1	270	14	33	14
HDIS_22_08	15	127	<10	<0.1	1480	<1	170	16	215	15
HDIS_28_08	1	254	<10	<0.1	510	<1	<10	9	168	19
*Rep HDIS_28_08	1	247	<10	<0.1	500	<1	<10	9	158	18
HDIS_32_08	8	89	<10	<0.1	1100	<1	170	7	94	15
HDIS_33_08	<1	90	40	0.9	1440	<1	70	10	22	79
HDIS_34_08	9	265	20	<0.1	730	<1	10	8	456	26
HDIS_48_08	3	31	30	0.6	710	<1	190	6	163	197
HDIS_49_08	2	144	<10	<0.1	1060	<1	80	13	97	97
[illegible]S_76_08	<1	221	<10	<0.1	660	1	<10	5	48	119
HDIS_308_08	3	236	30	0.1	2360	3	30	5	342	216
HDIS_335_08	<1	148	<10	<0.1	1300	<1	30	16	88	133
HDIS_336_08	6	144	<10	<0.1	3500	<1	140	31	219	67
HDIS_337_08	2	217	<10	0.2	1870	<1	20	3	121	107
HDIS_364_08	<1	182	20	<0.1	540	3	<10	8	12	54
HDIS_365_08	5	206	20	<0.1	1710	<1	20	13	201	344
*Rep HDIS_365_08	4	168	20	<0.1	1520	2	20	10	139	353
*Std MMISRM16	13	43	<10	21.9	70	<1	140	3	30	45
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
HDIS_2_08	<100	280	46	14.7	12.5	26	61	33	<5	3
*Rep HDIS_2_08	<100	300	49	16.1	12.5	24	62	31	<5	3
HDIS_5_08	<100	170	67	24.0	26.5	33	114	34	8	22
HDIS_7_08	<100	60	88	34.9	31.1	30	132	66	<5	9
HDIS_8_08	<100	100	34	11.7	8.9	35	39	18	<5	3
HDIS_11_08	<100	530	235	97.1	82.8	36	374	109	<5	26
HDIS_12_08	<100	800	108	47.2	30.3	20	149	25	8	72
HDIS_13_08	<100	1210	52	21.2	15.0	134	67	51	<5	8
HDIS_16_08	<100	100	79	27.8	30.6	10	130	69	<5	23
HDIS_17_08	<100	150	145	49.3	57.0	19	240	111	<5	6
HDIS_20_08	<100	1020	118	52.8	29.5	29	133	34	<5	32
HDIS_21_08	<100	100	33	14.7	10.2	12	44	18	<5	58
HDIS_22_08	<100	120	75	30.1	23.3	19	102	76	<5	13
HDIS_28_08	<100	100	54	18.7	14.2	19	64	32	<5	1
*Rep HDIS_28_08	<100	100	54	19.2	13.6	18	62	30	<5	1
HDIS_32_08	<100	270	40	16.2	15.1	17	63	29	<5	40
HDIS_33_08	<100	120	28	18.9	4.4	161	18	9	<5	12
HDIS_34_08	<100	140	94	35.9	31.2	32	132	115	<5	1
HDIS_48_08	<100	910	31	15.5	13.3	67	49	53	<5	18
HDIS_49_08	<100	150	182	86.0	41.0	81	188	29	<5	12
DIS_76_08	<100	220	15	7.9	3.1	126	13	16	<5	4
HDIS_308_08	100	180	34	11.3	12.3	98	52	121	5	4
HDIS_335_08	<100	150	99	50.4	11.9	80	61	26	<5	8
HDIS_336_08	<100	110	64	28.6	17.8	44	76	81	<5	25
HDIS_337_08	<100	340	24	12.0	6.0	119	24	42	<5	4
HDIS_364_08	<100	70	6	5.8	0.8	126	3	5	5	4
HDIS_365_08	<100	530	133	65.7	25.6	72	109	72	<5	6
*Rep HDIS_365_08	<100	400	76	40.1	15.1	100	64	53	<5	6
*Std MMISRM16	<100	460	3	1.2	1.5	4	6	7	<5	33
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_2_08	<5	1.3	87	70	320	<1	18	<1	147	<1
*Rep HDIS_2_08	<5	1.2	86	71	340	<1	17	<1	152	<1
HDIS_5_08	<5	<0.5	179	409	270	<1	30	<1	57	<1
HDIS_7_08	<5	<0.5	216	134	390	<1	42	<1	73	<1
HDIS_8_08	<5	0.8	57	59	340	<1	11	<1	133	<1
HDIS_11_08	<5	<0.5	568	641	590	<1	107	<1	103	<1
HDIS_12_08	<5	<0.5	138	483	540	<1	23	<1	33	<1
HDIS_13_08	<5	1.4	123	61	290	<1	27	<1	145	2
HDIS_16_08	<5	<0.5	242	79	410	<1	47	<1	132	<1
HDIS_17_08	<5	<0.5	421	65	940	1	83	<1	228	<1
HDIS_20_08	<5	<0.5	126	387	2040	<1	23	<1	64	<1
HDIS_21_08	<5	<0.5	55	141	480	<1	11	<1	61	<1
HDIS_22_08	<5	<0.5	178	142	690	<1	38	<1	155	<1
HDIS_28_08	<5	0.6	109	83	660	<1	22	<1	131	<1
*Rep HDIS_28_08	<5	0.6	105	83	660	<1	21	<1	124	<1
HDIS_32_08	<5	<0.5	102	124	230	<1	20	<1	140	<1
HDIS_33_08	<5	<0.5	23	121	690	<1	5	<1	33	4
HDIS_34_08	<5	1.9	305	91	1110	1	68	<1	214	3
HDIS_48_08	<5	<0.5	140	277	470	<1	31	<1	16	30
HDIS_49_08	<5	<0.5	150	127	720	<1	26	<1	77	<1
DIS_76_08	<5	4.7	21	87	340	<1	5	<1	108	<1
HDIS_308_08	<5	5.5	140	66	440	2	38	<1	200	2
HDIS_335_08	<5	0.6	76	80	690	<1	15	<1	61	<1
HDIS_336_08	<5	0.9	155	154	600	<1	35	<1	49	<1
HDIS_337_08	<5	3.1	60	101	90	<1	15	<1	175	<1
HDIS_364_08	<5	2.1	6	41	210	<1	2	<1	51	<1
HDIS_365_08	<5	1.0	159	274	1000	<1	35	<1	89	2
*Rep HDIS_365_08	<5	1.9	99	217	1180	<1	23	<1	70	2
*Std MMISRM16	40	<0.5	20	185	110	18	4	<1	263	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_2_08	27	43	<1	70	<1	12	<10	45.5	378	0.8
*Rep HDIS_2_08	28	42	<1	70	<1	12	<10	41.4	327	0.8
HDIS_5_08	<5	86	<1	1040	<1	18	<10	27.1	11	<0.5
HDIS_7_08	16	94	<1	480	<1	22	<10	33.3	68	<0.5
HDIS_8_08	16	28	<1	60	<1	8	<10	37.3	199	0.9
HDIS_11_08	51	288	<1	640	<1	62	<10	78.4	48	0.8
HDIS_12_08	<5	81	<1	1260	<1	26	<10	24.5	<3	<0.5
HDIS_13_08	41	52	<1	360	<1	13	<10	64.6	383	1.0
HDIS_16_08	12	103	<1	810	<1	22	<10	46.6	20	0.7
HDIS_17_08	65	200	<1	430	<1	40	<10	135	110	0.8
HDIS_20_08	28	74	<1	880	<1	26	<10	26.3	<3	<0.5
HDIS_21_08	<5	28	<1	1730	<1	8	<10	3.6	<3	<0.5
HDIS_22_08	17	72	<1	520	<1	19	<10	25.4	44	0.6
HDIS_28_08	31	47	<1	30	<1	13	<10	60.4	158	0.5
*Rep HDIS_28_08	30	44	<1	30	<1	13	<10	55.5	145	<0.5
HDIS_32_08	<5	46	<1	710	<1	11	<10	19.0	16	<0.5
HDIS_33_08	27	11	<1	490	<1	5	<10	20.1	42	<0.5
HDIS_34_08	59	109	<1	40	<1	24	<10	95.4	586	1.8
HDIS_48_08	19	44	<1	890	<1	8	<10	19.6	21	<0.5
HDIS_49_08	43	105	<1	470	<1	39	<10	50.4	85	<0.5
HDIS_76_08	19	9	<1	40	<1	3	<10	33.1	769	<0.5
HDIS_308_08	33	44	<1	110	<1	9	<10	121	1660	1.4
HDIS_335_08	29	34	<1	320	<1	17	<10	37.5	112	<0.5
HDIS_336_08	21	54	<1	870	<1	15	<10	39.0	283	<0.5
HDIS_337_08	35	19	<1	180	<1	5	<10	69.8	619	0.8
HDIS_364_08	17	2	<1	90	<1	<1	<10	21.4	373	<0.5
HDIS_365_08	51	69	<1	170	<1	26	<10	89.0	211	<0.5
*Rep HDIS_365_08	33	42	<1	160	<1	15	<10	72.2	269	<0.5
*Std MMISRM16	9	6	<1	450	<1	<1	<10	32.8	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	0.7	<3	<0.5

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Order:

Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_2_08	26	<1	129	9	140	55
*Rep HDIS_2_08	25	<1	144	10	130	49
HDIS_5_08	23	<1	263	15	280	23
HDIS_7_08	21	<1	433	21	770	43
HDIS_8_08	16	<1	108	7	50	38
HDIS_11_08	71	<1	717	71	540	90
HDIS_12_08	73	<1	440	30	230	30
HDIS_13_08	61	<1	193	15	50	86
HDIS_16_08	32	<1	315	17	80	54
HDIS_17_08	44	<1	474	34	100	131
HDIS_20_08	89	<1	431	32	440	56
HDIS_21_08	92	<1	174	10	430	9
HDIS_22_08	79	<1	330	20	360	37
HDIS_28_08	13	<1	176	12	150	58
*Rep HDIS_28_08	13	<1	176	12	120	53
HDIS_32_08	58	<1	175	11	180	22
HDIS_33_08	18	<1	130	11	580	29
HDIS_34_08	37	<1	359	25	200	135
HDIS_48_08	124	<1	171	13	150	24
HDIS_49_08	48	<1	556	56	930	50
HDIS_76_08	11	<1	46	6	420	62
HDIS_308_08	21	2	116	8	210	167
HDIS_335_08	14	<1	417	32	290	23
HDIS_336_08	17	<1	301	19	250	26
HDIS_337_08	22	<1	97	8	100	82
HDIS_364_08	7	<1	29	7	130	40
HDIS_365_08	109	<1	528	42	150	72
*Rep HDIS_365_08	99	<1	368	27	220	67
*Std MMISRM16	51	<1	11	<1	140	12
*Blk BLANK	<1	<1	<5	<1	<20	<5

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