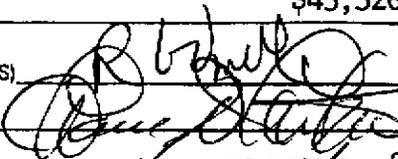




TITLE OF REPORT [type of survey(s)] <u>Geochemical and Geophysical</u>	TOTAL COST <u>\$43,326.17</u>
---	----------------------------------

AUTHOR(S) RICHARD LODMELL SIGNATURE(S)   
LARRY D. LULJEN

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) \_\_\_\_\_ YEAR OF WORK 2001-2002

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 3175991 - Feb. 6, 2002

PROPERTY NAME G1 Claim Group

CLAIM NAME(S) (on which work was done) G1, G2, G3, G4, G5, G6, G8, G9, G12 and G13

COMMODITIES SOUGHT Copper, Molybdenum, Gold, Platinum, Palladium

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN \_\_\_\_\_

MINING DIVISION Kamloops NTS 92I/068 and 92I/058

LATITUDE 50 ° 37 ' 5 " LONGITUDE 120 ° 28 ' \_\_\_\_\_ " (at centre of work)

OWNER(S)  
 1) Gold Mask Ventures Ltd. 2) \_\_\_\_\_

MAILING ADDRESS  
Box 1192  
Kamloops, BC  
V2C 6H3

OPERATOR(S) [who paid for the work]  
 1) Gold Mask Ventures Ltd. 2) \_\_\_\_\_

MAILING ADDRESS  
Box 1192  
Kamloops, BC  
V2C 6H3

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
PLEASE SEE ATTACHED

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS N/A

26848

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping _____			
Photo Interpretation _____			
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
Magnetic _____			
Electromagnetic _____			
Induced Polarization _____			
Radiometric _____			
Seismic _____			
Other <u>Self Potential - 15.5 Km</u>		QM 1 to 6, 8 & 9 and 12 & 13	
Airborne _____			
<b>GEOCHEMICAL</b> (number of samples analysed for ...)			
Soil <u>416 Terrasol Multi Element</u>		Same	
Silt _____			
Rock _____			
Other _____			
<b>DRILLING</b> (total metres; number of holes, size)			
Core _____			
Non-core _____			
<b>RELATED TECHNICAL</b>			
Sampling/assaying _____			
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
<b>PROSPECTING (scale, area)</b> _____			
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres) <u>1.5 Km Baseline, 15.5 Km Gridlines</u>		Same	
Topographic/Photogrammetric (scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
			<b>TOTAL COST</b> \$ 43,326.17

## GENERAL OBSERVATIONS AND GEOLOGICAL FRAMEWORK

From a brief examination, during my one-day field visit, of recent core from drill holes beneath the Afton pit it would seem that there is potential for Pd mineralization within the area in general, in addition to concealed Cu/Mo/Au porphyry deposits. Of note is the fact that the Pd mineralization is considered to be associated with mafic rocks, and the GM claim blocks incorporate land that previous workers have interpreted to be underlain by mafic volcanics.

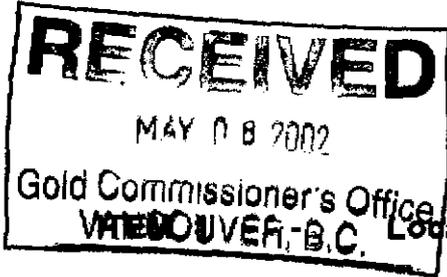
The GM claim blocks comprise an area of rolling hills with a vegetation cover dominated by Ponderosa pine and Douglas fir in an open parkland environment at an elevation of 2700' (approx. 920m a.s.l.). The general consistency to the pale brown colour, silty texture and depth of soil profiles renders the soils as an appropriate medium for collection and inter-site comparisons of analytical data. In some areas, notably draws, the soils are a little more enriched in clays. There are several open areas devoid of trees and shrubs that are present as topographic depressions. One of these was examined, and a soil pit was dug. At a depth of about 1 m the soil was still very rich in organic material. Such areas were avoided and sampled only on their margins in order to obtain soils of a similar nature to the rest of the claim blocks.

The GM claim blocks are covered almost entirely with a blanket of glacial till. The only outcrop has been described as a mafic tuff (Sugar Loaf unit) near the eastern limit of the survey area (L.900S, 500E). Geological work by others suggests that the tills overlie mostly mafic volcanic rocks of the Upper Triassic Nicola Group with the predicted contact with the Iron Mask batholith (Triassic/Jurassic) in the northeastern corner of the survey area. This contact is represented by the Cherry Creek Fault – a major northwest-trending lineament (Kwong, 1987; Monger, 1989). Rocks of the Nicola Group from the general area are known to comprise metabasalts, meta-andesites and tuffs which, at the fault contact, are predicted to be juxtaposed to the Sugar Loaf unit of the Iron Mask batholith comprising porphyritic hornblende +/- augite microdiorite (Kwong, 1987). Ultramafic picrite outcrops approx. 2 km northwest of the survey area.

Geophysical work carried out by Gold Mask Ventures had indicated several magnetic anomalies of interest, but their significance needs to be established. Diamond drilling, overburden drilling, trenching, or geochemical surveys can only effectively carry this out. Because the drilling and trenching will be expensive, it was recommended that they only be undertaken following closer refinement of the anomalous levels of Pd, Pt, Au and base metals that were established during our orientation surveys. It was recommended that in order to refine these targets an appropriate geochemical exploration survey should be undertaken.

**GOLD MASK LTD.**

**GEOCHEMICAL AND GEOPHYSICAL ASSESSMENT REPORT  
ON THE GM CLAIM GROUP TO FEBRUARY 6, 2002**



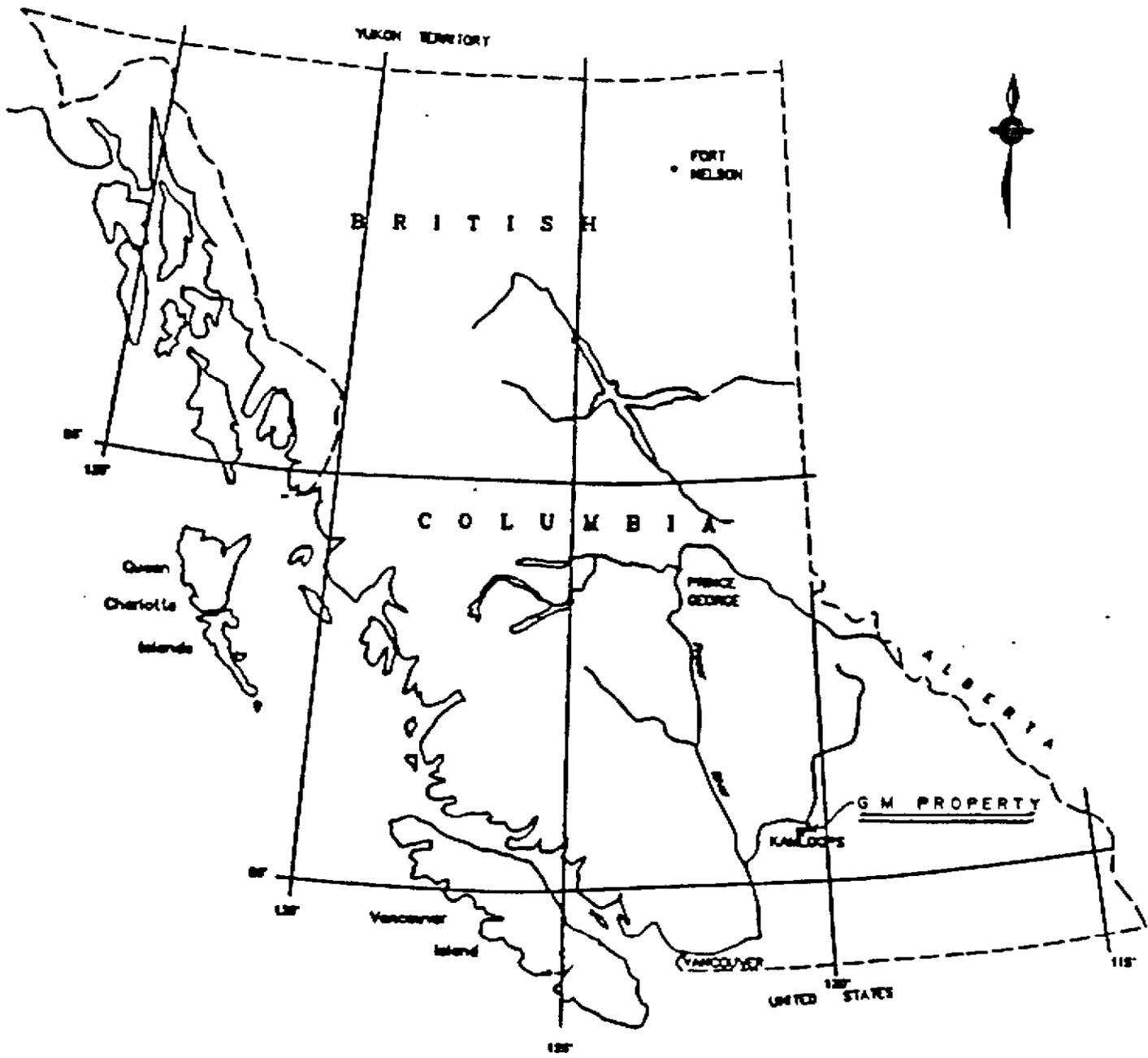
**TABLE OF CONTENTS**

- 2 - **GM Claims Map in the Kamloops Mining Division**
- 3 - **Exploration Grid Location Map**
- 4 - **Magnetometer Map**
- 5 - **A Report on the Terrasol Geochemical Survey  
By Dr. Colin Dunn (24 Pages)**
- 5a - **Terrasol Geochemical Survey Appendix I  
(14 Pages)**
- 6 - **A Report on the Self Potential Survey  
By Larry D. Lutjen**
- 7 - **A Report on the Terrasol Survey  
By Larry D. Lutjen**
- 8 - **The Itemized Cost Statement**
- 9 - **Writers Certification (4 Pages)**

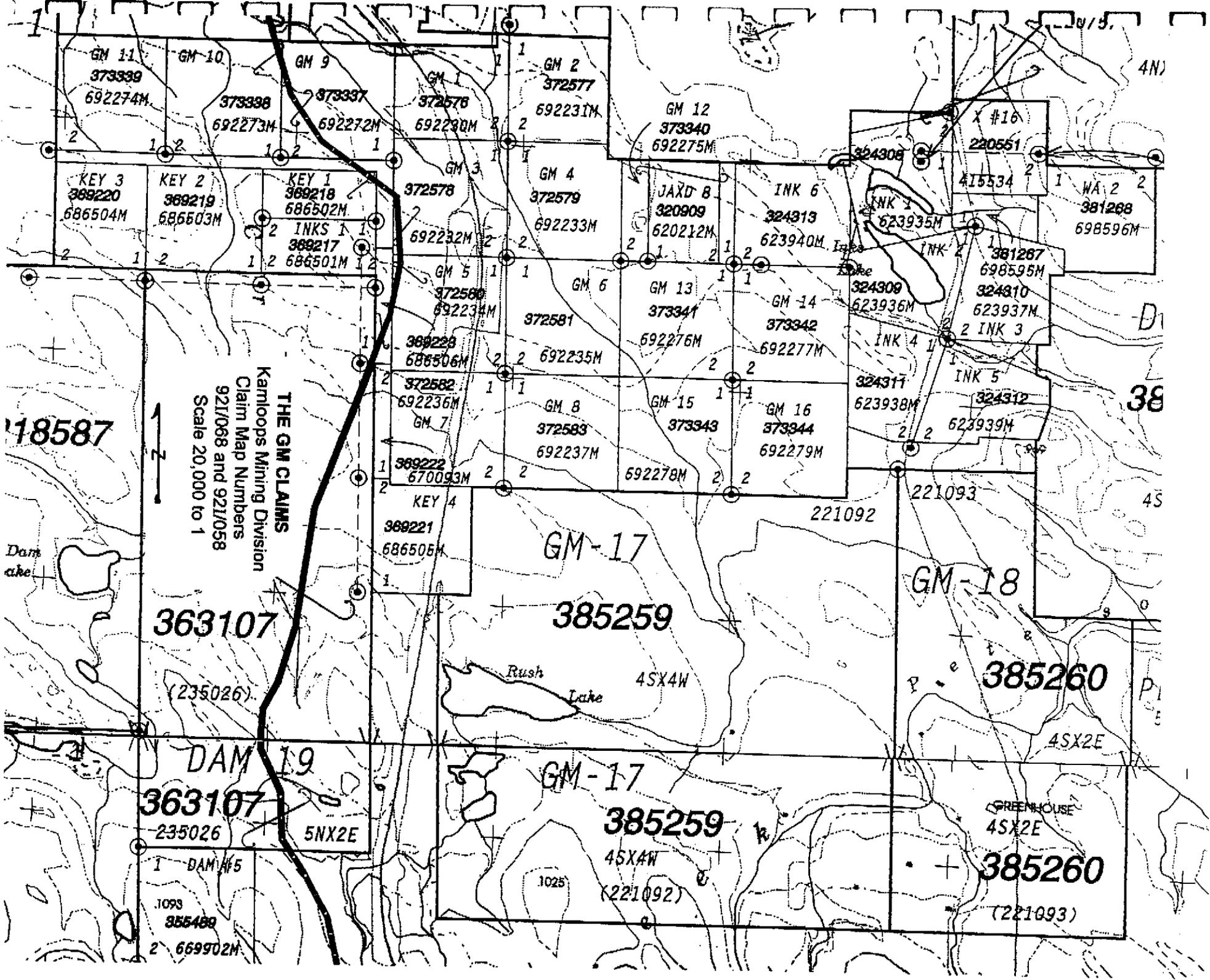
**GEOLOGICAL SURVEY BRANC**  
ASSESSMENT

- Back Pouch:**
- 1. **Plate for Self Potential Survey**
  - 6. **Plates for Terrasol Survey**

**26,848**



G M PROPERTY  
LOCATION MAP



**THE GM CLAIMS**  
Kamloops Mining Division  
Claim Map Numbers  
921/068 and 921/058  
Scale 20,000 to 1

**363107**  
(235026)

**363107**  
-235026

DAM #5  
1093  
355489  
2 669902M

**GM-17**

**385259**

**GM-17**

**385259**

4SX4W  
(221092)

**GM-18**

**385260**

**385260**

GREENHOUSE  
4SX2E  
(221093)

18587

38

45

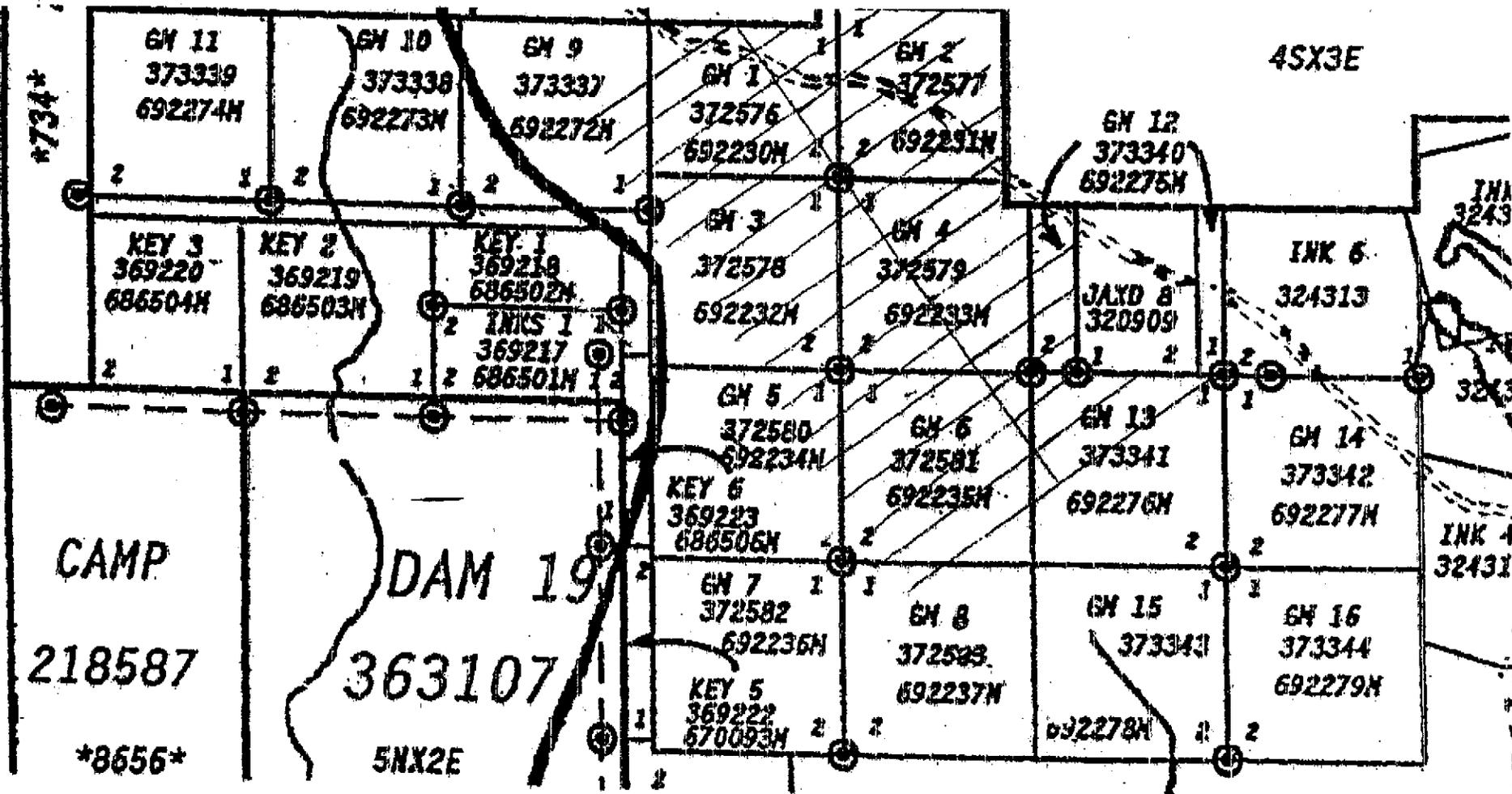
0

1

2

3

4



The Exploration Grid Location Map  
The Baseline is 1.5 km

The Afton Haul Road - — — — This road follows along the contact of the Nicola Mafic / Ultramafic rocks with the Iron Mask Batholith.

005 1005 2005 3005 4005 5005 6005 7005 8005 9005 10005 11005 12005 13005 14005 15005

1125	1385	2632	2931	2131	2177	2159	2421	2225	2122	2274	2264	2198	2369	2455	2615
1110	1401	2356	2101	2194	2084	2082	2234	1980	2316	2645	1994	2371	2418	2431	2201
1102	1318	2288	2044	2148	2011	2218	2134	2005	1976	2347	1934	2366	2418	2488	2131
1001	1325	2215	2044	2144	2041	2257	1921	1813	2192	1753	2521	2309	1923	2111	1958
481	1493	2110	1984	2141	1951	2027	1818	1877	2182	1661	1525	2177	1761	2043	1818
809	1574	2035	2015	2223	1973	2130	2013	1811	2072	2777	2287	2194	1908	1845	1863
572	1542	1745	2022	2281	1849	1760	2125	1731	2074	2645	2449	2109	1900	1765	1857
535	1262	1896	2002	2127	1904	1924	2034	2038	1645	2374	2434	1878	1748	1627	1585
705	841	1974	2013	2157	2026	2106	1874	1785	1753	2357	2465	1835	1687	1587	1532
942	1419	1964	2020	2114	2028	2098	1946	1634	1938	2373	1908	2150	1466	1511	1221
927	1051	1905	2081	2087	1875	2074	1970	1762	2170	2285	2284	2463	1383	1356	1246
861	930	1933	2147	2030	1814	2002	2048	2169	2125	2237	2254	1903	1561	1208	1381
1013	920	1963	2140	1981	1974	2004	1901	2230	2144	2207	1895	1849	1571	1435	1208
945	794	1842	2120	2025	1910	2135	1970	1930	2222	1745	1970	1854	1485	1356	964
1171	951	1931	1914	1987	1911	1894	1790	1982	1921	1879	2121	1793	1414	1105	988
1274	1114	1922	1884	1900	1958	2000	1811	2108	1831	2037	2214	1542	1332	841	1358
1486	1127	1863	2044	1933	1838	1763	1777	1844	2009	2272	2049	1437	1201	915	1138
1400	1183	1777	1962	2081	2044	1765	1772	2002	1961	2129	1751	1487	970	1001	1143
1445	1333	1830	1729	1942	1815	1785	1516	1394	1677	1687	1505	1310	1195	1036	1438
1300	1244	1777	1861	1841	1576	1933	1598	1585	1931	1650	1383	1178	1170	1011	1535
572	1047	1668	1843	1775	1575	1870	1355	1552	1449	1271	1313	1028	1274	1833	1834
1054	983	1624	1534	1454	1602	1590	1563	1467	1377	1200	1245	1244	1464	1961	2158
1174	1174	1773	1417	1980	1813	1132	1385	1434	1143	1037	173	1554	1770	2053	2384
1413	1300	1364	1218	1847	1250	1441	1345	1472	1013	805	1044	1828	1810	122	2281
1531	1376	1155	1471	1574	1243	1451	1525	1488	1070	855	1044	1044	1044	2011	2074
1871	1052	1286	1300	1302	1403	1303	1503	1503	841	1302	1000	1133	1810	2216	2246
1488	1159	1522	1870	1409	1411	1364	1152	1302	1070	1528	1783	1819	2076	2551	2462
1624	1241	1581	1712	1498	1418	1237	1154	1095	1405	1456	1778	1824	2117	2315	2652
1630	1224	1009	1685	1554	1304	1274	1044	677	1472	1605	1809	1702	2174	2411	2404
1914	1451	1730	1573	1042	1301	1212	1019	991	1536	1574	1821	1804	2242	306	2764
2018	1603	1573	525	903	1302	1156	1475	1154	1367	1077	1877	1830	2444	2413	2178
1745	1745	1573	1127	1254	1246	1244	1464	1447	1005	1613	1875	1830	2413	2400	2172
1946	1574	1575	1227	1154	1077	1345	1347	1532	1441	1763	1810	1817	2336	2244	2214
1264	1553	1332	463	1148	961	1223	1652	1502	1534	1761	1846	1761	2507	1000	2044
2004	144	1274	1012	1102	1047	1174	1511	1511	1516	1724	1761	1681	2555	2400	1879
1443	1707	1054	911	1170	1034	1024	1492	1584	1647	1647	1608	1648	2700	2400	2311
1643	183	881	1042	1174	1494	1494	1651	1451	1743	1616	1621	1844	2307	2474	2505
1502	183	880	1114	811	1195	1524	1545	1794	1764	1503	1787	2104	2794	2401	2464
1838	1744	101	820	843	1231	1724	1657	2077	1616	1773	1960	2244	2858	2504	2506
1860	1871	1025	602	1051	1491	1754	1694	1812	1737	2086	1741	2245	2231	2718	2674
1757	1888	2	1089	1179	1591	1730	2003	1904	2100	2124	1924	2374	2154	2571	2822
1815	1900	408	624	1214	1535	1907	2038	2114	2247	2200	1901	2470	2309	2403	3074
2055	2057	1471	1471	1867	1867	2058	2058	2231	2274	2274	2051	2670	2360	2210	2284
2114	2054	614	813	1471	1867	2058	2231	2274	2274	2274	2051	2670	2360	2210	2284
1887	2257	1184	764	1410	2201	2176	2204	2371	2447	2447	2141	2697	2607	1113	2447
1870	2217	1184	764	1410	2201	2176	2204	2371	2447	2447	2141	2697	2607	1113	2447
2051	2313	1635	1744	1902	2064	2233	1455	2308	2475	2475	2224	2124	1891	1815	1822
2074	2313	1635	1744	1902	2064	2233	1455	2308	2475	2475	2224	2124	1891	1815	1822
2157	2331	2002	2044	2177	1574	1747	1204	1204	2037	2457	2112	1719	1733	1722	1815
2244	2244	2024	2381	2502	1781	1351	1282	1012	1571	2212	1977	1854	1934	1602	1741
2322	2420	2024	2381	2502	1781	1351	1282	1012	1571	2212	1977	1854	1934	1602	1741

145° AZIMUTH  
 100M 200M 300M 400M 500M

NO. 2 TITLE TOTAL GAMMA READING  
 SEE APPENDIX 5 FOR LISTING  
 SOURCE GAMMA FROM EARTH SURFACE

<b>GOLD MASK VENTURES LTD.</b>		
<b>GM CLAIM GROUP</b>		
<b>MAGNETOMETER SURVEY</b>		
92L9W	Kamloops M.F.	October 2000
Drawn: L.D.L.	Scale 1:5,000	Figure 1

This plate defines the magnetometer low that is referred to on the terra sol plates

This work was done 2002

**Colin E. Dunn, PhD, P. Geo**

*Consulting Geologist/Geochemist*  
8756, Pender Park Drive, SIDNEY, BC, V8L 3Z5, CANADA  
(Tel. 250-655 9498)  
(Fax. 250-655 9408)  
e-mail colindunn@shaw.ca

Richard Lodmell  
Gold Mask Ventures  
PO Box 1192  
Stn. Main  
Kamloops  
BC V2C 3K4

13<sup>th</sup> March 2002

Dear Richard and Larry

I am pleased to submit, herewith, my report on the Terrasol geochemical data obtained on the soil samples from your GM claim blocks. There are some interesting patterns of element distributions and associated suites of elements that appear to make geological and mineralogical sense. This should be considered a first pass assessment of the data, since, as your program develops, I'm sure some of the concepts will evolve. Just to reiterate, keep in mind that from a selective leach dataset of this sort there is no way of assessing whether the 'highs' indicate significant mineralization or just sub-economic geochemical associations. Also, don't just focus on the highs – 'lows' surrounded by a series of 'highs' can be equally significant. As with any exploration program, the final assessment can only come from the drill. The factors that I consider to be of particular interest are the multi-element associations that provide encouragement for further investigation.

As mentioned both on the phone and in my e-mail of yesterday, I can provide the maps in digital form on a CD – let me know the format that you prefer and I can prepare copies for you.

I hope you find the data of use in your exploration program. Please advise me if I can be of further assistance.

Yours sincerely



Colin E. Dunn

## EXECUTIVE SUMMARY

Selective leaching of soil samples provides a means to determine concealed zones of metal enrichment. The PGE TerraSol<sup>sm</sup> technique offered by Activation Laboratories (ActLabs) relies on a weak acid attack of mostly manganese and iron oxide coatings to soil particles, upon which elements that have migrated upward from zones of metal enrichment may become loosely attached. They are typically present in the ppb range and, once released by selective leaching, can be determined and quantified by inductively-coupled plasma mass spectrometry (ICP-MS).

The GM claim blocks are almost entirely covered by a blanket of glacial deposits such that short of drilling and trenching, exploration must rely upon geophysical and geochemical methods to assist in locating zones of metal enrichment. Further to positive geophysical indications established by Gold Mask Ventures, soils were collected from 359 stations within a 1km x 1.5km block and submitted to ActLabs for PGE TerraSol<sup>sm</sup> determinations of 60 elements by ICP-MS.

Since the method involves a selective leach, absolute concentrations are not of importance, but analytical precision (reproducibility) is imperative for meaningful interpretation of the multi-element distribution patterns – both positive and negative. After several iterations to obtain stable data, a dataset of adequate quality was obtained. Each element was gridded by kriging and percentile values determined for plotting. In addition, kriged data, unconstrained by percentile values, were forwarded to ActLabs for their interpretation of the element distribution patterns.

The data show that most of the slightly elevated precious metal values, although all close to the detection limit, occur in the northern part of the survey area.

Elevated levels of many elements, including Cu, Mo, Re, As and Hg, occur close to the northwesterly trend of the haulage road. A review of the multi-element associations (high and low values) suggests that this trend is not an artifact of road construction or contamination, but is probably reflecting the location of the Cherry Creek Fault and, therefore, the contact between the Iron Mask batholith to the NE with the Nicola volcanics. Multi-element patterns, notably Hg, also suggest a conjugate set of faults that trend at ~60°.

Nickel closely follows the trend of the main magnetic low, which is flanked on both sides by elevated levels of the high field strength elements niobium, titanium and zirconium.

In the centre of the survey area, within the magnetic low, several elements, including Cu, Mo, V, U, W, Re, As, Sr (with traces of Au and Pt), have

elevated levels suggesting the presence of a concealed zone of metal enrichment. However, field notes should be checked to ensure that soil samples did not have an elevated organic content, because organic material can scavenge many of the elements that have elevated concentrations in this area.

In the southwest part of the survey area there appears to be a chalcophile association of elements (Cd, Zn, Pb, Ga, In, Co, Se, Pd) that indicate the possible presence of a zone with concealed sulphide enrichment.

A compilation map (Fig.13) shows an interpretation of the geochemical data. Breaks in geochemical trends suggest that there may be concealed northeast-trending faults that appear to have a dextral offset of about 100m. Five principal zones of interest are shown that would be worthy of closer investigation.

As exploration progresses, the TerraSol data should be reviewed to further refine and extract the information contained within the wealth of numbers and to determine the relevance of the patterns to the underlying geology.

*Colin E. Dunn*

Colin E. Dunn, PhD, P. Geo  
Consulting Geochemist  
Sidney, British Columbia, Canada

[colindunn@shaw.ca](mailto:colindunn@shaw.ca)



March 2002

# CONTENTS

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
<b>2.0</b>	<b>Background to the Present Survey .....</b>	<b>1</b>
	2.1 Location.....	1
	2.2 General Observations and geological framework .....	1
	2.3 Geochemical Surveys.....	2
	2.4 Recommendations.....	3
<b>3.0</b>	<b>Sample Collection and Analysis.....</b>	<b>4</b>
<b>4.0</b>	<b>Data .....</b>	<b>6</b>
	4.1 Data quality .....	6
	4.2 Data presentation .....	8
<b>5.0</b>	<b>Results .....</b>	<b>9</b>
	5.1 Precious metals.....	3
	5.2 Element enrichments along haulage road.....	10
	5.3 Molybdenum, vanadium, tungsten and antimony.....	13
	5.4 Nickel, niobium, titanium and zirconium .....	14
	5.5 Sulphide association.....	16
	5.6 Chromium hafnium, scandium and beryllium.....	17
<b>6.0</b>	<b>Discussion, Conclusions and Recommendations.....</b>	<b>20</b>

## FIGURES

Fig. 1	Sketch Map showing location of soil survey area.....	1
Fig. 2	Location of soil sample sites in GM claim blocks superimposed on predicted geology (complete till cover except for single outcrop) .....	5
Fig. 3	Comparison of distribution patterns for rhenium (Re) – first set of analytical data and final data set.....	7
Fig. 4	Comparison of distribution patterns for chromium – first set of analytical data and final data set.....	8
Fig. 5	Precious metals - Percentile plots of element concentrations	10
Fig. 6	Percentile plots of copper, thallium, arsenic and strontium ....	11
Fig. 7	Percentile plots of mercury, rhenium, lithium and indium .....	12
Fig. 8	Kriged data for europium, beryllium, gallium and thorium, showing 'lows' along road .....	13
Fig. 9	Molybdenum, vanadium, tungsten and antimony distribution patterns .....	14
Fig. 10	Nickel, niobium, titanium and zirconium distribution patterns.....	15
Fig. 11	Cadmium, Lead, Gallium and Palladium distribution patterns.....	16
Fig. 12	Chromium, Hafnium Scandium and Beryllium distribution patterns.....	17
Fig. 13	Preliminary interpretation of structure and main areas of interest.....	19

## Appendix 1

Table 1 Analytical data listings .....	10 pages
Table 2 Analytical controls .....	3 pages
Table 3 Statistical summary .....	1 page

## Appendix 2

Element plots – listed alphabetically by element

## 1.0 Introduction

On Friday 28<sup>th</sup> September 2001 I had the opportunity to drive and walk around much of GM claim blocks that comprise the area of the survey covered by this report. This served to provide the basis for the comments and recommendations that I submitted in my letter of opinion dated 29<sup>th</sup> September 2001. Of particular value were observations of the many soil pits dug during the day at scattered and representative locations over your property. These built upon my review of some preliminary geochemical data (pine bark and soils) that you sent me earlier in the year. Also taken into consideration are the results of my field experience in the general vicinity of your claim blocks.

## 2.0 Background to the Present Survey

### 2.1 Location

The northern end of the GM claim blocks are located 10 km southwest from the centre of Kamloops and 1 km south of Sugar Loaf Hill on NTS map 92I/9W (Fig. 1). The Trans Canada (Coquihalla) highway is located close to the western margin of the claim blocks.

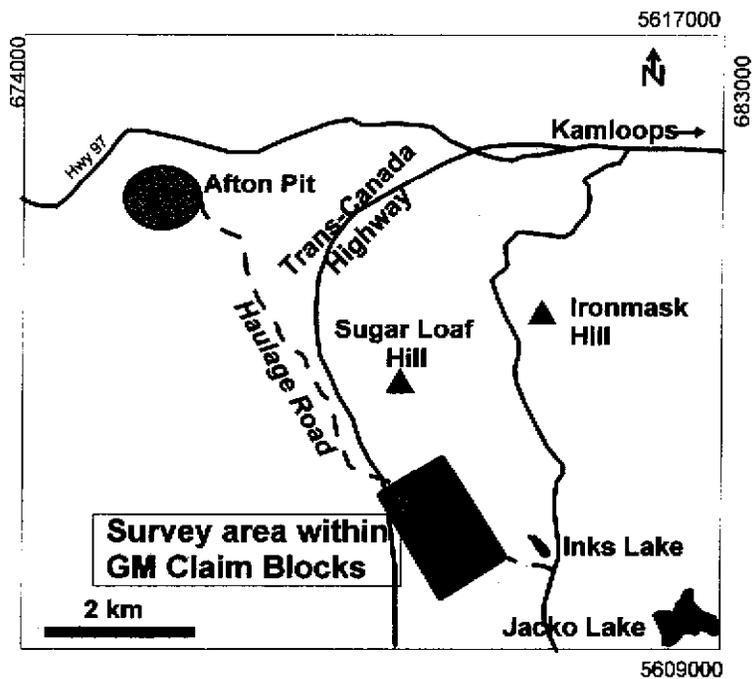


Fig. 1 Sketch Map showing location of soil survey area

### 2.2 General Observations and Geological Framework

From a brief examination, during my one-day field visit, of recent core from drill holes beneath the Afton pit it would seem that there is potential for Pd mineralization within the area in general, in addition to concealed Cu/Mo/Au porphyry deposits. Of note is the fact that the Pd mineralization is considered to be associated with mafic rocks, and

the GM claim blocks incorporate land that previous workers have interpreted to be underlain by mafic volcanics.

The GM claim blocks comprise an area of rolling hills with a vegetation cover dominated by Ponderosa pine and Douglas fir in an open parkland environment at an elevation of 2700' (approx. 920m a.s.l.). The general consistency to the pale brown colour, silty texture and depth of soil profiles renders the soils as an appropriate medium for collection and inter-site comparisons of analytical data. In some areas, notably draws, the soils are a little more enriched in clays. There are several open areas devoid of trees and shrubs that are present as topographic depressions. One of these was examined, and a soil pit was dug. At a depth of about 1 m the soil was still very rich in organic material. Such areas were avoided and sampled only on their margins in order to obtain soils of a similar nature to the rest of the claim blocks.

The GM claim blocks are covered almost entirely with a blanket of glacial till. The only outcrop has been described as a mafic tuff (Sugar Loaf unit) near the eastern limit of the survey area (L.900S, 500E). Geological work by others suggests that the tills overlie mostly mafic volcanic rocks of the Upper Triassic Nicola Group with the predicted contact with the Iron Mask batholith (Triassic/Jurassic) in the northeastern corner of the survey area. This contact is represented by the Cherry Creek Fault – a major northwest-trending lineament (Kwong, 1987; Monger, 1989). Rocks of the Nicola Group from the general area are known to comprise metabasalts, meta-andesites and tuffs which, at the fault contact, are predicted to be juxtaposed to the Sugar Loaf unit of the Iron Mask batholith, comprising porphyritic hornblende +/- augite microdiorite (Kwong, 1987). Ultramafic picrite outcrops ~2km northwest of the survey area.

Geophysical work carried out by Gold Mask Ventures had indicated several magnetic anomalies of interest, but their significance needs to be established. Diamond drilling, overburden drilling, trenching, or geochemical surveys can only effectively carry this out. Because the drilling and trenching will be expensive, it was recommended that they only be undertaken following closer refinement of the anomalous levels of Pd, Pt, Au and base metals that were established during your orientation surveys. It was recommended that in order to refine these targets an appropriate geochemical exploration survey should be undertaken.

### **2.3 Geochemical Surveys**

The following rationale was put forward:

- Only one rock outcrop is known, therefore pre-empting the possibility of conducting a litho-geochemical survey.
- The overburden cover is largely glacial till, which is material that has been transported from some considerable distance and is, therefore, exotic. A till geochemical survey may contribute useful knowledge on the vectors of transport and may help in locating the sources of precious metal-rich material. However,

this is a fairly expensive type of survey that is unlikely to provide significant new exploration targets within the claim blocks.

- Conventional soil surveys (e.g. ICP-ES analysis of an aqua regia digestion of a – 80 mesh soil sample) will only provide data on the soil profile developed on top of the till cover. Thus, it will be mostly a reflection of the chemistry of the exotic till material and will probably not add significant information to assist in locating any concealed base and precious metals that might be present on the property
- Studies have shown that there are high concentrations of various metals (notably Cu, Au, Ni, Pd) in pine bark from the survey area. Work carried out by the GSC several years ago established the Cu, Ni and Au enrichments, and the orientation surveys undertaken by Gold Mask Ventures have confirmed these high values and shown, for the first time, that Pd enrichment is present. Because the tree roots penetrate the soils to a modest depth, and integrate the geochemical signature of the loosely bound components of these soils, a systematic survey of the area using pine bark could provide new information of value to the exploration program. Since the roots attack the loosely bound metals, they do, in effect, perform a selective leach of the soils. However, the area of the claim blocks has been affected by the extensive mining activities of the past century, and it appears likely that some of the metal enrichments are attributable to airborne contamination – either direct precipitation of metal-bearing dust onto the bark, or precipitation on to the ground with subsequent dissolution and uptake by the tree roots. Furthermore, examination of the property shows that there is probably inadequate coverage of pine to conduct a comprehensive biogeochemical survey. An alternative would be to use the bark of Douglas fir, which is more evenly distributed over the claim blocks.
- Another approach suggested was to collect soils for a selective leach of metals. Most of these leach methods operate on the principle that metals move upward from concealed zones of mineralization (by diffusion, capillary action, galvanic cells, or seismic pumping), perhaps as nanoparticles and are captured on the charged surfaces of amorphous oxide coatings of soil grains – primarily Mn and Fe oxides. There are many commercially available selective leach methods – e.g. enzyme leach, hydroxylamine hydrochloride, MMI (mobile metal ions). A relatively new method is the PGE-Terrasol leach offered by Activation Laboratories Ltd. of Ancaster, Ontario. The Terrasol is a somewhat more rigorous acid attack than most other leaches, and has the particular advantage that it selectively leaches most of the precious metals. In addition, the ICP-MS analysis of the solutions provides data for more than 50 additional elements, some of which may be useful 'pathfinder' elements for locating mineralization. This technique has not been extensively tested, but it has been proven to be of use for defining PGE mineralization at the West Rambler deposit in Wyoming and Cu porphyry mineralization in Arizona.

#### **2.4 Recommendations**

In light of the above, it was recommended that, as a preliminary test, soil samples should be collected from the B-horizon (generally at a depth of 10-15 cm, as

demonstrated in the field) at intervals of 100m along lines spaced 100 m apart, throughout the extent of the established grid of approximately 1000 m by 1500 m. At approximately every 20<sup>th</sup> site (or less) a duplicate sample should be collected from a second soil pit dug about 1 m from the first. Samples should be placed in standard 'kraft' soil bags, half to ¾ filling the bag. Samples should be clearly labelled and no sample preparation should be undertaken before sending them to Activation Laboratories Ltd for analysis by their PGE-Terrasol technique. Activation Laboratories Ltd. has the highest available accreditation of any laboratory in the country (ISO 17025) and is one of the world's leading analytical facilities – especially for exploration geochemistry. It was strongly recommended that prior to submitting samples for analysis some control ('standard') samples should be inserted – at least one sample in each batch of 20. If possible, a bulk field sample should be collected (e.g. from a site at which elevated levels of Pt and Pd in the soil had been established). This provides control on precision of the analytical data. Ideally, several kilograms of material should be collected, sieved to –80 mesh and thoroughly homogenized.

In my report of 29<sup>th</sup> September it was stressed that users of PGE-Terrasol should appreciate that, although the technique *may* provide near total concentrations of the precious metals, it is a *selective* extraction, and therefore the results do not indicate the total content of metals in the samples. The extraction attacks primarily the amorphous manganese and iron coatings to soil particles, and attacks also some of the crystalline phases of Mn and Fe. Metals released from concealed zones of mineralization are considered to move upward (through either diffusion, capillary action, electrochemical cells or seismic pumping) and become trapped on the 'chemical sponge' of the oxide coatings of the soils. It is not possible to quantify element concentrations to the point that a certain level can be declared as indicative of mineralization. The technique is one of *pattern recognition* that takes a trained eye to interpret the patterns. Multi-element patterns must be examined and the spatial relationship of inter-element associations ascertained (both positive and negative values) in relation to other geological and geophysical parameters. The process is one of stacking the entire geoscience information base to provide vectors toward potential concealed mineralization. It is possible that encouraging multi-element signatures reflect geochemical signatures of slight element enrichment that are not economically viable. Only drilling and rock analysis will confirm the economic status of subtle enrichments in the surface materials.

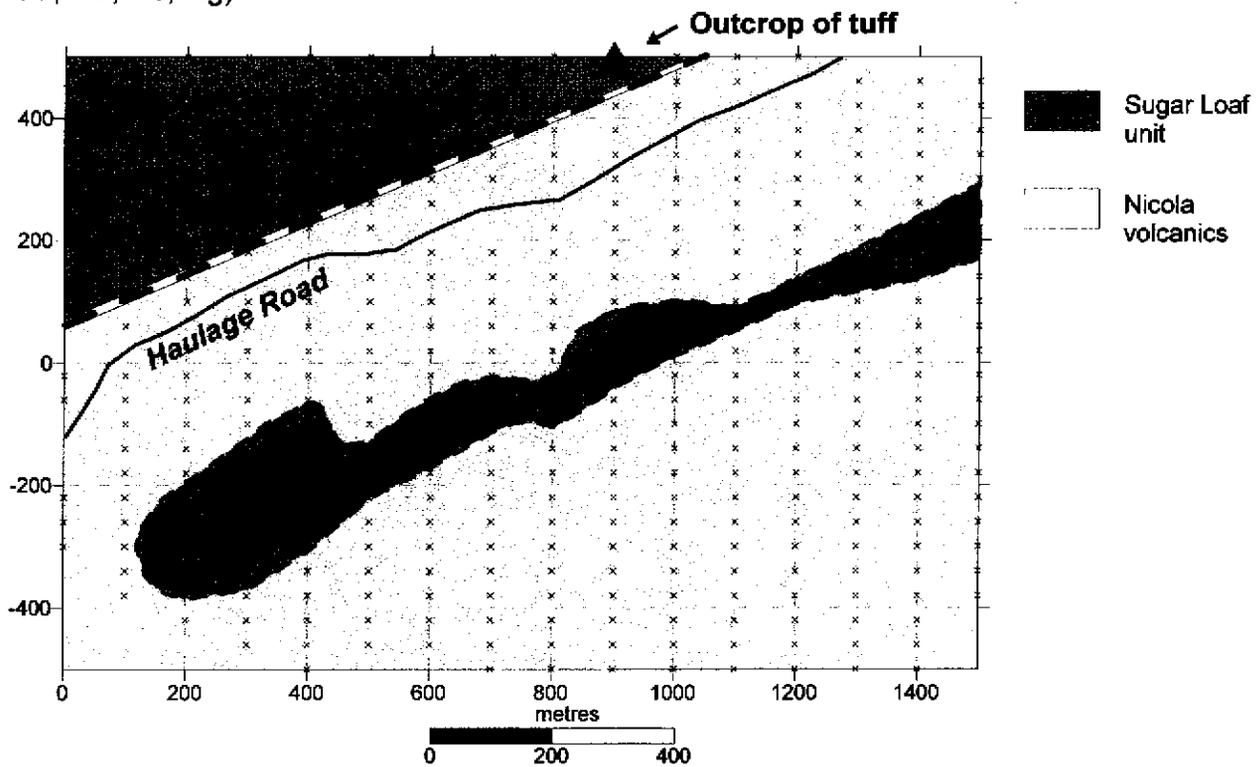
It was recommended that once data are received they should be carefully evaluated for precision and accuracy (by examining the analyses of the duplicates and control samples), and then plotted as maps. Subsequently, any trends or anomalies that appear to be of significance should be more closely examined. Any further action at that time will depend on the nature and extent of any multi-element associations.

### **3.0 Sample Collection and Analysis**

Richard Lodmell and Larry Lutjen undertook soil sample collection. I am informed that samples were collected at depths of 10-15 cm from 359 pits 40m apart along 15 lines

100m apart, trending northeast throughout several of the GM claim blocks. Figure 2 shows the sample locations with respect to the approximate location of the haulage road, the outline of a magnetic low established by Larry Lutjen, and the predicted geological substrate beneath the till cover, based on previous studies (e.g. Kwong, 1987).

Duplicate samples were not collected, but a bulk sample was obtained, homogenized and split into 15 portions for inclusion at regular intervals within the sample sequence as an over all control on analytical precision. Samples were submitted directly to ActLabs in Ancaster. I did not see the sample collection, but I am assured that samples were collected at constant depth (approx. 15 cm) and that their consistency was similar. I am advised that a few samples from the northern end of the survey area had a slightly greasy feel suggesting that they may have minor clay content. I am further assured that no samples were collected from disturbed sites – in light of the presence of the haulage road through the survey area this observation is key to some of the interpretations of the following dataset. If any sample had been from a disturbed site, or dug from a greater depth (e.g. C horizon) this would result in a different interpretation to that given in the following text and negate some of the conclusions derived from the patterns that parallel the trend of the haulage road (e.g. Cu, Re, As, Hg).



**Fig. 2: Location of soil sample sites in GM claim blocks superimposed on predicted geology (complete till cover except for single outcrop). Approximate locations of haulage road and main magnetic low are plotted.**

The suite of 374 soils samples submitted for analysis comprised 359 survey samples plus 15 quality control samples (bulk sample split to estimate analytical precision). Samples were dried at ActLabs, and prepared for analysis by method 7PGETS (PGE TerraSol<sup>sm</sup>). In their 2001 fee schedule, ActLabs describes this method as:

*"a more aggressive leach (than Enzyme Leach) that attacks all components of amorphous mixed-oxide coatings and certain crystalline iron and manganese oxides. The oxidant used in the process also dissolves a substantial portion of the Au and platinum group elements (PGE) in the soil sample. TerraSol<sup>sm</sup> performs best over shallower mineral deposits. The PGE option is particularly useful for revealing platinum group and associated trace element patterns in buried mafic sequence.*

*Pattern recognition is the key to proper interpretation of Enzyme Leach<sup>sm</sup> and TerraSol<sup>sm</sup> data, since anomaly patterns can be different from conventional geochemical data. Selective extractions have been shown to work effectively in both acidic and alkaline environments, and have been used successfully in desert, tropical, glacial and permafrost terrains."*

Upon receipt of the B-horizon samples at ActLabs they were "dried in special rooms kept below 40°C and leached (using a proprietary solution) under rigidly controlled conditions. The resultant solutions were analyzed using a state-of-the-art Perkin Elmer Sciex ELAN 6000 ICP-MS (inductively-coupled plasma mass spectrometer)".

## **4.0 Data**

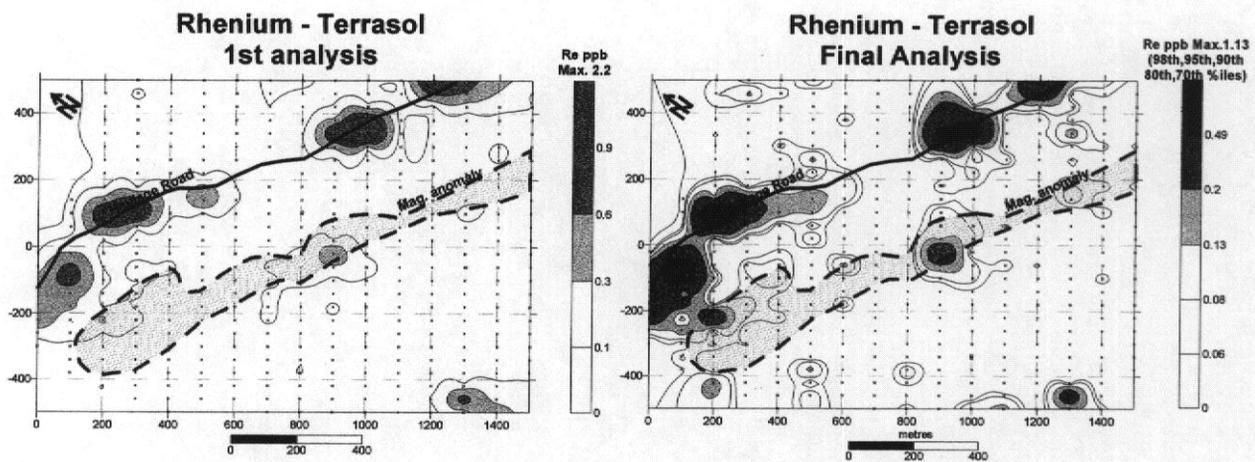
Table 1 (Appendix 1) lists all of the analytical data, as received from ActLabs. These data are included, also, as an Excel Table on the CD included with this report.

### **4.1 Data Quality**

Upon receipt in digital form, the data were reviewed and bar graphs of each element in the control samples were plotted. This approach served to evaluate the analytical precision. Absolute accuracy could not be determined, because no standards of known composition were included in the set of samples. Since absolute concentrations of elements are of no real importance to selective leach studies, this was not a concern. It is the patterns of element distribution that are of importance and therefore the analytical precision (i.e. reproducibility) is critical. From the bar graphs derived from the first set of data received it was evident that there was some instrumental drift that had occurred during analysis of the sequence of samples. Adjustment of data for a few elements did not solve all of the problems, and consequently the samples were reanalyzed. This dataset also contained some spurious data for a few elements. Detailed discussions with the analysts failed to resolve all of the problems, and so another digestion and analysis was undertaken. On February 14<sup>th</sup> a final dataset was received that was sufficiently stable for nearly all elements that some meaningful plots could be made of the data. The following observations are based on the Feb. 14<sup>th</sup> dataset. A review of the analytical precision achieved for this dataset is given in Table 2 (Appendix 1), along

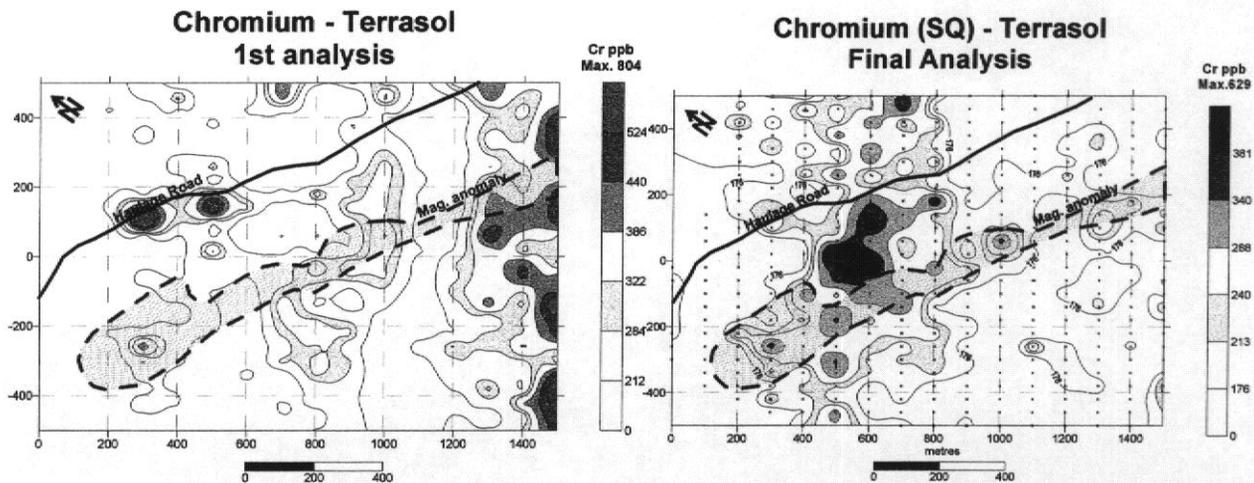
with mean value and standard deviations for each element. These data still show a modicum of variation for some elements, but there is no obvious systematic analytical drift. They are, therefore, 'fit for the purpose' (Bettany and Stanley, 2001) and, with a few exceptions, they can be plotted with confidence that distribution patterns are valid natural variations, and not an artifact of analytical determinations.

The critical importance of obtaining data of good precision is demonstrated in the following two figures in which data from the original set of analyses are plotted and compared with data from the final set of analyses used for this report. In the first pair of plots data are shown for rhenium, which, even though the standard deviation of the control samples was quite large, show that the distribution patterns from the two data sets remain essentially the same (Fig. 3).



**Fig. 3 Comparison of distribution patterns for rhenium (Re) – first set of analytical data and final data set.**

From Fig. 3 it is evident that, although the absolute numbers are different, the data from either data set could be used to determine the distribution patterns for rhenium. Note, too, that these data are from two completely separate digestions and analytical determinations of the Re content of the soils (2 separate sample splits), attesting to the fact that these variations are, indeed, true natural variations and not an artifact of the analytical methodology. This reproducibility of distribution patterns from the two analyses is typical for *most* elements, but not all. For example, Fig. 4 shows that there are dramatically different distribution patterns for Cr from the two sets of analyses.



**Fig. 4 Comparison of distribution patterns for chromium – first set of analytical data and final data set.**

Clearly from Fig.4, the wrong conclusions would be drawn from consideration of the distribution patterns obtained from the first data set. The high values to the right of the plot from the 1<sup>st</sup> analysis represent nothing more than some instrumental drift. This factor was identified from the control samples that were interspersed.

#### 4.2 Data presentation

Table 3 (Appendix 1) shows a basic statistical analysis of all elements except those that returned all values below the detection limit (Ag, Te, Rh, Ir). 'SQ' after an element indicates that the data should be considered as semi-quantitative (as reported by ActLabs). Data plots have all been prepared in the same manner after gridding the data using the kriging method. For the purposes of plotting the relative concentrations of elements, percentile values have been calculated and, on the element distribution maps in Appendix 2, the following colour scheme has been applied throughout.

- Purple >98<sup>th</sup> percentile
- Red 95-98<sup>th</sup> percentile
- Salmon 90<sup>th</sup>-95<sup>th</sup> percentile
- Yellow 80<sup>th</sup>-90<sup>th</sup> percentile
- Green 70<sup>th</sup>-80<sup>th</sup> percentile

In addition, contours are plotted of the 50<sup>th</sup> percentile with contour values printed, but (as requested) no colour has been provided for this interval in order that the higher values stand out. This presentation serves to provide a picture of areas where relatively high concentrations of elements are located. However, for Terrasol (and other selective leaches) data interpretation should not rely entirely on relatively high concentrations of elements. It must be remembered that the technique is only a *selective leach* that extracts only those elements attached to oxide coatings of the soil particles.

Consequently, areas of element *depletion* can be as significant as those with element enrichment (i.e. leached zones can be identified).

The CD that accompanies this report includes:

- **map plots of the percentile values**, as shown in hard copy in **Appendix 2**, with the maps sorted in alphabetical order of the elements. Since the rare earth elements (REE) all show much the same distribution patterns (because of their chemical coherence in Nature), only representative REE are plotted – La, Ce (representing the light REE), Eu (because of its multi-valency states) and Yb (representing the heavy REE). Consequently there are no plots for Pr, Nd, Sm, Gd, Dy, Ho, Er, Tm and Lu.
- **map plots (also kriged) of all values**, without constraining the data with percentile values. These are the types of plot that ActLabs typically use for elucidating the significance of element distribution patterns. Copies of all of these maps were sent to ActLabs for their review and comments and, after discussions with Greg Hill and Bob Clark (both of ActLabs) additional information that they have supplied is included in this report. Hard copy of these plots is not provided in the appendices, but some relevant plots are included in the following section.

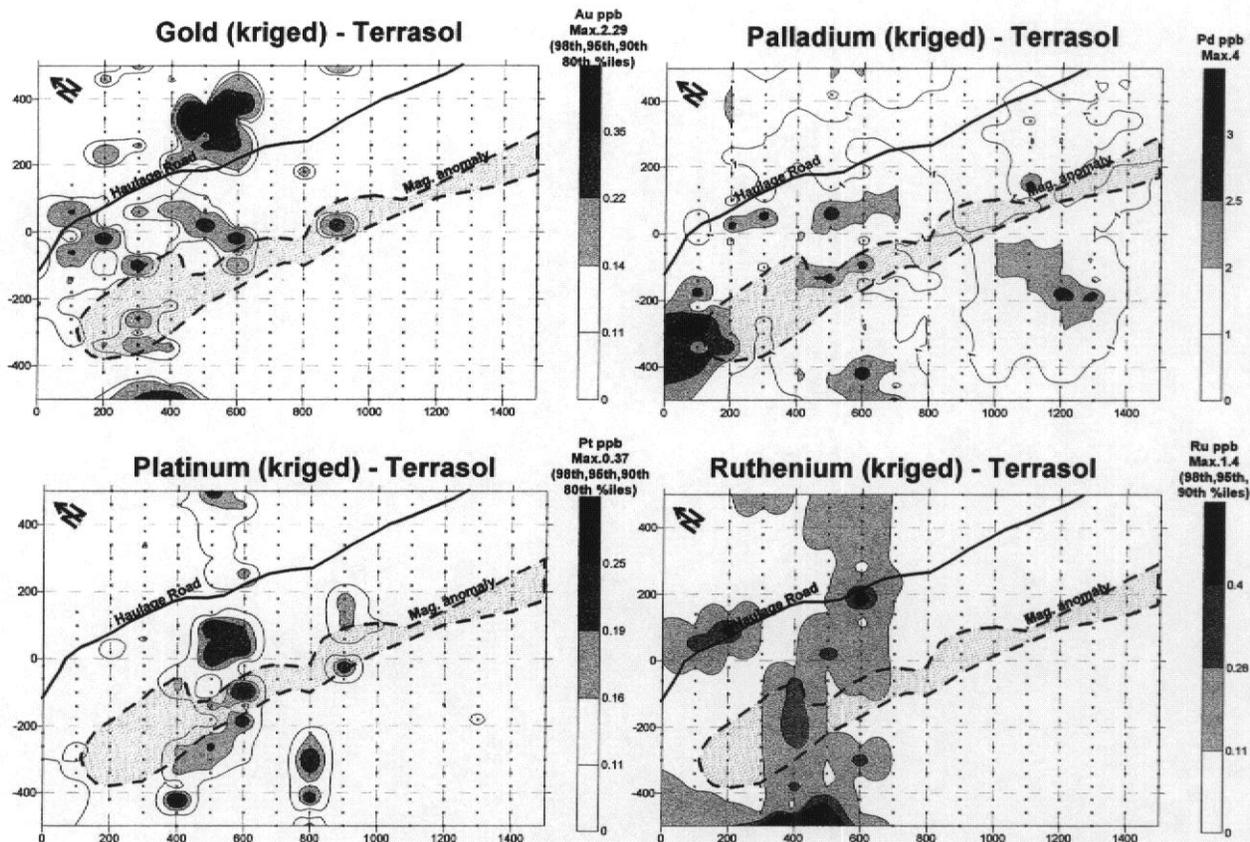
## 5.0 Results

For ease of discussion, the elements have been grouped in accord with similar distribution patterns.

### 5.1 Precious Metals

It is important to note that all samples yielded concentrations of the precious metals either close to or below the detection limit (d.l.). At these concentrations the reproducibility is typically +/- 100%, and therefore these data should be treated with caution and viewed in context of other geochemical associations and any geological and geophysical data.

No sample yielded a detectable level of rhodium (d.l. 5 ppb Rh) or iridium (d.l. 10 ppb Ir). A few samples yielded greater than the detection level of 0.1 ppb Os and 0.2 ppb Ru. Figure 5 shows that detectable levels of the precious metals cluster mostly in the northern part of the survey area (i.e. left side of map). Palladium has slightly elevated levels in a few samples from the southern part of the survey area at sites (e.g. 1200S, 200W) where there appears to be some enrichment of sulphides (see later discussion). Detectable levels of Pd occur at the northwestern end of the magnetic low. Of note are the slightly elevated levels of gold north of the haulage road, and coincident subtle enrichment of Au, Pd, Ru and Os (see osmium map in Appendix 2) around 500S,100-200E. Slightly elevated levels of Au and Pt occur in the center of the magnetic low, around 900S and the baseline.



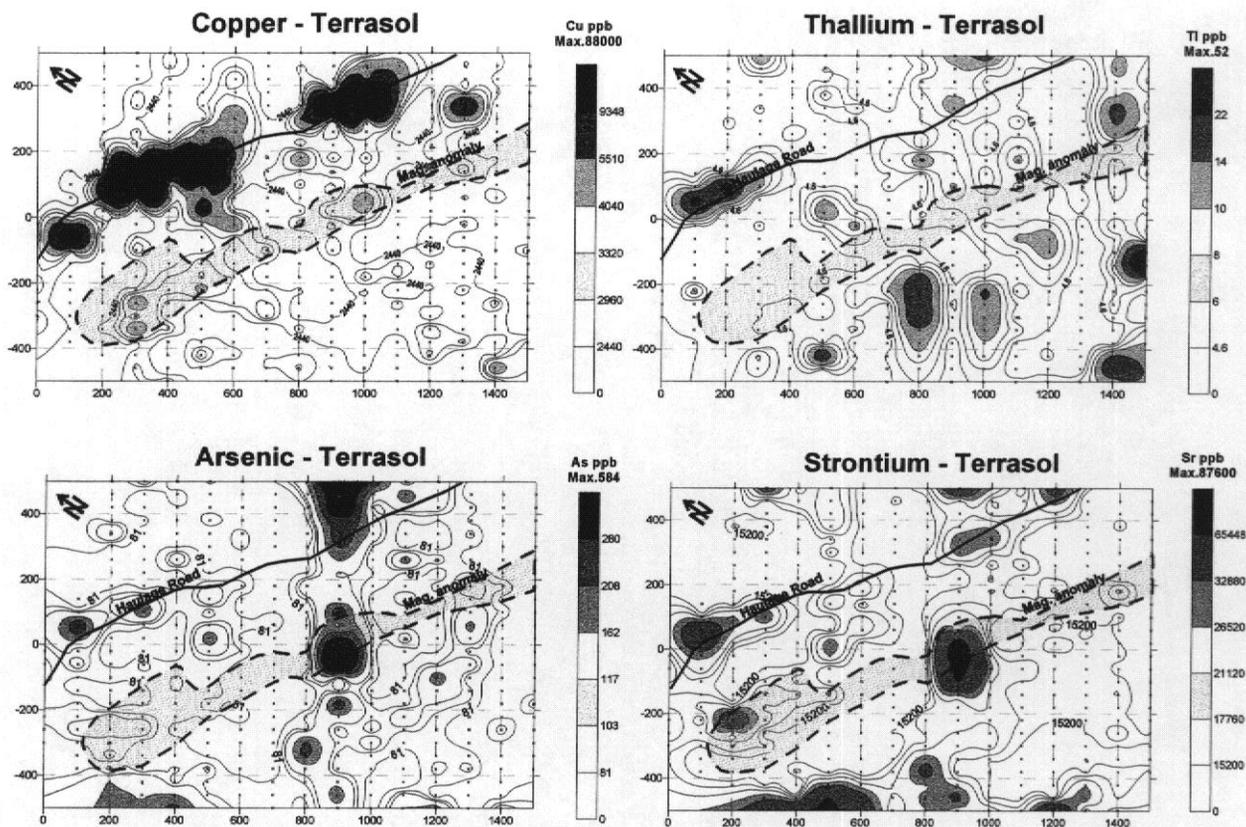
Precious metals - percentile plots of element concentrations

**Fig. 5 Precious metals - Percentile plots of element concentrations**

### 5.2 Element enrichments along haulage road

Figure 6 shows a linear zone of element enrichments that parallel the haulage road. At first sight it would seem that these enrichments might be due to contamination of the samples from the road itself and the haulage traffic that has passed along it. I am told that these samples were not collected from disturbed sites, and it appears unlikely that, since they were collected at depths of about 15 cm, they can be due to any dust contamination from the road. There does remain the possibility that metal-rich dust from the road settled on the surface and was subsequently leached downward, but this appears unlikely, especially in view of the multi-element suite of samples that show this trend.

Figure 6 shows that there are high levels of leachable copper (up to 88,000ppb [88 ppm] Cu) along the trend of the road. Thallium, arsenic and strontium also follow this trend, but also display a northeasterly trend along line 800 and 900S (approximately 060°). The implication of this second trend is that it represents a conjugate set of enrichments along the plane of concealed faults.

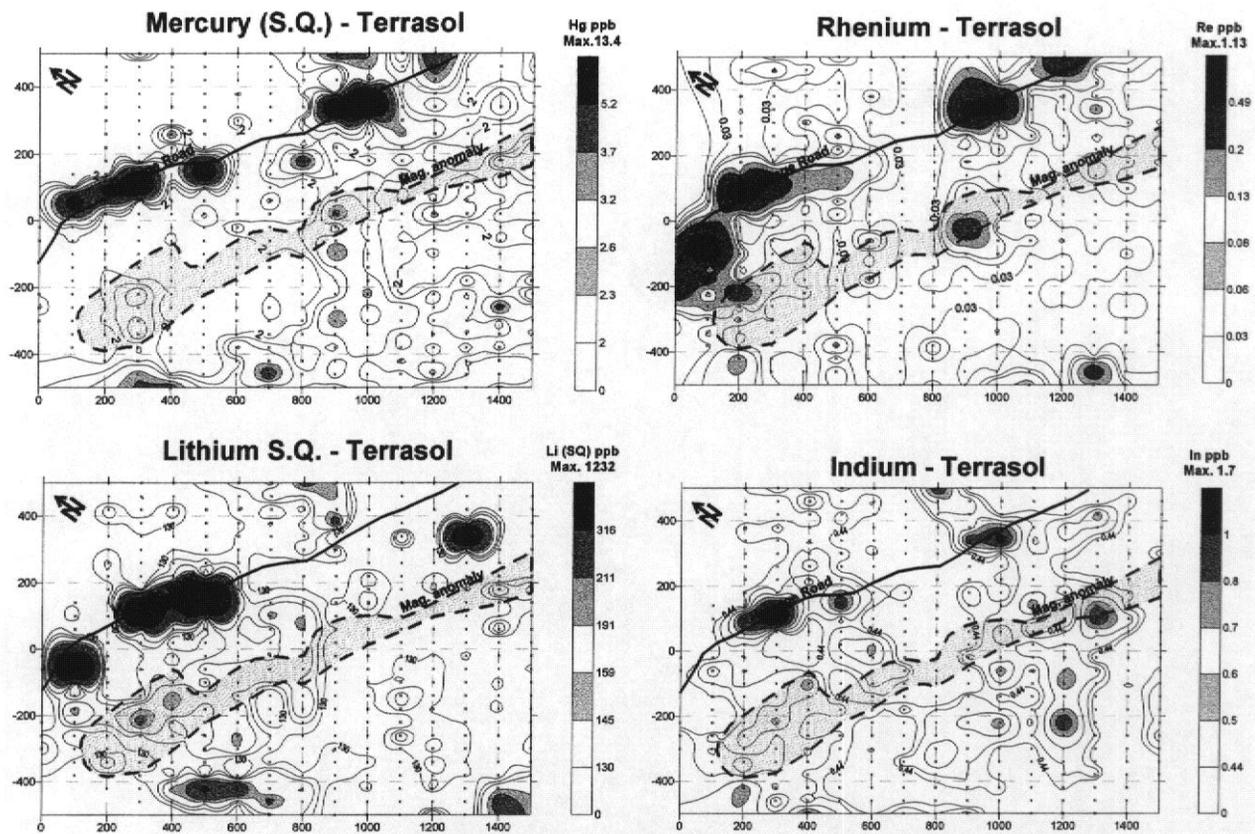


Elevated levels of Cu, Tl, As and Sr along trend of haulage road. Note conjugate (ENE) trends. Percentile plots (98th, 95th, 90th, 80th, 70th, 50th).

**Fig. 6 Percentile plots of copper, thallium, arsenic and strontium.**

From Fig. 6 it is evident that the highest concentrations of arsenic occur in the northeast, close to the solitary outcrop in the area, and over the central part of the magnetic low. At the latter site there is coincident enrichment of a number of elements, including strontium, molybdenum, vanadium and slight enrichment of Au, Cu, and Pb. Provided this sample did not have a slight enrichment of organic matter (which tends to concentrate these elements), then this site is worthy of closer investigation. The Cu level is also elevated in the southeast (L1300S.320E).

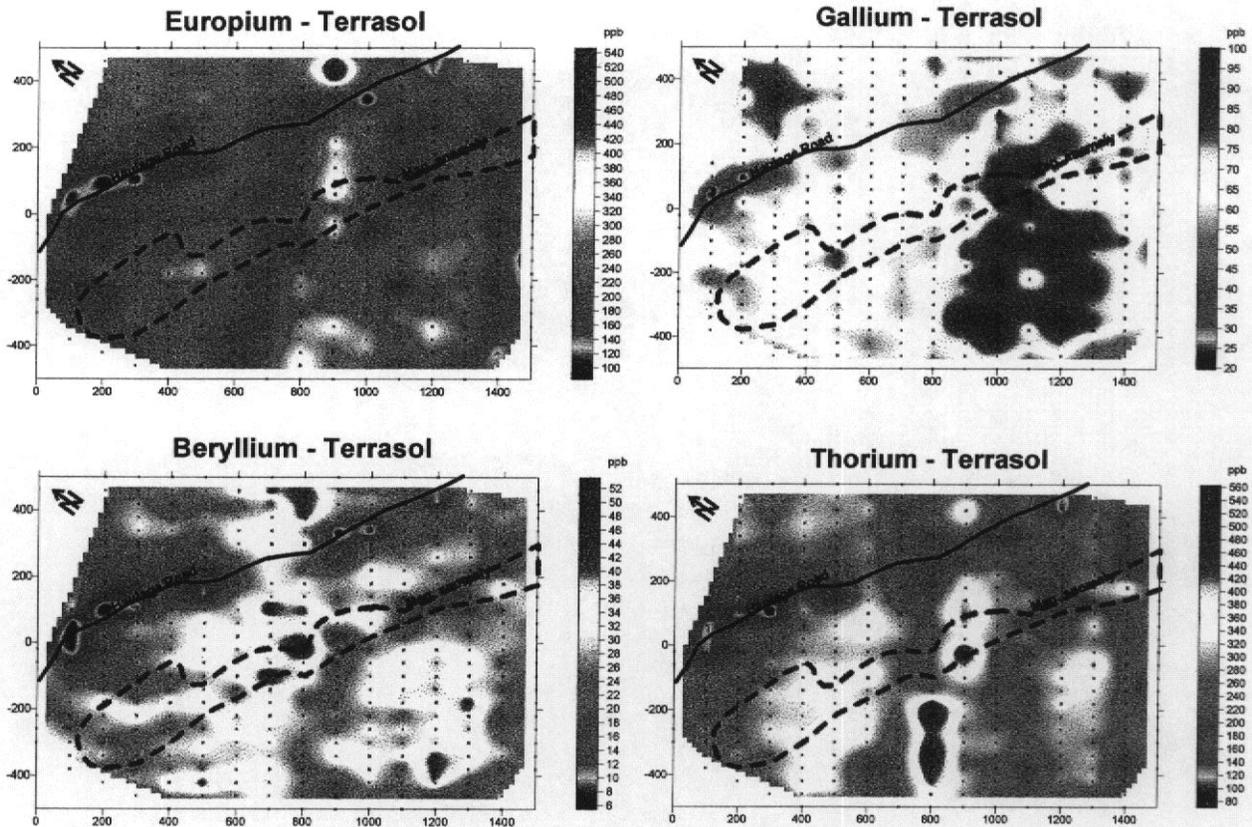
Figure 7 shows that, in addition to elements shown in Fig. 6, there are similar enrichments along the haulage road of mercury, rhenium, lithium and indium. Furthermore, the mercury and, to a lesser extent, the rhenium exhibit the same conjugate patterns of enrichment as those seen for some elements in Fig. 6. In light of the volatile nature of mercury, it is likely that the mercury distribution pattern is reflecting concealed structure and/or breccia zones. If this is the case, the data indicate that the Cherry Creek Fault is a little farther to the southwest than where it has been predicted to occur by others (e.g. Kwong, 1987).



Elevated levels of Hg, Re, Li and In along trend of haulage road. Note conjugate (ENE) of Hg. Percentile plots (98th, 95th, 90th, 80th, 70th, 50th).

**Fig. 7 Percentile plots of mercury, rhenium, lithium and indium**

Further evidence that the above trends of element enrichments are related to structure, comes from consideration of those elements that are depleted along the trend of the road. Fig. 8 shows the kriged data (not defined as percentiles) of europium, gallium, beryllium and thorium. Other elements that exhibit the same depletions include germanium, hafnium, titanium, niobium and zirconium. The implication is that these elements are depleted because of leaching from a zone of weakness – i.e. the Cherry Creek fault/breccia zone. Note that in the southwest (i.e. around 900S.150W) these elements indicate a break that may reflect an offset fault. This is especially noticeable in Th, and will be discussed later.



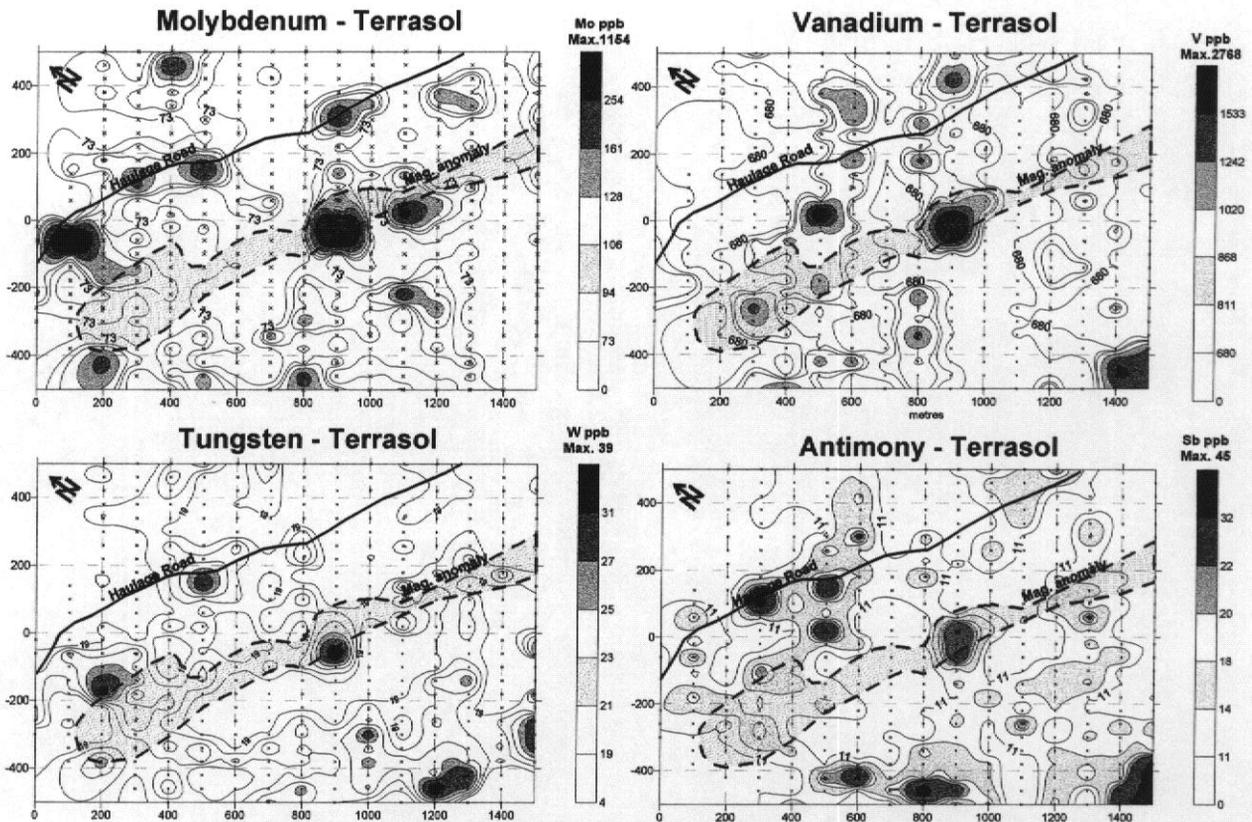
Elements showing relatively low concentrations along a trend parallelling the haulage road (similar depletions in Ge, Hf, Ti, Nb and Zr)

**Fig. 8 Kriged data for europium, beryllium, gallium and thorium, showing 'lows' along road.**

From the above patterns it is concluded that there is leakage of elements upward from concealed faults and/or breccia zones.

### 5.3 Molybdenum, vanadium, tungsten and antimony.

The common factor to these elements is the elevated level that occurs over the central part of the magnetic low, at ~900S and the baseline. The molybdenum distribution is similar to that of Cu (especially along the road) and there is a broadly similar pattern for antimony. There is a long list of elements that are moderately to slightly enriched at the 900S/baseline location, including As, Au, REE, Mn, Mo, Ni, Pt, Re, Sr, Th, W, U, and V.



Elevated levels of Mo, V, W and Sb over central magnetic low. Also elevated in this area are As, Au, REE Ni, Pt, Re, Sr, Ti, Th and U. Percentile plots (98th, 95th, 90th, 80th, 70th, 50th).

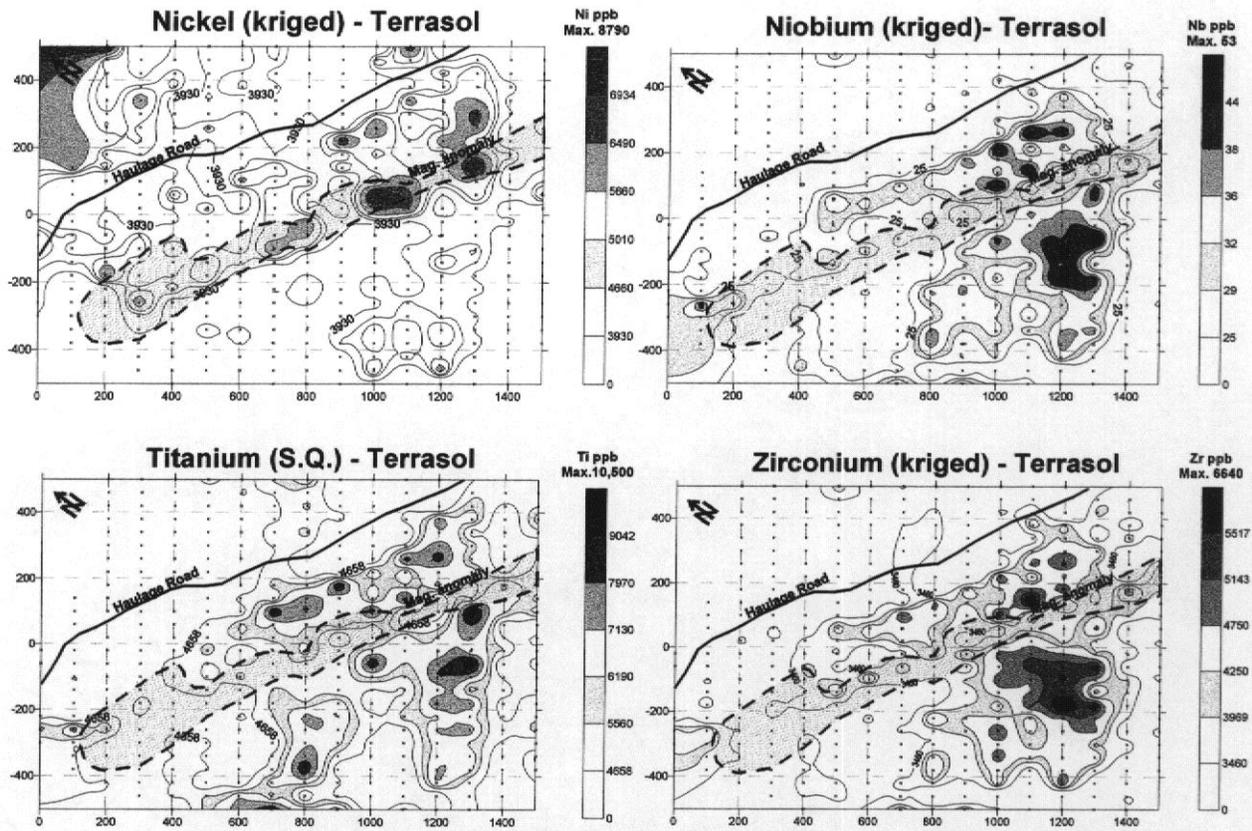
**Fig. 9 Molybdenum, vanadium, tungsten and antimony distribution patterns**

#### 5.4 Nickel, niobium, titanium and zirconium

There is a striking similarity to the trends of these elements, with Nb, Ti and Zr mostly running parallel to the margins of the magnetic low, but with similar areas of elevated levels extending to the southwest (Fig. 10). Nickel follows the same southeast-northwest trend, but with elevated levels mostly confined to the magnetic low, therefore sitting central to the peripheral patterns of the other three elements.

With respect to the magnetic low, the following relationships are observed:

- **Over the low:** relative enrichment of Ni, Co, Mo, Pb and locally As, Sb and Pd
- **East of the low:** relative enrichment of As, Be, Cr, Co, REE, Ga, Ge, Hf, In, Li, Mn, Hg, Mo, Nb, Pd, Pt, Re, Ru, Sc, Se, Sr, Ti, Th, Ti, V, Zr.
- **West of low:** relative enrichment of Ba, Cd, Rb, Ti, Rb, Zn

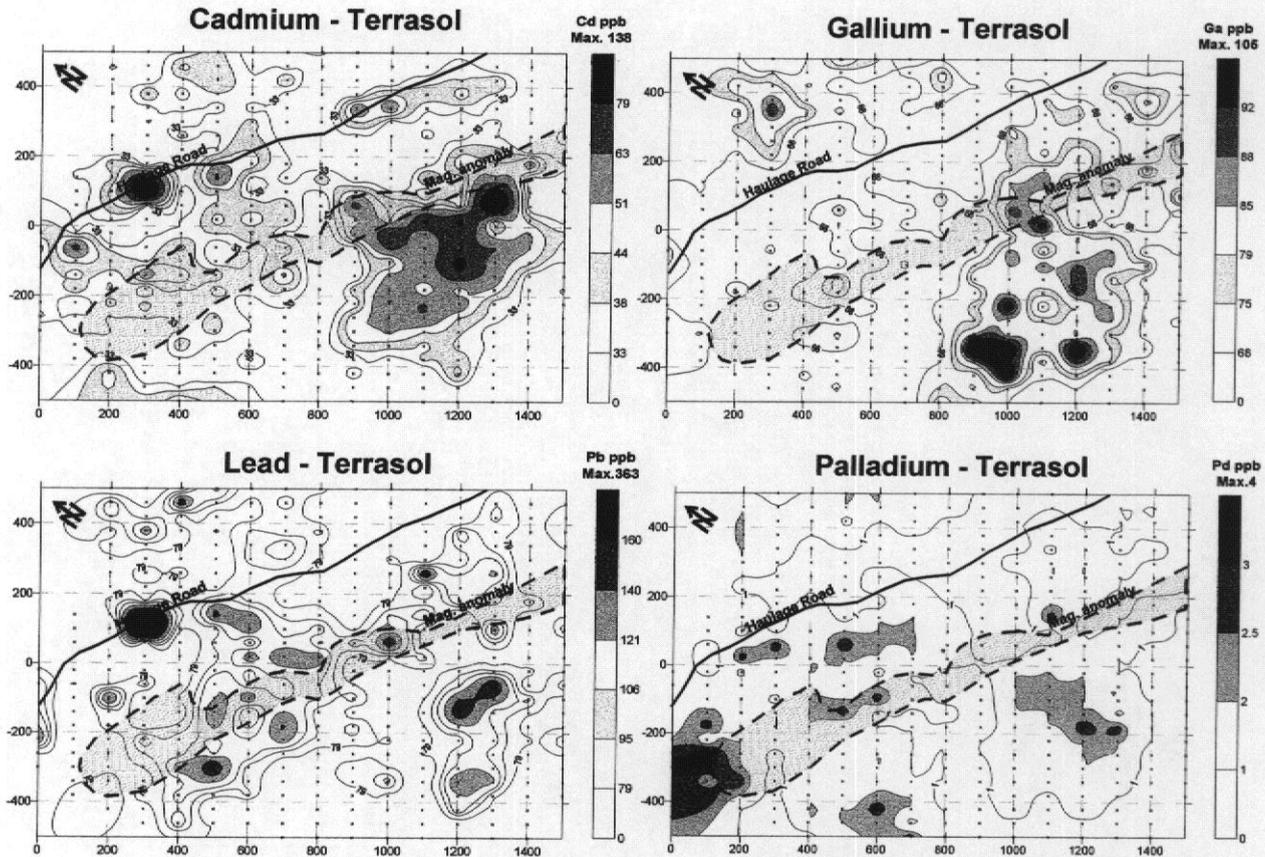


Elevated levels of Ni over linear magnetic low; depleted Nb, Ti and Zr over magnetic low, with elevated levels along the north and south margins. Note conjugate trends (ENE). Percentile plots (98th, 95th, 90th, 80th, 70th, 50th).

**Fig. 10 Nickel, niobium, titanium and zirconium distribution patterns**

### 5.5 Sulphide association

Figure 11 shows the distribution patterns of several elements that are commonly associated with sulphides – cadmium and gallium tend to follow zinc. Selenium, too exhibits some enrichment in this area, as do germanium, indium and a subtle enrichment of tin.

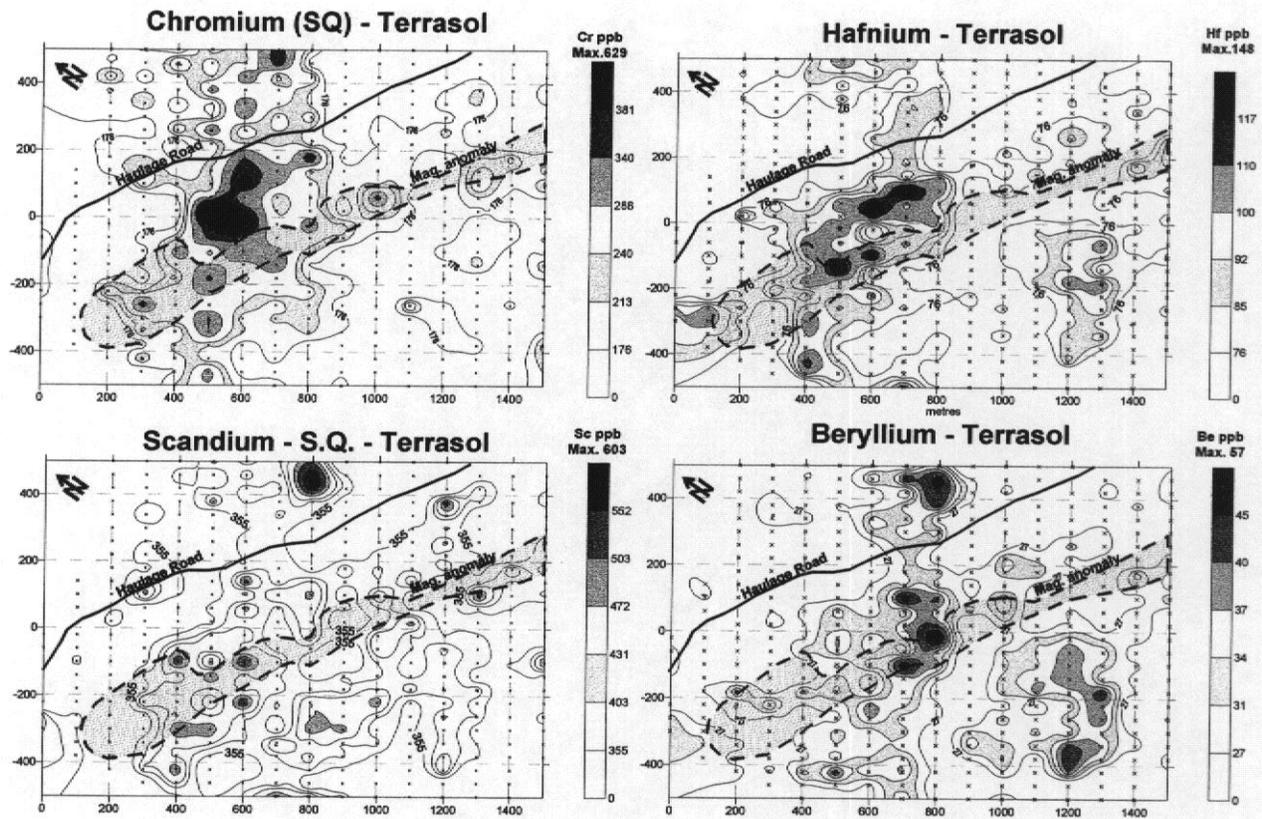


Elements showing relative enrichments in the southern part of survey area

**Fig. 11 Cadmium, lead, gallium and palladium distribution patterns**

### 5.6 Chromium, Hafnium, Scandium and Beryllium

Of note is the area in which Cr values are relatively high (Fig. 12) since this corresponds to the area of elevated levels of most of the precious metals. The implication is that this could be an ultramafic association. The significance of the other elements shown in Fig.12 is uncertain. Other elements exhibiting similar distribution patterns include barium and lead.



Distribution of Cr, Hf, Sc and Be (similar patterns for Ba and Pb)

**Fig. 12 Chromium, hafnium, scandium and beryllium distribution patterns**

## **6.0 Discussion, Conclusions and Recommendations**

The Terrasol partial extraction of oxide-phase elements associated with coatings to soil particles has provided a wealth of data comprising determinations for 60 elements on 374 samples (more than 22,000 items of data). There are many ways to synthesize and view these data, and this report presents them primarily as percentile plots. In addition, plots of kriged data, unconstrained by percentile intervals, have been prepared and examined to help elucidate the element associations and their significance.

Since Terrasol data consist of element concentrations expressed in parts per billion (or less), and only part of each element in the soils is recovered from the extraction procedure (partial leach), the approach to determining the significance of element distribution patterns is somewhat different from that of conventional element extractions using strong acids. Zones of element depletions need to be considered, as do zones of element concentrations that may be peripheral to those of 'commodity' elements that may appear directly above a zone of mineralization. Furthermore, where a zone of element enrichment in the substrate is close to the surface, the response derived from Terrasol may be directly over the source rather than peripheral to it. Consequently, at this stage of data interrogation, the primary objective has been to ascertain the validity of the data (i.e. good precision) and to provide a simple visual portrayal of the element distribution patterns. Obvious associations have been grouped together and briefly described. More subtle associations need to be considered, and the data re-evaluated on a constant basis as more geophysical, geochemical, and geological information becomes available.

Figure 13 provides a preliminary interpretation of the area based upon the Terrasol geochemical database. The inferred faults are based upon shifts in element trends (after due consideration of data quality).

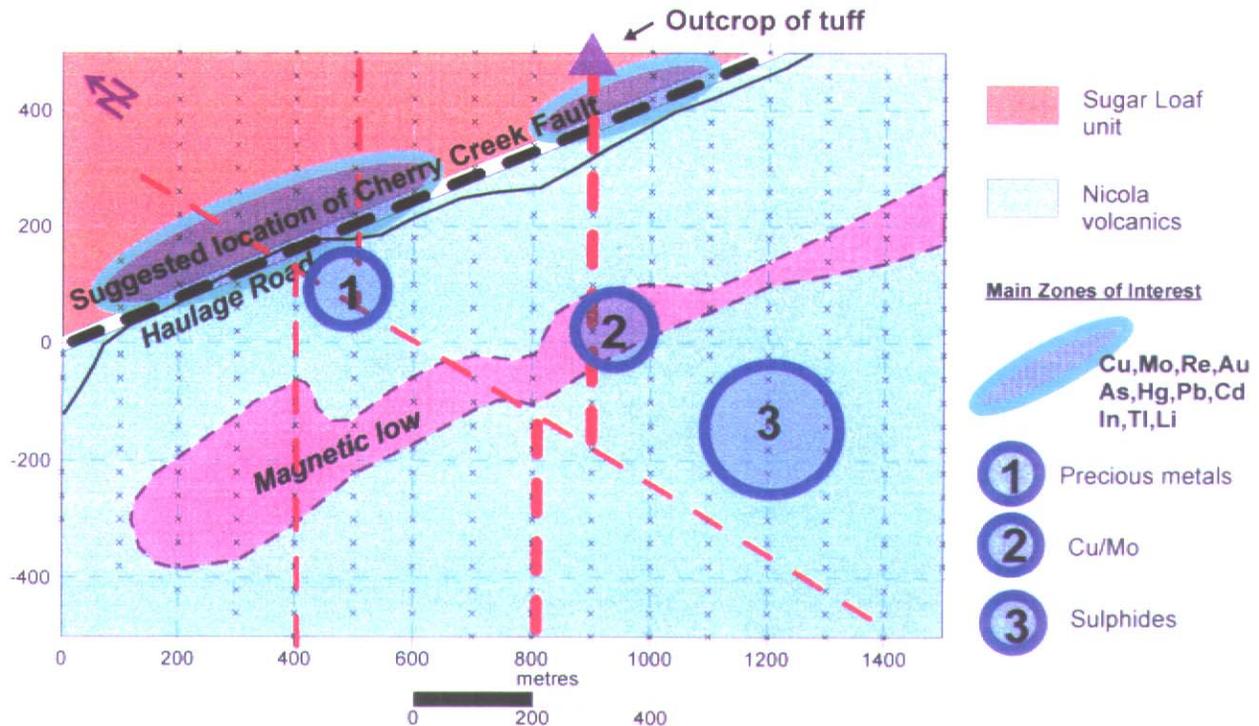


Fig. 13 Preliminary interpretation of structure and main areas of interest

At this stage it would seem that the following deductions can be made from the the observations provided in this report:

- **A zone of element enrichment (including Cu, Mo, Re, As and Hg) parallels the haulage road.** A coincident zone of element depletion, indicating leaching, is seen in REE, Be, Th and Ga. After consideration of the information provided on the locations and nature of the samples collected, it seems probable that this zone reflects a significant fault and/or breccia zone in the near subsurface. This may prove to be the true location of the Cherry Creek Fault that juxtaposes the Iron Mask batholith against the Nicola volcanics.
- **A second zone of element enrichments (including Hg, As, Sr, REE, Th, and V [among others]) appears to comprise a feature, striking at  $\sim 60^\circ$ , that reflects a conjugate fault.** The leakage of mercury, in particular, is likely to take place along such a feature.
- **Precious metal concentrations are low** and precision at the near-detection levels is poor. However, there appears to be a consistent northerly trend to the Pt and Ru data in the north part of the survey area, and **coincident subtle enrichment of Pd, Os and Au at around 500S. 0-100E.**

- A second zone of weakly elevated Pd occurs in the south where there are indications of sulphide enrichments (a chalcophile association) – Cd, Zn, Pb, Ga, In, Co, Se. This is centred on L1200S.200W and slightly to the north.
- A multi-element association that includes Cu, Mo and traces of Au and Pt, occurs in the central part of the magnetic low. Provided the samples from this area did not have an elevated organic component the association would suggest some concealed Cu/Mo enrichment. It should be noted, though, that even slight enrichment of organic matter can scavenge metals and give rise, therefore, to elevated levels
- The magnetic low that transects the survey area has coincident elevated levels of Ni and Co, and is flanked on both sides by elevated levels of Nb, Ti and Zr. The inference is that this may represent hydrothermally altered body of mafic to ultramafic rocks.

The data set is generally of high quality and deserves closer scrutiny, based upon exploration models for the area. For example, it is known that for porphyry Cu/Mo/Au deposits there is commonly a central zone of Cu with coincident Mo, Au, and Ag with possibly Bi, W, B and Sr (Pantaleyev, 1995). Peripheral enrichment in Pb, Zn, Mn, V, Sb, As, Se, Te, Co, Ba, Rb and Hg is documented. These associations, and their various permutations, should be examined to further develop exploration models.

Consideration should be given to additional geophysical surveys (e.g. IP), focusing on zones with multi-element anomalies. Additional geochemical work should focus on similar anomalies. This could include determinations on C-horizon samples, using an ultra-low level fire assay method for the precious metals, and/or biogeochemical methods (e.g. Douglas-fir bark) since the roots of trees penetrate to the C-horizon and in effect sample that part of the soil profile. Ultimately, the validity and significance of the multi-element anomalies and the geophysical information needs to be assessed through trenching and/or drilling.

## References

- Bettany, L., and Stanley, C., 2001. Geochemical data quality: the Fit-for-Purpose approach. *Explore*, v.111, p.12, 21-22.
- Kwong, Y.T.J., 1987. Evolution of the Iron Mask Batholith and its Associated Copper Mineralization. *BC Geological Survey Branch, Bull. 77, 55 pp.*
- Monger, J.W.H., 1989. Geology of Hope and Ashcroft Map Areas, British Columbia. *Geol. Survey Canada Maps 41-1989 and 42-1989, 10 maps.*
- Pantaleyev, A., 1995. Porphyry Cu +/- Mo +/- Au. *In: Selected BC Mineral Deposit Profiles – vol.1 – Metallics and Coal (Eds. D.V. Lefebure and G.E. Ray). BC Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Open File 1995-20, p.87-91.*

# APPENDIX 1

## Tables

Table 1 Analytical data listings.....	10 pages
Table 2 Analytical controls .....	3 pages
Table 3 Statistical summary .....	1 page

PGE Package:	Rare Earth Elements:														Lithophile Elements:										PGEs:				
	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Ho	Er	Tm	Yb	Lu	Sr	Li	Be	Sr	Sc	Mn	Rb	Sr	Ca	Ba	Ru	Rh	Pd	Cs	Ir	Pt
00S-20W	2660	7260.0	832.0	3730.0	835.0	204.00	726.0	685.0	135.00	405.00	50.80	339.0	55.2	116	20.5	245	448000	171.0	15876	3.0	57760			-0.2	-5	2	-0.1	-10	-0.1
00S-80W	3150	8520.0	992.0	4530.0	1000.0	242.00	878.0	789.0	153.00	463.00	56.80	382.0	60.0	105	31.8	319	473000	105.0	12247	1.4	50400			-0.2	-5	1	-0.1	-10	-0.1
00S-220W	2570	7990.0	832.0	3720.0	828.0	208.00	723.0	687.0	133.00	396.00	50.90	346.0	54.1	88	21.6	210	459000	388.0	24494	8.1	45440			-0.2	-5	2	-0.1	-10	-0.1
00S-360W	2890	7020.0	908.0	4030.0	904.0	221.00	751.0	696.0	138.00	419.00	53.50	364.0	59.0	152	33.9	443	420000	321.0	26898	8.0	59600			-0.2	-5	3	-0.1	-10	-0.1
100S-60E	2730	6540.0	834.0	3710.0	822.0	204.00	712.0	653.0	134.00	401.00	51.80	347.0	56.0	169	32.9	433	271000	413.0	18488	11.9	75360			-0.2	-5	3	-0.1	-10	-0.1
100S-100E	623	878.0	228.0	1030.0	242.0	82.80	722.0	221.0	45.20	132.00	17.20	123.0	25.0	92	4.4	165	100000	99.0	85448	14.4	69040			-0.4	-5	-1	-0.1	-10	-0.1
100S-140E	2840	5786.0	836.0	3870.0	884.0	232.00	765.0	716.0	147.00	431.00	56.80	371.0	58.1	153	33.8	295	228000	271.0	15193	15.7	65520			-0.2	-5	1	-0.1	-10	-0.1
BL100S	1880	4020.0	596.0	2740.0	616.0	158.00	526.0	620.0	103.00	308.00	41.00	288.0	46.2	100	24.7	378	221000	239.0	14258	2.8	43360			-0.2	-5	1	-0.1	-10	-0.1
100S-20W	1830	2160.0	528.0	2370.0	534.0	141.00	464.0	424.0	84.80	248.00	30.80	266.0	45.2	357	6.2	172	245000	162.0	27410	3.3	49280			-0.2	-5	-1	-0.1	-10	-0.1
100S-80W	2130	7140.0	615.0	2790.0	835.0	184.00	580.0	519.0	105.00	314.00	39.50	314.00	50.0	104	22.1	376	385000	327.0	15817	7.2	41780			-0.2	-5	2	-0.1	-10	-0.1
100S-100W	2620	6300.0	851.0	3800.0	858.0	209.00	712.0	680.0	133.00	394.00	51.40	346.0	57.3	104	22.1	376	385000	327.0	15817	7.2	41780			-0.2	-5	2	-0.1	-10	-0.1
100S-140W	2520	5698.0	818.0	3700.0	818.0	209.00	707.0	644.0	129.00	379.00	49.70	335.0	54.8	122	25.8	319	382000	383.0	17431	7.8	68580			-0.2	-5	2	-0.1	-10	-0.1
100S-180W	2390	6240.0	795.0	3600.0	828.0	206.00	700.0	639.0	130.00	388.00	51.30	364.0	55.9	212	27.4	174	287000	238.0	23522	5.1	27280			-0.2	-5	3	-0.1	-10	-0.1
100S-220W	1270	1482.0	414.0	1890.0	442.0	117.00	377.0	382.0	71.00	219.00	28.20	205.0	36.2	174	24.5	140	54000	390.0	14258	19.3	29520			-0.2	-5	1	-0.1	-10	-0.1
100S-260W	2440	6800.0	794.0	3500.0	777.0	190.00	683.0	604.0	119.00	358.00	47.20	342.0	52.4	95	22.5	384	414000	103.0	20930	1.7	58480			-0.2	-5	4	-0.1	-10	-0.1
100S-300W	3110	7140.0	968.0	4340.0	950.0	227.00	817.0	780.0	154.00	452.00	58.30	390.0	63.3	142	30.5	354	317000	185.0	15293	4.0	70240			-0.2	-5	3	-0.1	-10	-0.1
100S-340W	2910	6720.0	870.0	3900.0	854.0	208.00	751.0	684.0	136.00	408.00	53.20	357.0	57.0	125	31.3	360	288000	165.0	11923	4.7	60560			-0.2	-5	2	-0.1	-10	-0.1
100S-380W	2900	6900.0	895.0	4090.0	933.0	228.00	807.0	743.0	153.00	450.00	59.90	406.0	63.6	111	29.7	396	302000	142.0	13738	2.5	68880			-0.2	-5	3	-0.1	-10	-0.2
200S-20E	2930	7200.0	951.0	4220.0	923.0	221.00	815.0	744.0	149.00	453.00	60.20	393.0	62.8	120	26.3	418	382000	290.0	18338	6.9	53120			-0.2	-5	3	-0.1	-10	-0.2
200S-100E	661	750.0	170.0	782.0	193.0	64.70	173.0	179.0	37.00	115.00	15.50	106.0	23.1	23	2.5	274	178000	78.7	27629	5.4	32800			0.5	-5	-1	-0.1	-10	-0.1
200S-140E	2820	6280.0	885.0	4010.0	928.0	230.00	808.0	718.0	147.00	450.00	56.50	386.0	62.9	129	17.4	307	349000	148.0	13154	2.8	42240			-0.2	-5	2	-0.1	-10	-0.1
200S-180E	2800	7380.0	854.0	3740.0	840.0	197.00	720.0	639.0	127.00	387.00	51.00	326.0	52.2	112	20.7	322	405000	231.0	12789	3.3	59620			-0.2	-5	2	-0.1	-10	-0.1
200S-220E	2890	7440.0	907.0	4250.0	949.0	238.00	854.0	761.0	155.00	486.00	57.70	385.0	62.6	144	21.0	284	330000	219.0	11275	4.1	53280			-0.2	-5	-1	-0.1	-10	-0.1
200S-260E	3040	7880.0	939.0	4410.0	987.0	241.00	871.0	800.0	159.00	480.00	61.50	415.0	64.8	150	25.5	257	205000	200.0	11923	3.4	51040			-0.2	-5	1	-0.1	-10	-0.1
200S-300E	3430	8280.0	1100.0	4920.0	1070.0	258.00	940.0	841.0	171.00	508.00	62.90	416.0	69.2	135	21.5	244	272000	260.0	11148	4.9	56000			-0.2	-5	2	-0.1	-10	-0.1
200S-340E	2630	7580.0	832.0	3850.0	821.0	193.00	706.0	632.0	123.00	379.00	47.50	322.0	51.7	85	22.5	335	301000	138.0	11684	1.3	45840			-0.2	-5	2	-0.1	-10	-0.1
200S-380E	3490	8100.0	1130.0	5140.0	1100.0	251.00	948.0	841.0	169.00	515.00	65.70	434.0	69.7	137	23.4	294	284000	217.0	19505	4.4	44720			-0.2	-5	2	-0.1	-10	-0.1
200S-420E	4120	10140.0	1310.0	5990.0	1290.0	297.00	1100.0	973.0	193.00	589.00	72.50	471.0	75.2	161	25.3	276	385000	155.0	13673	3.0	70800			-0.2	-5	2	-0.1	-10	-0.1
200S-460E	3190	8940.0	1010.0	4510.0	964.0	217.00	839.0	701.0	139.00	420.00	53.20	383.0	58.5	98	20.2	230	445000	193.0	13284	2.8	58880			-0.2	-5	2	-0.1	-10	-0.1
200S-500E	2780	6960.0	885.0	4180.0	934.0	232.00	851.0	757.0	154.00	480.00	58.40	385.0	59.7	108	20.7	319	388000	198.0	10044	4.3	51840			-0.2	-5	2	-0.1	-10	-0.1
BL200S	2150	4750.0	705.0	3300.0	737.0	187.00	646.0	613.0	125.00	383.00	50.10	335.0	55.2	104	31.5	404	252000	250.0	14515	6.0	47840			-0.2	-5	2	-0.1	-10	-0.1
200S-20W	1980	5592.0	636.0	2960.0	676.0	170.00	608.0	557.0	116.00	348.00	44.40	300.0	49.5	86	19.0	288	357000	217.0	11405	5.7	47520			-0.2	-5	-1	-0.1	-10	-0.1
200S-60W	2520	6800.0	781.0	3520.0	784.0	190.00	687.0	634.0	125.00	378.00	50.10	330.0	52.7	97	21.2	308	379000	304.0	12053	6.0	56960			-0.2	-5	1	-0.1	-10	-0.1
200S-100W	2220	6800.0	710.0	3160.0	716.0	174.00	640.0	583.0	117.00	351.00	44.40	302.0	50.4	94	23.3	292	571000	211.0	11923	3.8	52480			-0.2	-5	1	-0.1	-10	-0.1
200S-140W	2620	7620.0	819.0	3880.0	814.0	199.00	731.0	659.0	129.00	385.00	49.50	338.0	52.9	119	20.3	281	523000	250.0	11405	4.5	65800			-0.2	-5	2	-0.1	-10	-0.1
200S-180W	3630	9220.0	1160.0	5310.0	1170.0	288.00	1030.0	922.0	184.00	546.00	69.20	454.0	70.9	159	40.0	276	577000	288.0	18403	5.3	63120			-0.2	-5	1	-0.1	-10	-0.1
200S-220W	1680	2258.0	565.0	2580.0	608.0	154.00	533.0	502.0	101.00	314.00	41.30	275.0	47.2	151	26.0	209	228000	225.0	65448	6.8	33920			-0.2	-5	2	-0.1	-10	-0.1
200S-260W	1990	2724.0	641.0	2980.0	674.0	171.00	598.0	566.0	113.00	343.00	45.90	303.0	50.0	118	29.2	372	321000	183.0	62880	4.5	62480			-0.2	-5	2	-0.1	-10	-0.1
200S-300W	1980	2700.0	650.0	3040.0	687.0	172.00	612.0	578.0	118.00	357.00	47.50	329.0	52.7	109	21.7	293	294000	269.0	22890	6.5	42480			-0.2	-5	2	-0.1	-10	-0.1
200S-340W	2830	7740.0	884.0	3890.0	901.0	225.00	803.0	734.0	150.00	457.00	58.80	406.0	64.7	168	31.3	247	316000	217.0	13414	3.6	65440			-0.2	-5	3	-0.1	-10	-0.1
200S-380W	2600	7320.0	810.0	3620.0	790.0	191.00	709.0	652.0	132.00	379.00	47.50	322.0	51.7	119	21.9	288	494000	257.0	11794	5.6	54880			-0.2	-5	2	-0.1	-10	-0.1
200S-420W	1950	2652.0	621.0	2710.0	621.0	149.00	547.0	496.0	102.00	306.00	38.10	246.0	42.0	105	31.3	254	375000	192.0	18913	4.2	39600			-0.2	-5	1	-0.1	-10	-0.1
300S-20E	2880	6720.0	890.0	4010.0	875.0	212.00	768.0	683.0	142.00	419.00	53.10	374.0	56.8	160	28.0	299	273000	371.0	18792	9.6									

PGE Package:

Sample ID:	Rare Earth Elements:													
	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Ho	Er	Tm	Yb	Lu	
400S-60W	2850	4419.4	912.0	4090.0	933.0	236.00	783.0	752.0	149.00	453.00	80.40	404.0	66.1	
400S-100W	2720	3975.8	832.0	3770.0	843.0	215.00	708.0	703.0	143.00	418.00	58.90	372.0	59.6	
400S-140W	2560	4197.6	825.0	3750.0	857.0	218.00	710.0	696.0	141.00	420.00	58.30	377.0	59.9	
400S-180W	4030	9424.8	1280.0	5830.0	1300.0	318.00	1060.0	1000.0	209.00	606.00	79.20	532.0	83.4	
400S-220W	3030	5282.6	944.0	4250.0	967.0	248.00	828.0	779.0	159.00	470.00	80.20	402.0	65.3	
400S-260W	3210	4984.9	977.0	4520.0	997.0	252.00	848.0	790.0	161.00	479.00	82.00	421.0	69.8	
400S-300W	3540	6962.4	1080.0	4850.0	1060.0	271.00	930.0	862.0	179.00	524.00	88.80	460.0	72.7	
400S-340W	3330	8725.2	1030.0	4950.0	1070.0	271.00	912.0	884.0	180.00	544.00	88.50	477.0	76.9	
400S-380W	2850	7774.8	912.0	4120.0	929.0	227.00	791.0	745.0	153.00	445.00	59.80	405.0	65.4	
400S-420W	2710	8395.2	880.0	3870.0	886.0	223.00	771.0	743.0	151.00	440.00	58.40	389.0	62.4	
400S-460W	2730	8487.6	896.0	4130.0	944.0	234.00	785.0	783.0	161.00	470.00	80.10	423.0	66.3	
400S-500W	1840	4688.0	510.0	2260.0	543.0	152.00	446.0	442.0	93.00	267.00	37.70	242.0	41.8	
500S-20E	2960	5988.0	833.0	3750.0	874.0	227.00	738.0	700.0	143.00	428.00	57.70	388.0	62.9	
500S-60E	3450	8040.0	1050.0	4770.0	1090.0	281.00	925.0	875.0	185.00	556.00	72.50	484.0	76.4	
500S-100E	3160	7752.0	948.0	4310.0	987.0	235.00	814.0	746.0	156.00	459.00	60.30	387.0	63.0	
500S-220E	2980	8804.0	929.0	4290.0	1010.0	244.00	833.0	788.0	169.00	502.00	65.30	423.0	68.9	
500S-260E	3000	8124.0	931.0	4290.0	973.0	248.00	839.0	779.0	160.00	487.00	61.80	397.0	62.5	
500S-300E	2610	5628.0	809.0	3880.0	837.0	204.00	692.0	667.0	136.00	399.00	52.60	345.0	56.2	
500S-340E	4020	7880.0	1230.0	5800.0	1280.0	305.00	1040.0	942.0	190.00	581.00	72.40	464.0	72.0	
500S-380E	3300	8016.0	1080.0	4900.0	1110.0	271.00	902.0	841.0	173.00	526.00	69.80	481.0	71.6	
500S-420E	2620	7140.0	981.0	3930.0	878.0	209.00	734.0	653.0	137.00	409.00	53.80	358.0	58.2	
500S-460E	3100	8498.0	967.0	4500.0	1010.0	235.00	849.0	801.0	198.00	491.00	64.10	418.0	67.7	
500S-500E	3940	9528.0	1200.0	5420.0	1220.0	288.00	987.0	923.0	188.00	559.00	74.80	484.0	74.1	
BL500S	2820	6190.0	809.0	3450.0	938.0	233.00	788.0	785.0	102.00	489.00	63.80	410.0	63.8	
500S-20W	2850	5210.0	903.0	4100.0	940.0	233.00	762.0	753.0	159.00	461.00	62.30	411.0	64.7	
500S-60W	3220	6970.0	968.0	4430.0	1010.0	248.00	824.0	779.0	162.00	467.00	60.30	388.0	62.0	
500S-100W	2780	7040.0	882.0	3910.0	912.0	219.00	760.0	723.0	151.00	431.00	58.90	375.0	61.5	
500S-140W	3880	7820.0	1200.0	5430.0	1230.0	297.00	1020.0	965.0	204.00	588.00	76.50	513.0	82.8	
500S-180W	4280	13900.0	1340.0	6110.0	1390.0	338.00	1140.0	1090.0	218.00	652.00	85.40	544.0	85.2	
500S-220W	2630	6050.0	832.0	3820.0	893.0	222.00	745.0	734.0	149.00	442.00	59.80	397.0	63.1	
500S-260W	2910	6350.0	890.0	4090.0	912.0	228.00	773.0	743.0	157.00	464.00	62.10	392.0	62.9	
500S-300W	3300	7830.0	1000.0	4500.0	996.0	249.00	880.0	801.0	165.00	480.00	63.70	410.0	64.5	
500S-340W	3340	7350.0	1050.0	4790.0	1110.0	262.00	901.0	870.0	178.00	507.00	67.50	432.0	72.1	
500S-380W	2310	5250.0	734.0	3450.0	782.0	200.00	686.0	627.0	132.00	398.00	50.60	326.0	55.0	
500S-420W	2670	5980.0	866.0	4140.0	975.0	254.00	838.0	809.0	169.00	499.00	68.50	435.0	67.2	
500S-460W	2580	5980.0	833.0	3800.0	896.0	228.00	743.0	746.0	156.00	461.00	61.40	404.0	64.8	
600S-20E	3110	6370.0	961.0	4250.0	950.0	232.00	783.0	758.0	157.00	448.00	60.80	389.0	64.2	
600S-60E	2700	5020.0	855.0	3880.0	880.0	207.00	697.0	693.0	147.00	440.00	57.50	383.0	62.7	
600S-100E	3080	7090.0	887.0	4650.0	1050.0	256.00	880.0	838.0	168.00	515.00	66.30	428.0	70.3	
600S-140E	3390	7820.0	1010.0	4580.0	1040.0	254.00	871.0	818.0	184.00	478.00	64.10	418.0	66.3	
600S-180E	2570	5710.0	828.0	3900.0	898.0	233.00	762.0	747.0	153.00	453.00	61.50	376.0	63.0	
600S-260E	3120	6090.0	963.0	4500.0	1010.0	252.00	864.0	814.0	198.00	493.00	64.80	434.0	68.8	
600S-300E	3070	6780.0	964.0	4530.0	1020.0	258.00	860.0	802.0	184.00	493.00	64.20	434.0	68.8	
600S-340E	2970	6070.0	914.0	4280.0	965.0	241.00	850.0	770.0	161.00	473.00	63.80	404.0	65.1	
600S-380E	3130	5980.0	961.0	4600.0	1040.0	264.00	857.0	823.0	169.00	504.00	66.80	428.0	68.8	
600S-420E	2920	6010.0	945.0	4400.0	1010.0	250.00	823.0	807.0	169.00	503.00	65.00	443.0	71.1	
600S-460E	2890	4950.0	814.0	4410.0	911.0	241.00	861.0	841.0	174.00	519.00	71.40	450.0	73.7	
600S-500E	3370	7170.0	1040.0	4810.0	1090.0	256.00	905.0	829.0	170.00	508.00	65.10	433.0	68.8	
BL600S	2480	5100.0	828.0	3800.0	882.0	212.00	737.0	707.0	101.00	461.00	60.30	365.0	64.5	
600S-20W	2470	5070.0	763.0	3530.0	830.0	230.00	711.0	692.0	141.00	424.00	57.50	381.0	61.5	
600S-60W	3050	6060.0	960.0	4440.0	1010.0	244.00	856.0	810.0	165.00	492.00	62.30	418.0	67.5	
600S-100W	3490	8030.0	1090.0	4990.0	1130.0	289.00	936.0	878.0	183.00	545.00	72.30	477.0	77.3	
600S-140W	2410	5740.0	793.0	3840.0	847.0	215.00	738.0	710.0	146.00	425.00	54.10	372.0	58.7	
600S-180W	2710	5280.0	865.0	4050.0	840.0	237.00	777.0	757.0	157.00	459.00	62.40	411.0	65.2	
600S-220W	3010	5230.0	959.0	4440.0	1010.0	248.00	829.0	810.0	170.00	493.00	65.40	429.0	67.6	
600S-260W	2810	6200.0	898.0	4190.0	958.0	245.00	823.0	781.0	161.00	473.00	62.90	424.0	64.3	
600S-300W	2910	5720.0	911.0	4230.0	968.0	238.00	815.0	790.0	165.00	485.00	63.20	432.0	69.5	
600S-340W	2699	7672.9	857.0	4011.0	902.5	212.00	706.9	732.9	147.49	434.80	55.00	373.3	66.1	
600S-380W	2410	5174.3	748.8	3485.0	780.4	182.80	607.9	642.8	126.28	385.40	48.40	320.3	57.9	
600S-420W	1881	4348.9	848.0	3108.0	728.8	190.00	594.3	596.4	119.85	359.70	47.00	334.8	58.2	
600S-460W	1982	5013.7	861.4	3087.0	718.3	172.40	548.5	590.1	118.93	352.80	45.20	308.0	53.8	
700S-20E	2687	9528.8	948.4	4347.0	978.1	226.00	748.4	751.8	154.43	451.00	57.20	383.5	69.1	
700S-60E	2296	8282.3	744.8	3381.0	755.8	176.80	580.1	604.8	121.79	352.80	48.80	314.2	58.8	
700S-100E	2781	6969.8	963.2	3908.0	875.6	200.00	889.0	882.5	142.39	430.50	55.00	359.0	67.2	
700S-140E	2657	7395.9	873.6	4158.0	943.9	226.00	756.4	777.0	153.61	467.40	58.60	395.8	69.9	
700S-180E	2369	6121.7	777.8	3696.0	842.5	202.00	659.3	693.0	140.78	420.25	54.00	371.3	66.6	
700S-300E	2451	6315.6	788.3	3759.0	861.1	204.00	677.2	705.6	143.41	422.30	53.00	369.2	68.5	
700S-340E	2843	8420.8	904.8	4200.0	935.6	210.00	746.5	741.3	142.77	428.45	56.00	379.4	66.3	
700S-380E	2946	7700.8	944.3	4557.0	1014.3	240.00	817.7	816.9	168.06	492.00	61.40	420.2	75.6	
700S-420E	1638	5207.6	540.8	2520.0	552.7	133.40	449.5	451.5	88.33	268.55	34.20	226.4	36.0	
700S-460E	3099	9362.6	964.2	4620.0	1001.9	232.00	790.0	780.2	152.80	451.00	56.80	386.8	68.3	
700S-500E	2616	7398.2	873.6	4158.0	919.1	214.00	722.7	739.2	147.70	440.75	56.40	387.6	67.7	
BL700S	2163	5781.6	721.8	3360.0	784.5	176.80	592.0	630.0	106.00	387.45	49.00	334.6	58.7	
700S-20W	2822	8365.4	908.0	4283.0	962.8	214.00	738.6	751.8	146.47	432.56	58.20	385.8	63.3	
700S-60W	2534	7562.1	807.0	3717.0	852.8	192.00	666.2	662.5	134.44	396.85	50.80	363.1	64.4	
700S-100W	2534	8228.9	811.2	3780.0	865.3	204.00	677.2	716.1	144.88	430.50	53.40	377.4	65.0	
700S-140W	2513	8171.5	823.7	3927.0	863.2	208.00	695.0	716.1	144.02	422.30	55.80	363.1	65.5	
700S-180W	2122	6562.6												

PGE Package:	Rare Earth Elements:														Lithophile Elements:										P.G.E.s:				
	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Ho	Er	Tm	Yb	Lu	Sr	Li	Be	Sr	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Rh	Pd	Os	Ir	Pt
7005-300W	2245	5878.5	725.9	3444.0	799.0	196.20	619.7	672.0	134.23	389.50	50.20	346.8	62.2	139	33.3	289	156216	191.0	10140	8.1	53700		-0.2	-5	1	-0.1	-1.0	-0.1	
7005-340W	1063	6232.5	890.6	3255.0	751.4	194.40	603.9	665.7	134.64	399.75	51.80	346.8	60.9	112	28.1	500	276000	153.0	14520	12.3	37400		-0.2	-5	1	-0.1	-1.0	-0.1	
7005-380W	2287	6841.9	813.3	3885.0	894.2	214.00	683.3	724.5	146.68	442.80	52.40	377.4	67.2	195	35.8	399	231840	248.0	18960	5.3	38900		-0.2	-5	2	-0.1	-1.0	-0.1	
7005-420W	2023	5346.1	707.2	3339.0	799.0	200.00	594.0	663.6	129.54	389.50	49.80	344.8	59.2	148	38.1	387	200580	179.0	21120	5.3	44800		-0.2	-5	2	-0.1	-1.0	-0.1	
7005-460W	2101	5844.7	755.0	3654.0	846.6	222.00	669.2	718.2	146.88	446.90	55.80	381.5	69.6	236	31.5	367	239200	319.0	20780	14.5	39400		-0.2	-5	-1	-0.1	-1.0	-0.1	
7005-500W	2348	5955.5	769.6	3570.0	808.4	187.00	639.5	674.1	135.86	407.95	51.00	369.2	63.9	147	37.7	527	204240	337.0	17180	7.1	44800		-0.2	-5	3	0.2	-1.0	-0.1	
8005-202	2616	6758.8	852.8	4011.0	912.9	212.00	700.9	720.3	143.41	426.40	54.00	375.4	67.7	162	38.8	437	184000	208.0	12840	3.7	51700		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-60E	2513	7118.9	811.2	3717.0	854.9	198.40	665.3	663.8	132.80	395.40	49.40	342.7	60.8	198	34.4	448	241000	232.0	15390	3.8	75900		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-100E	2996	6559.3	975.5	4398.0	978.1	230.00	774.2	774.9	152.39	448.95	57.00	399.8	67.2	193	42.6	485	340400	201.0	16320	3.6	61300		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-140E	2016	5983.2	869.8	3150.0	718.2	174.00	576.2	581.7	119.85	364.90	44.80	328.4	58.9	154	24.7	448	241000	232.0	15390	3.8	75900		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-180E	1351	4494.3	461.8	2205.0	523.7	141.20	407.9	433.6	88.13	254.20	33.20	298.7	37.4	134	34.1	311	133098	184.0	14580	8.6	51400		-0.2	-5	1	-0.1	-1.0	-0.1	
8005-220E	1936	6454.1	824.0	2835.0	639.6	153.40	510.8	506.1	98.74	285.20	36.40	253.0	42.9	83	21.1	307	312800	218.0	15120	5.2	45800		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-300E	1790	5706.2	611.5	2877.0	687.2	186.40	554.4	556.5	111.18	352.60	43.80	295.8	50.0	181	36.6	288	176088	120.0	15720	2.0	42100		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-340E	2245	4988.0	748.7	3570.0	799.0	184.80	683.3	634.2	131.17	398.75	50.80	340.7	61.4	138	23.7	381	142232	243.0	10956	3.7	58100		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-380E	2472	7894.5	807.0	3780.0	867.3	202.00	710.8	690.9	137.90	407.95	52.00	367.2	62.0	155	43.9	379	173144	152.0	12720	2.5	62700		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-420E	2369	7872.9	844.5	3927.0	921.2	246.00	774.2	747.6	148.31	424.35	52.80	383.5	69.9	122	43.0	597	181240	199.0	14640	4.9	62900		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-460E	1967	5401.5	711.4	3465.0	873.5	246.00	706.9	735.0	144.23	424.35	54.40	381.5	66.1	151	49.8	603	277840	77.8	14040	2.5	77400		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-500E	1574	4847.5	567.8	2867.0	637.6	175.00	530.6	518.9	107.12	296.30	36.80	287.2	42.3	237	33.0	500	288880	175.0	18240	8.2	103000		-0.2	-5	2	-0.1	-1.0	-0.1	
BL800S	1998	5484.6	723.8	3381.0	784.5	181.20	649.4	623.7	101.00	393.60	48.80	359.9	65.0	112	39.7	474	184000	293.0	15960	5.6	44000		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-20W	2699	7562.1	919.4	4242.0	977.0	230.00	748.5	798.0	154.43	487.40	57.80	406.0	68.3	184	56.7	464	248400	147.0	15720	1.9	50400		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-60W	2307	7423.8	767.5	3612.0	817.7	180.80	641.5	646.8	128.13	377.20	45.20	324.5	53.8	171	33.5	384	253620	335.0	12360	5.1	46300		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-100W	2163	7008.1	753.0	3528.0	774.2	185.80	596.0	613.2	117.71	362.85	45.00	314.2	52.1	152	39.2	287	255780	165.0	13440	2.8	42800		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-140W	2122	5458.9	707.2	3192.0	720.4	181.80	568.3	569.1	112.20	330.05	38.40	285.6	48.6	181	27.5	346	191380	387.0	11112	8.1	50800		-0.2	-5	2	-0.1	-1.0	-0.1	
8005-180W	5525	8825.2	1347.8	5985.0	1279.3	304.00	1069.2	1003.8	192.58	558.65	72.60	473.3	82.3	187	23.0	376	511078	351.0	18580	7.3	49500		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-220W	5284	6293.4	1260.5	5775.0	1275.1	304.00	1047.4	1020.8	166.90	571.95	74.80	499.8	83.8	147	28.6	478	508723	184.0	21800	2.8	51200		-0.2	-5	-1	-0.1	-1.0	-0.2	
8005-260W	5131	6343.2	1227.2	5544.0	1246.1	298.00	1051.4	1008.0	197.08	578.10	74.40	487.8	84.0	129	27.9	492	562912	198.0	17780	4.9	44700		-0.2	-5	-1	-0.1	-1.0	-0.2	
8005-300W	3188	6581.5	958.8	4347.0	969.5	248.00	841.5	835.8	162.59	479.70	61.80	406.0	71.4	109	23.8	588	162580	140.0	17780	5.9	34900		-0.2	-5	-1	-0.1	-1.0	-0.3	
8005-340W	4738	7828.0	1177.3	5313.0	1211.0	310.00	1053.4	1005.9	201.35	562.45	78.80	516.1	85.9	120	22.1	403	582510	188.0	30540	5.8	47400		-0.2	-5	-1	-0.1	-1.0	-0.2	
8005-380W	3603	6481.8	1139.8	5188.0	1134.4	284.00	978.1	936.6	187.27	547.35	72.20	483.5	84.4	132	23.0	442	520488	291.0	39800	7.1	50300		-0.2	-5	-1	-0.1	-1.0	-0.2	
8005-460W	5219	7895.9	1277.1	5859.0	1341.4	332.00	1126.6	1113.0	214.20	629.35	80.80	544.7	89.5	197	28.6	424	478108	488.0	24120	16.7	50200		-0.2	-5	-1	-0.1	-1.0	-0.3	
8005-480W	4651	6947.2	1235.5	5943.0	1428.3	398.00	1233.5	1241.1	248.88	715.45	80.80	612.0	101.8	174	21.2	248	499302	487.0	29520	19.1	38500		-0.2	-5	-1	-0.1	-1.0	-0.1	
8005-500W	5808	9207.5	1418.5	6321.0	1372.4	342.00	1178.1	1138.2	240.40	670.35	84.20	559.0	91.8	159	25.0	500	597043	437.0	25820	14.8	51200		-0.2	-5	-1	-0.1	-1.0	-0.2	
9005-20E	3013	5517.8	813.3	3570.0	774.2	218.00	685.1	625.8	126.97	352.60	44.80	304.0	58.0	99	6.2	147	485171	112.0	87600	4.7	55600		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-60E	7948	11983.0	1782.6	7812.0	1668.4	404.00	1494.9	1308.3	259.08	782.60	97.80	626.3	108.4	137	33.8	407	541696	296.0	21500	5.3	63300		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-100E	4935	7429.1	1374.9	6111.0	1355.9	352.00	1199.9	1115.1	226.44	658.05	86.00	573.2	103.1	89	28.8	279	288493	145.0	26400	2.9	73100		-0.2	-5	-1	-0.1	-1.0	-0.2	
9005-140E	4913	9568.5	1424.8	6468.0	1411.7	342.00	1199.9	1119.3	214.20	627.30	80.80	559.0	97.9	137	24.1	383	383898	302.0	17400	5.8	64200		-0.2	-5	-1	-0.1	-1.0	-0.2	
9005-180E	5131	7977.8	1449.8	6342.0	1384.8	312.00	1184.0	1083.6	218.12	604.75	78.40	538.8	97.4	114	29.7	446	342682	195.0	15900	3.8	58700		-0.2	-5	-1	-0.1	-1.0	-0.2	
9005-220E	4542	9822.4	1387.4	6428.0	1446.9	388.00	1283.0	1173.9	228.48	694.85	87.80	569.2	104.8	119	19.9	308	398029	324.0	13500	7.4	43100		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-260E	2410	4720.1	682.2	2982.0	674.8	171.80	617.8	556.8	107.71	307.50	39.20	299.3	60.5	124	8.3	181	337971	88.8	15500	3.4	42300		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-300E	3687	8143.8	1112.8	4851.0	1038.1	256.00	918.7	814.8	155.65	461.25	59.40	395.8	76.7	176	12.7	226	427489	291.0	30900	6.2	46900		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-340E	1407	2160.8	359.8	1593.9	383.0	120.80	354.4	359.1	70.38	211.15	28.20	192.0	50.0	52	4.1	286	412180	148.0	32700	5.5	30200		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-380E	3337	4670.2	1048.2	4914.0	1111.8	298.00	952.4	942.9	187.48	549.40	71.80	487.6	91.4	253	26.3	302	314840	206.0	20600	8.1	37200		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-420E	3936	11185.3	1458.0	6909.0	1798.4	588.00	1598.0	1596.0	314.18	877.40	110.80	734.4	115.1	170	27.5	393	379940	208.0	20400	18.4	38200		-0.2	-5	-1	-0.1	-1.0	-0.1	
9005-460E	2818	8359.9	1048.0	5250.0	1528.7	500.00	1351.9	1501.5	288.49																				



PGE Package: Sample ID:	Rare Earth Elements:														Lithophile Elements:										PGEs:				
	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Ho	Er	Tm	Yb	Lu	Sr	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Rh	Pd	Os	Ir	Pt	
1300S-400W	1584	4986.0	536.6	2415.0	548.8	133.20	431.6	432.6	83.84	250.10	32.60	228.5	39.3	99	17.3	135	226320	273.0	30720	8.4	6320	-0.2	-5	-1	-0.1	-10	-0.1		
1300S-500W	1749	4598.2	590.7	2698.0	598.2	151.60	512.8	506.1	101.80	301.35	39.40	255.0	46.6	99	16.5	245	153624	143.0	14400	4.6	21500	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-20E	2493	6315.6	792.5	3633.0	797.0	195.00	706.9	661.5	133.62	397.70	51.20	344.8	59.6	80	28.4	271	195040	207.0	15240	4.6	49100	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-60E	2740	6925.0	871.5	4032.0	927.4	222.00	762.3	758.1	147.46	434.60	55.80	385.6	62.8	193	29.2	359	209760	254.0	14520	5.0	46300	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-100E	1959	3698.8	640.0	2982.0	674.8	161.60	558.4	562.8	113.93	348.50	46.00	310.1	54.6	124	23.9	377	147568	193.0	15960	3.8	48500	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-140E	3111	6703.4	975.5	4515.0	954.3	228.00	794.0	791.7	151.18	459.20	59.80	401.9	63.4	99	31.8	382	216960	130.0	14160	3.3	47500	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-190E	3996	9833.5	1273.0	5880.0	1339.3	318.00	1073.2	1140.3	216.24	627.30	81.40	554.9	99.3	211	36.6	468	428720	251.0	23880	4.8	78100	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-220E	1667	4875.2	585.7	2656.5	546.6	134.80	465.3	464.1	92.00	268.55	34.80	236.6	43.9	86	13.4	212	272088	106.0	12480	1.6	28200	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-260E	2142	4653.6	757.3	3557.4	747.3	174.00	596.0	644.7	124.84	396.95	47.40	334.6	53.8	86	21.8	286	191270	127.0	13560	1.6	32000	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-300E	1654	4044.2	606.3	2795.1	577.5	136.80	483.1	485.1	96.70	287.00	37.80	244.8	42.2	114	17.0	278	230332	196.0	13200	3.7	39700	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-340E	2451	6786.5	846.6	3973.2	848.7	199.40	758.3	829.5	169.32	518.85	69.60	457.0	71.6	141	21.7	351	160020	201.0	12360	5.2	37700	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-380E	2472	6648.0	892.3	4273.5	875.6	218.00	784.1	760.2	155.04	463.30	61.60	403.9	65.7	144	29.4	298	374456	174.0	16800	3.4	42300	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-420E	2204	4847.5	814.5	3672.9	747.3	182.80	641.5	630.0	126.48	371.05	48.80	324.4	55.2	110	21.5	312	210668	165.0	14040	2.7	54000	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-460E	1634	4016.5	606.3	2748.9	569.3	139.60	483.0	483.0	99.56	289.05	36.80	261.1	43.9	97	22.1	314	219556	161.0	10776	2.7	40200	-0.2	-5	-1	-0.1	-10	-0.1		
BL-1400S	2038	3933.4	581.2	2702.7	569.3	134.60	451.4	497.7	94.06	276.75	37.80	267.2	44.9	120	20.7	371	243533	236.0	14880	4.8	44900	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-20W	2919	6703.4	814.5	3811.5	751.4	186.80	659.3	648.9	126.99	375.15	46.80	334.6	55.9	120	29.7	369	390622	100.0	16560	1.3	39600	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-60W	2094	4487.4	581.2	2725.8	573.4	152.80	495.0	487.2	96.86	261.10	39.80	267.2	44.3	113	21.4	285	249729	192.0	13320	7.7	41700	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-100W	3696	7423.6	990.7	4550.7	906.7	228.00	784.1	779.1	158.51	469.45	59.20	401.9	67.0	139	29.3	369	358295	292.0	17160	6.7	45800	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-140W	2841	4404.3	723.0	3418.8	712.1	178.80	582.1	661.5	129.13	385.40	52.20	363.1	58.0	125	23.8	330	151938	191.0	18120	4.6	48800	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-180W	2758	5066.1	758.6	3580.5	772.1	191.00	631.6	674.1	136.27	399.50	53.20	344.8	55.9	140	28.1	325	255386	196.0	15840	2.4	44300	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-220W	2512	6371.0	796.3	3203.3	710.0	169.20	607.9	652.1	121.79	360.80	49.40	330.5	55.0	110	16.0	294	390622	165.0	15120	2.5	39300	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-260W	2440	6260.2	704.7	3260.2	697.6	187.20	578.2	590.1	118.48	326.00	43.40	289.7	46.0	78	19.2	201	282864	110.0	21960	4.2	38000	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-300W	2484	5179.9	727.6	3349.5	710.0	184.00	631.6	665.7	134.23	412.05	52.80	361.1	57.8	130	25.2	265	230602	214.0	15000	5.1	38700	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-340W	2895	6121.7	810.0	3719.1	788.7	195.40	681.1	716.1	141.17	420.25	52.60	361.1	60.1	128	31.2	254	290946	155.0	12720	3.2	43900	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-380W	2225	4625.9	683.5	3118.5	698.6	171.80	584.1	580.1	115.67	346.45	45.20	304.0	50.4	109	16.7	219	288252	193.0	16620	5.4	28800	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-420W	1237	2817.7	372.9	1815.7	405.7	108.00	328.7	392.7	76.91	227.55	33.80	224.4	41.0	186	24.4	141	50107	153.0	16560	2.9	13300	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-460W	1711	2963.9	549.1	2587.2	573.4	144.00	473.2	497.7	100.16	309.55	43.20	301.9	49.8	245	22.6	127	3556	365.0	17280	9.2	13700	-0.2	-5	-1	-0.1	-10	-0.1		
1400S-600W	1500	1891.9	466.8	2196.6	464.7	129.60	425.7	462.0	95.47	297.25	41.00	306.0	52.9	215	17.0	160	46289	278.0	22680	6.4	15400	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-20E	3080	5263.0	828.3	3927.0	770.0	192.40	675.2	663.6	130.15	391.55	52.20	338.6	54.2	107	26.3	318	235451	180.0	10840	3.0	52500	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-60E	2450	5096.8	688.7	3234.0	687.2	170.00	574.2	592.2	117.30	350.55	46.40	301.9	51.5	111	20.4	261	238796	251.0	12416	4.4	33600	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-100E	3321	7423.6	906.0	4065.6	811.4	186.80	653.4	680.4	128.93	375.15	50.20	334.6	55.4	127	36.3	434	288252	253.0	12720	5.0	41500	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-140E	2758	5844.7	743.6	3485.0	703.8	162.40	558.4	569.1	110.57	319.80	42.80	289.7	51.0	134	23.4	365	363682	290.0	11808	7.1	46700	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-180E	2785	5207.6	755.0	3441.9	687.2	163.40	590.0	594.3	117.91	352.80	46.80	297.8	51.0	178	26.8	422	255655	425.0	10956	10.9	47300	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-220E	3240	5595.4	887.7	3927.0	763.8	182.60	683.3	646.8	129.34	379.25	48.80	318.2	54.2	120	31.2	376	192348	190.0	11388	3.8	43700	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-260E	3937	6398.7	1029.6	4781.7	989.5	244.00	833.6	867.3	167.89	494.05	65.60	446.8	73.1	136	22.7	405	290946	249.0	12240	5.2	47400	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-300E	1698	3517.9	478.2	2270.7	465.8	115.20	396.1	407.4	82.01	239.85	31.80	220.3	37.2	92	18.3	294	190731	199.0	9864	4.3	32000	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-340E	2496	4819.8	688.7	3187.8	627.2	147.80	516.8	539.7	100.16	305.45	41.60	281.5	44.9	106	16.8	283	282864	148.0	12360	2.2	53600	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-380E	2705	5705.2	775.6	3534.3	716.2	170.60	605.9	592.2	116.08	336.20	44.20	301.9	51.0	100	25.9	389	198891	83.9	11172	1.0	34600	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-420E	2919	6814.2	814.5	3649.8	714.2	185.40	598.0	579.6	112.40	332.10	44.60	287.8	48.1	122	30.6	351	352907	298.0	13920	8.0	40800	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-460E	2675	5013.7	750.5	3441.9	660.3	157.00	570.2	564.9	107.51	336.25	45.20	295.8	50.8	101	28.7	301	265559	141.0	12480	2.5	39900	-0.2	-5	-1	-0.1	-10	-0.1		
BL1500S	2041	4044.2	604.0	2772.0	650.6	138.80	491.0	495.8	96.53	307.50	40.40	285.2	45.8	122	21.9	370	241647	218.0	14040	3.8	43100	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-20W	2584	4456.9	741.3	3372.6	695.2	170.60	582.1	564.9	114.04	342.35	46.40	304.0	50.2	110	24.3	272	288586	187.0	12720	4.6	34000	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-60W	3053	7091.2	826.0	3742.2	757.6	184.80	617.8	611.1	118.73	348.50	45.40	293.8	49.6	142	26.8	384	409479	295.0	13080	10.6	60600	-0.2	-5	-1	-0.1	-10	-0.1		
1500S-100W	1907	3684.1	448.2	1972.7	405.7	109.40	390.1	424.2	85.68	254.20	32.40	204.0	35.9	99</															

PGE Package: Sample ID:	Oxidation Suite:													Base Metals:					Base Metal - Chalcophili:				
	S.Q. Cl	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q. Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In
BL100S	-25000	809	127	56	49	11	-10	12	0.06	0.2	2.7	195	77	1260	2530	2050	2120	76	54	9	-25	35	0.6
BL200S	-25000	737	123	81	55	9	-10	15	0.08	-0.1	2.2	254	85	1310	2990	2205	2340	73	64	10	-25	47	0.7
BL300S	-25000	622	119	71	58	9	-10	15	0.10	-0.1	2.1	241	79	1210	2860	1649	1890	61	56	9	-25	35	0.5
BL400S	-25000	805	113	53	64	11	-10	19	-0.05	-0.1	1.7	244	85	1460	3090	2090	1850	67	57	12	-25	35	0.6
BL500S	-25000	800	122	80	55	11	-10	19	0.06	-0.1	2.1	215	78	1590	2660	1900	1700	85	66	9	-25	43	0.7
BL600S	-25000	757	115	74	64	8	-10	17	0.08	-0.1	2.2	193	91	1550	2850	1620	2050	80	60	11	-25	47	0.6
BL700S	-25000	745	128	77	52	9	-10	16	-0.05	-0.1	1.9	254	86	1240	2540	1960	1890	75	54	7	-25	41	0.5
BL800S	-25000	872	125	83	55	10	-10	19	-0.05	-0.1	2.8	245	88	1346	2630	2180	2030	63	62	8	-25	35	0.5
BL900S	-25000	896	141	84	61	9	-10	16	0.21	-0.1	2.5	227	90	1544	2710	1800	1790	73	66	15	-25	35	0.5
BL1000S	-25000	625	128	77	44	10	-10	15	0.06	-0.1	1.9	231	80	1134	2680	1610	1940	80	65	12	-25	30	0.5
BL1100S	-25000	624	105	79	45	8	-10	15	0.08	-0.1	2.3	230	74	1146	2480	1650	1820	75	61	9	-25	41	0.7
BL1200S	-25000	883	121	84	56	10	-10	17	0.07	-0.1	2.1	269	79	1654	2800	1670	1980	79	67	12	-25	47	0.7
BL1300S	-25000	797	129	75	57	11	-10	16	-0.05	-0.1	2.4	251	88	1610	2920	1740	1850	86	66	13	-25	45	0.7
BL1400S	-25000	586	126	74	55	7	-10	14	0.08	-0.1	2.7	210	69	1121	2860	1800	2010	66	60	7	-25	38	0.5
BL1500S	-25000	622	124	69	50	8	-10	17	0.06	-0.1	2.3	227	80	1225	2830	1950	1900	74	53	7	-25	35	0.5
<b>Mean</b>		<b>745</b>	<b>123</b>	<b>74</b>	<b>55</b>	<b>9</b>		<b>16</b>	<b>0.05</b>		<b>2</b>	<b>232</b>	<b>82</b>	<b>1360</b>	<b>2762</b>	<b>1858</b>	<b>1944</b>	<b>74</b>	<b>61</b>	<b>10</b>		<b>39</b>	<b>1</b>
<b>Std. Dev.</b>		<b>106</b>	<b>8</b>	<b>9</b>	<b>6</b>	<b>1</b>		<b>2.1</b>	<b>0.07</b>		<b>0.3</b>	<b>22</b>	<b>6</b>	<b>190</b>	<b>177</b>	<b>206</b>	<b>155</b>	<b>7</b>	<b>5</b>	<b>2</b>		<b>6</b>	<b>0.1</b>

Table 2: Analytical Precision  
Repeat analyses of control sample from the survey area,  
interspersed among the sequence of soil samples

PGE Package:	e Associati			High-Field Strength Elements:							Rare Earth Elements:								
	Sample ID:	Sn	Tl	Bi	S.Q. Tl	S.Q. Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy
BL100S	19	6.6	-0.5	4590	197	2980	2830	24	70	1.4	1860	4020	596	2740	619	156	526	600	103
BL200S	-10	4.3	-0.5	4710	178	3360	3370	27	87	1.9	2150	4750	705	3300	737	187	646	613	125
BL300S	14	7.0	-0.5	3830	128	3310	3230	23	81	1.2	1980	5292	683	3100	710	173	598	584	119
BL400S	-10	6.4	-0.5	4370	158	3720	3620	23	84	2.0	2320	6288	789	3690	847	218	732	711	106
BL500S	-10	3.7	-0.5	6460	256	3940	4310	30	87	2.3	2820	6190	809	3450	938	233	788	765	102
BL600S	-10	3.9	-0.5	5470	203	3660	3810	25	88	2.3	2480	5100	828	3800	882	212	737	707	101
BL700S	-10	3.9	-0.5	6375	203	2880	3750	24	88	1.9	2163	5762	722	3360	785	176	592	630	106
BL800S	-10	3.3	-0.5	6500	223	2990	3980	26	87	1.8	1998	5485	724	3381	785	181	649	624	101
BL900S	-10	4.9	-0.5	6190	159	3140	4077	32	72	1.4	2940	7379	870	3733	758	160	626	633	103
BL1000S	-10	5.8	-0.5	5150	141	3150	3798	28	82	1.5	2225	5789	738	3318	725	179	632	594	121
BL1100S	-10	4.3	-0.5	6360	174	2860	4100	31	90	1.8	1920	5180	666	2940	654	168	582	546	112
BL1200S	-10	4.8	-0.5	6180	184	3170	4480	25	79	1.6	2307	6925	780	3507	782	187	653	655	107
BL1300S	-10	3.8	-0.5	6300	200	3170	4550	26	90	1.5	2390	4471	799	3612	832	204	715	687	108
BL1400S	-10	8.3	-0.5	5630	120	2570	3500	24	70	2.1	2038	3933	581	2703	569	135	451	498	95
BL1500S	-10	6.4	-0.5	5260	137	2600	3450	26	73	1.8	2041	4044	604	2772	551	139	491	496	99
Mean		5		5558	177	3167	3790	26	82	2	2242	5374	726	3294	745	180	628	623	107
Std. Dev.		1.5		873	38	390	477	3	7	0.3	315	1044	88	367	111	28	93	76	9

Table 2: Analytical Precision  
Repeat analyses of control sample from the survey area,  
interspersed among the sequence of soil samples

<i>PGE Package:</i>					<i>Lithophile Elements:</i>									<i>P.G.E.s:</i>					
Sample ID:	Er	Tm	Yb	Lu	S.Q. Li	Be	S.Q. Sc	Mn	Rb	Sr	Cs	Ba	Ru	Rh	Pd	Os	Ir	Pt	
BL100S	309	41	268	46	100	25	378	221000	239	14256	2.8	43360	-0.2	-5	2	-0.1	-10	-0.1	
BL200S	383	50	335	55	104	32	404	252000	250	14515	5.0	47840	-0.2	-5	2	-0.1	-10	0.1	
BL300S	362	48	321	55	104	25	377	237000	251	11664	4.9	38880	-0.2	-5	2	-0.1	-10	-0.1	
BL400S	439	57	396	65	107	27	492	251000	243	14328	5.1	47760	-0.2	-5	2	-0.1	-10	0.1	
BL500S	489	64	410	64	106	29	548	380000	267	12800	4.1	54160	-0.2	-5	3	-0.1	-10	0.2	
BL600S	461	60	395	65	105	24	515	269000	280	13800	5.1	43360	-0.2	-5	2	-0.1	-10	0.1	
BL700S	387	49	335	59	108	34	463	174432	266	14760	5.6	46400	-0.2	-5	-1	-0.1	-10	-0.1	
BL800S	394	49	351	65	112	40	474	184000	293	15960	5.6	44000	-0.2	-5	2	-0.1	-10	-0.1	
BL900S	319	53	354	58	127	30	422	260640	303	16500	6.1	41800	-0.2	-5	1	-0.1	-10	0.2	
BL1000S	365	49	314	56	116	23	371	235520	280	15600	4.5	43800	-0.2	-5	1	-0.1	-10	-0.1	
BL1100S	338	46	298	51	108	27	409	213440	298	15400	5.5	43900	-0.2	-5	1	-0.1	-10	-0.1	
BL1200S	383	51	351	60	118	26	463	268000	291	15100	5.5	40300	-0.2	-5	1	-0.1	-10	0.1	
BL1300S	408	53	361	62	125	29	460	258000	255	17280	4.1	38000	-0.2	-5	1	-0.1	-10	0.1	
BL1400S	277	38	267	45	120	21	371	243533	236	14880	4.8	44900	-0.2	-5	1	-0.1	-10	-0.1	
BL1500S	308	40	265	46	122	22	370	241647	216	14040	3.6	43100	-0.2	-5	1	-0.1	-10	-0.1	
<b>Mean</b>	<b>375</b>	<b>50</b>	<b>335</b>	<b>57</b>	<b>112</b>	<b>28</b>	<b>434</b>	<b>245947</b>	<b>265</b>	<b>14726</b>	<b>5</b>	<b>44104</b>							
<b>Std. Dev.</b>	<b>59</b>	<b>7</b>	<b>47</b>	<b>7</b>	<b>9</b>	<b>5</b>	<b>58</b>	<b>46488</b>	<b>26</b>	<b>1399</b>	<b>0.9</b>	<b>3973</b>							

Table 2: Analytical Precision  
Repeat analyses of control sample from the survey area,  
interspersed among the sequence of soil samples

POE Package:

Sample ID:	Oxidation Suite:											Base Meta:					Base Metal - Chalcopyrite Associate:										High-Field Strength Elements:										
	S.Q.	Cl	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ge	Ag	Cd	In	Sn	Tl	Bi	S.Q.	Ti	S.Q.	Cr	Y	Zr	Nb	Hf	Ta	
1300S-480W	82500	351	58	81	59	9	-10	27	0.40	-0.1	2.1	194	78.3	1245.4	1490	385	76	33			42.9	8	-25	13.7	-0.2	-10	3.0	-0.5	4880	80	1970.0	2480.0	21.6	38.7	-0.1		
1300S-500W	-25000	349	48	60	101	5	-10	14	0.08	-0.1	1.8	171	87.5	1181.3	2180	987	222	35			45.5	8	-25	13.5	0.3	-10	6.5	-0.5	5270	101	2380.0	2430.0	20.8	43.2	0.3		
1400S-20E	-25000	407	52	67	47	7	-10	18	-0.05	-0.1	1.7	212	92.9	1897.8	2700	2000	298	50			59.8	10	-25	41.6	0.3	11	6.3	-0.5	4840	101	3140.0	3280.0	22.8	87.2	0.4		
1400S-80E	-25000	651	59	90	47	11	-10	19	-0.05	-0.1	2.8	227	74.3	2386.1	4780	2790	233	48			86.0	14	-25	27.5	0.5	-10	8.2	-0.5	3740	165	3380.0	2570.0	17.4	56.7	0.3		
1400S-100E	-25000	875	107	89	27	14	-10	11	0.09	-0.1	1.9	218	98.5	1387.1	2800	2270	416	44			49.7	10	-25	30.7	0.7	-10	8.7	-0.5	8630	178	2570.0	4140.0	29.9	78.8	0.2		
1400S-140E	-25000	628	84	83	52	9	-10	19	-0.05	-0.1	3.6	414	126	2021.8	3270	2110	291	60			63.3	12	-25	26.8	0.4	-10	8.7	-0.5	8290	200	3440.0	3970.0	30.2	78.5	0.5		
1400S-180E	-25000	918	119	122	77	14	-10	26	0.08	-0.1	1.2	168	79.2	2774.3	5150	2850	1240	110			88.2	19	-25	82.3	0.5	11	9.3	-0.5	7680	264	4700.0	5380.0	39.8	107.0	0.9		
1400S-220E	-25000	433	45	42	59	6	-10	11	-0.05	-0.1	0.9	188	88.4	1580.6	2270	1220	415	53			67.3	8	-25	24.9	0.2	-10	3.5	-0.5	4130	101	2030.0	2380.0	18.1	47.0	-0.1		
1400S-280E	-25000	530	42	86	26	6	-10	13	-0.05	-0.1	1.2	168	79.2	1316.3	2800	1420	262	62			61.8	8	-25	30.3	0.4	-10	14.7	-0.5	3820	110	3380.0	2820.0	17.7	53.7	0.2		
1400S-300E	-25000	399	75	72	70	7	-10	17	0.08	-0.1	2.3	185	42.3	1343.3	4150	1820	982	47			80.8	13	-25	28.4	0.4	-10	9.0	-0.5	4540	143	2580.0	2570.0	18.2	55.3	-0.1		
1400S-340E	-25000	500	34	110	49	9	-10	17	-0.05	-0.1	3.1	204	179	1038.1	3300	1510	777	59			87.8	13	-25	31.0	0.4	-10	9.2	-0.5	4370	168	4830.0	4550.0	21.5	98.4	0.5		
1400S-380E	-25000	780	46	95	65	9	-10	15	-0.05	-0.1	2.8	159	108	2102.6	4650	2780	435	78			73.9	9	-25	27.9	0.4	-10	9.0	-0.5	4380	119	3380.0	3870.0	25.4	78.2	0.3		
1400S-420E	-25000	480	39	89	26	5	-10	13	-0.05	-0.1	2.0	204	82.4	895.5	2670	2020	485	73			66.9	8	-25	31.1	0.5	19	11.5	-0.5	5560	135	2700.0	3980.0	29.7	78.3	-0.1		
1400S-460E	-25000	527	67	88	75	6	-10	15	0.07	-0.1	0.9	191	89.8	828.0	2570	2800	789	62			59.7	7	-25	38.0	0.5	-10	8.3	-0.5	5630	120	2570.0	3500.0	24.0	88.8	2.1		
BL-1400S	-25000	586	126	74	55	7	-10	14	0.08	-0.1	2.7	210	88.8	1120.5	2880	1800	2010	86			78.6	11	-25	52.8	0.4	-10	11.0	-0.5	5780	206	3440.0	4100.0	30.2	86.1	0.3		
1400S-20W	-25000	917	47	80	74	12	-10	18	-0.05	-0.1	2.2	267	88.8	1896.8	4530	2040	140	91			59.0	9	-25	51.1	-0.2	-10	5.5	-0.5	3140	180	2710.0	2570.0	14.5	47.8	0.2		
1400S-60W	-25000	809	80	85	21	19	-10	13	-0.05	-0.1	2.5	206	25.7	1842.8	3420	2340	437	113			87.8	15	-25	46.9	0.5	-10	9.5	-0.5	4540	168	3970.0	4090.0	26.0	87.0	0.5		
1400S-100W	-25000	594	53	87	82	9	-10	18	0.08	-0.1	1.5	254	114	1032.8	1880	2300	259	80			62.3	9	-25	28.6	0.3	-10	9.5	-0.5	5280	139	3480.0	3940.0	26.4	78.2	0.3		
1400S-140W	-25000	697	53	71	50	12	-10	13	-0.05	-0.1	1.9	237	95.8	1555.9	2460	1880	358	87			70.8	11	-25	29.3	0.3	-10	5.8	-0.5	4100	135	3480.0	3760.0	24.9	76.1	0.3		
1400S-180W	-25000	478	41	67	88	6	-10	17	-0.05	-0.1	1.9	233	81.0	1898.4	3510	1860	337	83			67.2	11	-25	31.9	0.3	-10	5.8	-0.5	4460	131	3140.0	3540.0	23.7	69.1	0.4		
1400S-220W	-25000	518	78	72	17	18	-10	22	0.05	-0.1	4.5	263	21.4	1221.8	2530	3880	119	88			86.7	10	-25	31.3	0.3	-10	6.8	-0.5	5010	208	2880.0	2410.0	19.3	38.8	0.2		
1400S-280W	-25000	1002	122	72	17	18	-10	22	0.05	-0.1	2.1	188	118	1508.6	2780	2390	445	69			65.3	11	-25	31.1	0.4	-10	6.1	-0.5	4540	103	3540.0	3970.0	24.6	79.3	0.2		
1400S-300W	-25000	558	74	78	50	13	-10	20	-0.05	-0.1	3.0	191	70.9	2305.1	3330	3060	109	54			72.7	12	-25	26.7	-0.2	-10	2.5	-0.5	3390	78	3700.0	3160.0	18.4	65.3	0.3		
1400S-340W	-25000	488	42	83	36	12	-10	18	-0.05	-0.1	1.5	177	112	587.4	1270	2280	87	22			65.2	10	-25	13.1	0.3	-10	2.8	-0.5	3910	59	3080.0	2720.0	17.2	54.0	0.2		
1400S-380W	-25000	844	46	111	33	17	-10	22	-0.05	-0.1	3.0	191	70.9	143.3	1030	5710	40	12			43.1	8	-25	16.4	-0.2	34	15.3	-0.5	3650	177	2240.0	2680.0	18.8	43.5	0.1		
1400S-420W	-25000	1544	84	75	57	15	-10	14	-0.05	-0.1	1.5	177	112	429.8	1120	2030	-20	14			54.0	13	-25	13.9	-0.2	-10	10.1	-0.5	3510	93	3180.0	3800.0	22.2	53.4	0.1		
1400S-460W	-25000	1657	62	95	34	27	-10	-10	-0.05	-0.1	0.9	198	247	1680.5	3000	2200	198	74			77.3	11	-25	30.9	0.3	-10	8.2	-0.5	3080	152	2880.0	3350.0	15.9	48.1	-0.1		
1500S-200E	87800	1284	139	101	75	30	-10	11	0.08	-0.1	2.6	185	149	2031.8	6090	2480	188	54			62.7	9	-25	27.0	-0.2	-10	6.4	-0.5	5380	142	3490.0	3890.0	25.0	92.5	0.4		
1500S-60E	-25000	439	34	74	26	7	-10	18	-0.05	-0.1	1.4	194	113	2480.4	4810	2070	287	110			92.6	15	-25	34.5	0.4	-10	8.0	-0.5	7100	265	3250.0	4120.0	34.4	95.5	0.5		
1500S-100E	-25000	417	44	81	118	5	-10	21	-0.05	-0.1	3.1	237	81.0	2112.8	3880	1110	172	76			69.3	10	-25	31.8	0.4	-10	3.7	-0.5	5030	151	2750.0	3320.0	23.2	71.7	0.3		
1500S-140E	-25000	382	72	88	82	2	-10	19	0.08	-0.1	2.7	286	77.8	1339.9	3180	1700	570	78			82.4	9	-25	33.7	0.3	-10	6.2	-0.5	6350	208	2980.0	4030.0	28.8	95.2	0.5		
1500S-180E	-25000	442	36	86	73	5	-10	18	-0.05	-0.1	3.1	210	107	1887.3	3220	1910	189	87			80.2	11	-25	27.3	0.3	-10	4.7	-0.5	5700	132	3320.0	4360.0	27.9	98.1	0.3		
1500S-220E	-25000	588	48	75	83	11	-10	20	-0.05	-0.1	1.9	189	137	2055.4	4880	2880	288	85			88.7	11	-25	40.2	0.3	-10	3.2	-0.5	5780	148	4390.0	4190.0	25.4	95.9	0.4		
1500S-280E	-25000	394	40	53	120	4	-10	13	0.08	-0.1	1.8	180	31.3	837.0	3240	1240	870	52			54.7	7	-25	28.8	0.6	27	9.4	-0.5	3910	161	2120.0	2050.0	15.3	47.9	-0.1		

PGE Package: Sample ID:	Oxidation Suite:													Base Met:					Base Metal - Chalcophile Associate:										High-Field Strength Elements:											
	S	Q	Cl	V	As	Se	Mo	Sb	Te	W	Re	Au	S	Q	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	S	Q	Ti	S	Q	Cr	Y	Zr	Nb	Hf
1000S-340V	-25000	508	83	109	113	9	-10	21	0.07	-0.1	3.1	282	95.6	2812.5	5350	2920	478	117	101.7	15	-25	40.1	0.4	-10	12.0	-0.5	4730	145	4580.0	5110.0	34.3	84.5	0.6	3500	118	5530.0	4200.0	29.0	68.9	1.0
1000S-360V	-25000	706	89	94	79	15	-10	27	-0.05	-0.1	3.1	234	113	2385.0	5320	2970	450	69	90.9	18	-25	28.9	0.4	-10	9.7	-0.5	4300	159	5440.0	4740.0	31.0	74.9	0.9	2930	89	3770.0	2040.0	15.0	36.2	0.4
1000S-420V	-25000	579	68	85	71	18	-10	23	-0.05	-0.1	2.5	234	52.9	2236.5	4820	2920	246	81	102.6	18	-25	29.5	0.5	-10	9.7	-0.5	4220	112	3500.0	3700.0	30.2	54.3	0.4	2930	89	3770.0	2040.0	15.0	36.2	0.4
1000S-460V	-25000	508	85	85	71	18	-10	23	-0.05	-0.1	2.5	234	52.9	1596.0	3310	1910	32	52	89.4	13	-25	20.9	0.3	-10	5.5	-0.5	4220	112	3500.0	3700.0	30.2	54.3	0.4	2930	89	3770.0	2040.0	15.0	36.2	0.4
1000S-500V	-25000	656	82	77	95	21	-10	19	0.13	-0.1	1.9	236	77.9	2722.5	6790	2000	1710	104	74.2	14	-25	88.3	0.7	-10	6.3	-0.5	7260	195	3560.0	4590.0	37.5	73.8	0.7	3930	153	3680.0	3870.0	27.4	63.8	0.5
1100S-20E	-25000	535	135	88	344	10	-10	26	-0.05	-0.1	2.3	305	64.4	2223.0	6720	2150	288	67	78.8	12	-25	27.3	0.5	-12	9.0	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-60E	-25000	500	63	80	128	11	-10	22	0.07	-0.1	1.9	236	77.9	1845.0	6140	1470	383	70	86.2	11	-25	48.4	0.8	-10	6.7	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-100E	-25000	530	53	71	98	7	-10	15	-0.05	-0.1	1.9	272	33.5	1273.5	4740	2550	218	86	85.0	13	-25	29.0	0.8	-25	11.5	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-140E	-25000	577	113	83	158	6	-10	28	-0.05	-0.1	2.8	314	88.7	1273.5	4740	2550	218	86	64.7	13	-25	19.9	0.5	-10	8.8	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-180E	-25000	518	59	81	44	5	-10	13	-0.05	-0.1	1.5	286	97.0	1728.0	4100	1580	1230	184	69.8	13	-25	36.8	0.8	-10	5.2	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-220E	-25000	565	83	58	58	10	-10	17	-0.05	-0.1	2.5	248	61.0	1885.3	4250	2300	526	50	73.8	14	-25	30.0	0.5	-21	7.4	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-260E	-25000	503	212	65	97	10	-10	22	0.12	-0.1	3.5	280	68.8	2011.5	6610	3630	229	48	73.0	13	-25	33.4	0.4	-10	4.2	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-300E	-25000	428	56	75	37	10	-10	15	-0.05	-0.1	2.9	245	78.1	1449.0	3390	5210	521	57	77.0	15	-25	42.1	0.5	-10	5.2	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-340E	-25000	694	75	83	38	18	-10	22	-0.05	-0.1	2.6	225	52.2	1588.5	5190	4690	400	48	65.8	13	-25	28.0	0.4	-10	5.1	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-380E	-25000	681	75	80	51	18	-10	19	-0.05	-0.1	2.1	237	122	2317.5	7500	3540	696	47	64.9	13	-25	30.5	0.2	-10	4.8	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-460E	-25000	856	208	86	33	18	-10	15	0.14	-0.1	2.2	281	61.2	1146.0	2480	1850	1820	75	60.9	9	-25	41.7	0.7	-10	4.3	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-500E	-25000	636	79	73	58	14	-10	22	-0.05	-0.1	1.5	215	62.6	1599.8	3650	1510	335	74	82.2	15	-25	51.3	0.6	-10	7.9	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
BL1100S	-25000	624	105	79	45	8	-10	15	0.08	-0.1	2.3	230	74.3	1104.8	2900	2490	484	83	69.8	14	-25	56.5	0.4	-10	11.1	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-20W	-25000	520	57	88	93	8	-10	18	-0.05	-0.1	2.0	251	127	1703.3	4430	2110	458	78	90.0	15	-25	58.6	0.5	-10	6.4	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-40W	-25000	732	62	77	48	10	-10	10	0.09	-0.1	1.9	288	108	1482.8	3870	3340	380	88	79.2	15	-25	58.4	0.3	-10	5.0	-0.5	4220	122	4380.0	4700.0	26.5	78.8	0.6	4420	122	4380.0	4700.0	26.5	78.8	0.6
1100S-100W	-25000	685	75	87	81	10	-10	18	-0.05	-0.1	2.3	296	118	1536.8	3820	3580	236	77	78.4	14	-25	41.0	0.5	-14	5.3	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-140W	-25000	638	101	86	38	15	-10	18	-0.05	-0.1	1.9	283	149	1968.8	5040	3580	533	85	81.9	17	-25	43.7	0.4	-10	4.1	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-180W	-25000	643	86	78	81	14	-10	18	-0.05	-0.1	1.9	234	45.2	1824.8	4870	2370	377	48	83.1	18	-25	35.6	0.4	-10	3.8	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-220W	-25000	326	166	51	256	5	-10	21	-0.05	-0.1	3.0	288	42.1	1741.5	4100	2910	368	72	62.7	10	-25	40.4	0.4	-10	3.7	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-260W	-25000	842	101	82	46	26	-10	17	-0.05	-0.1	2.2	245	107	1741.5	4100	2910	368	72	62.7	10	-25	40.4	0.4	-10	3.7	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-300W	-25000	588	87	99	50	10	-10	18	-0.05	-0.1	3.1	225	79.9	2115.0	5110	2440	206	39	51.7	8	-25	19.5	0.3	-10	3.4	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-340W	-25000	764	74	73	80	13	-10	20	-0.05	-0.1	2.2	245	107	967.5	2790	828	1740	44	60.4	10	-25	85.3	0.8	-10	5.6	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-380W	-25000	400	58	47	84	5	-10	25	-0.05	-0.1	2.2	191	47.2	812.3	1750	465	750	40	60.4	10	-25	85.3	0.8	-10	5.6	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-420W	-25000	484	42	79	89	6	-10	21	-0.05	-0.1	2.7	182	88.8	1163.3	2970	1090	1720	45	62.9	12	-25	34.9	0.5	-10	6.1	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-460W	-25000	232	135	56	43	3	-10	20	0.07	-0.1	2.1	228	20.6	1266.8	3910	1770	531	44	64.2	12	-25	35.8	0.3	-11	6.7	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1100S-500W	-25000	439	162	36	103	6	-10	14	0.17	-0.1	2.3	165	54.4	1737.0	5120	3110	355	47	63.5	15	-25	34.1	0.3	-10	3.0	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1200S-20E	-25000	521	57	54	130	8	-10	18	-0.05	-0.1	3.7	238	77.9	2430.0	4370	3150	558	125	84.8	14	-25	50.9	0.7	-14	2.4	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.0	44.7	98.6	0.3
1200S-60E	-25000	626	81	72	143	12	-10	19	-0.05	-0.1	1.8	233	103	2947.5	6570	3440	531	110	85.6	12	-25	41.9	0.5	-10	2.5	-0.5	4280	188	2980.0	2900.0	20.5	51.2	0.3	6900	174	3090.0	6310.			

PGE Package:

Sample ID:  
700S-300W  
700S-340W  
700S-380W  
700S-420W  
700S-500W  
800S-202  
800S-60E  
800S-100E  
800S-140E  
800S-220E  
800S-300E  
800S-340E  
800S-380E  
800S-420E  
800S-480E  
800S-500E  
BL800S  
800S-20W  
800S-60W  
800S-100W  
800S-140W  
800S-180W  
800S-220W  
800S-280W  
800S-300W  
800S-340W  
800S-380W  
800S-420W  
800S-460W  
800S-500W  
900S-20E  
900S-60E  
900S-100E  
900S-140E  
900S-180E  
900S-220E  
900S-280E  
900S-300E  
900S-340E  
900S-380E  
900S-420E  
900S-460E  
900S-500E  
BL900S  
800S-20W  
800S-60W  
900S-100W  
900S-140W  
900S-180W  
900S-220W  
900S-260W  
900S-300W  
900S-340W  
900S-380W  
900S-420W  
900S-460W  
1000S-20E  
1000S-60E  
1000S-100E  
1000S-140E  
1000S-180E  
1000S-220E  
1000S-260E  
1000S-300E  
1000S-340E  
1000S-420E  
1000S-460E  
1000S-500E  
BL1000S  
1000S-20W  
1000S-60W  
1000S-100W  
1000S-140W  
1000S-180W  
1000S-220W  
1000S-260W  
1000S-300W

Oxidation Suite:

S.Q.	Cl	V	As	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	
-25000	720	68	59	18	14	-10	19	-0.05	-0.1	2.0	197	45.5	
-25000	780	87	57	164	8	-10	28	-0.05	-0.1	1.7	221	78.7	
-25000	581	59	80	64	11	-10	20	-0.05	-0.1	2.6	227	75.8	
-25000	861	86	104	38	12	-10	19	-0.05	-0.1	2.7	230	59.2	
-25000	798	103	90	37	22	-10	21	-0.05	-0.1	4.9	182	87.1	
-25000	515	95	92	101	7	-10	26	-0.05	-0.1	1.8	239	128	
-25000	629	55	57	33	7	-10	18	-0.05	-0.1	1.5	238	123	
-25000	585	63	63	68	10	-10	20	-0.05	-0.1	1.2	242	116	
-25000	828	79	107	38	13	-10	26	-0.05	-0.1	1.6	279	141	
-25000	869	105	92	51	11	-10	20	-0.05	-0.1	2.2	243	70.6	
-25000	1488	164	102	18	22	-10	16	-0.05	0.2	5.1	179	29.5	
-25000	800	73	58	91	10	-10	26	-0.05	-0.1	1.8	198	64.3	
-25000	1281	80	81	68	17	-10	22	-0.05	-0.1	2.7	210	44.3	
-25000	462	38	77	72	6	-10	15	-0.05	-0.1	0.8	179	129	
-25000	827	84	104	16	8	-10	13	-0.05	-0.1	2.4	225	100	
-25000	745	91	88	24	7	-10	13	-0.05	-0.1	2.0	251	80.3	
-25000	581	139	83	25	11	-10	16	-0.05	-0.1	2.6	180	61.0	
-25000	481	169	90	28	7	-10	18	-0.05	-0.1	2.2	216	50.4	
-25000	782	125	83	55	10	-10	19	-0.05	-0.1	2.4	248	137	
-25000	968	67	141	71	12	-10	18	-0.05	-0.1	2.1	281	69.7	
-25000	542	39	80	78	6	-10	20	-0.05	-0.1	2.3	257	83.0	
-25000	804	113	84	44	10	-10	22	-0.05	-0.1	2.1	281	69.7	
-25000	357	40	72	85	3	-10	14	-0.05	-0.1	1.2	225	58.8	
-25000	637	42	83	104	6	-10	15	0.05	-0.1	1.8	473	66.8	
-25000	1264	113	84	122	12	-10	18	-0.05	-0.1	1.6	594	108	
-25000	978	90	79	101	9	-10	23	-0.05	-0.1	2.0	437	105	
-25000	790	228	81	158	7	-10	24	-0.05	-0.1	1.7	471	60.1	
-25000	1418	230	79	86	21	-10	20	-0.05	-0.1	2.6	567	91.4	
-25000	1018	130	82	105	15	-10	22	0.11	-0.1	2.2	486	164	
-25000	818	108	88	78	14	-10	19	0.07	-0.1	1.9	455	103	
-25000	1058	84	87	206	45	-10	27	-0.05	-0.1	2.5	353	68.8	
-25000	904	71	97	151	15	-10	23	-0.08	-0.1	2.3	458	144	
-25000	1832	288	73	45	37	-10	24	0.09	0.4	4.3	293	33.5	
-25000	808	133	80	198	12	-10	22	0.10	-0.1	2.8	423	162	
-25000	824	280	75	80	6	-10	15	0.12	-0.1	2.3	416	163	
-25000	832	110	75	165	10	-10	18	-0.05	-0.1	2.1	351	193	
-25000	647	140	77	87	6	-10	17	0.10	-0.1	1.9	320	79.4	
-25000	858	107	75	87	13	-10	18	-0.05	-0.1	2.2	145	53.3	
-25000	803	170	56	95	6	-10	13	0.05	-0.1	3.1	273	85.1	
-25000	782	216	63	246	12	-10	17	0.33	-0.1	12.4	188	50.4	
-25000	734	272	47	163	7	-10	-10	0.71	-0.1	1.5	338	155	
-25000	952	190	85	81	10	-10	14	0.29	-0.1	1.4	407	32.9	
-25000	1656	512	87	20	10	-10	20	0.25	-0.1	2.0	294	60.0	
-25000	936	212	75	20	9	-10	14	0.14	-0.1	5.1	207	32.4	
-25000	1112	580	67	15	13	-10	17	0.09	0.2	2.5	227	90.0	
-25000	896	141	84	81	9	-10	16	0.21	-0.1	1.8	558	241.0	
-25000	2768	590	115	1154	22	-10	27	0.48	-0.1	3.1	422	170	
-25000	1818	584	93	474	32	-10	39	0.18	-0.1	3.9	383	17.8	
-25000	471	47	89	27	10	-10	23	0.07	-0.1	2.5	288	95.8	
-25000	824	72	101	69	10	-10	19	-0.05	-0.1	2.3	318	99.4	
-25000	824	278	88	84	11	-10	19	-0.05	-0.1	3.1	327	113	
-25000	880	143	91	99	14	-10	18	-0.05	-0.1	3.1	287	114	
-25000	580	89	86	80	15	-10	17	-0.05	-0.1	3.8	318	75.2	
-25000	847	114	90	125	11	-10	23	0.05	-0.1	2.6	287	111	
-25000	715	95	107	72	17	-10	22	-0.05	-0.1	2.1	275	82.4	
-25000	574	84	87	51	16	-10	20	0.05	-0.1	2.7	327	60.1	
-25000	965	152	83	130	14	-10	21	-0.05	-0.1	2.8	290	22.9	
-25000	865	193	77	21	30	-10	22	-0.05	-0.1	2.1	339	101	
-25000	867	149	85	118	10	-10	21	-0.05	-0.1	2.7	285	62.3	
-25000	848	109	93	53	16	-10	17	0.09	-0.1	2.3	288	65.2	
-25000	1240	92	70	87	12	-10	20	0.07	-0.1	2.5	294	156	
-25000	713	75	80	86	10	-10	19	0.06	-0.1	2.5	302	115	
-25000	555	88	80	114	10	-10	17	-0.05	-0.1	1.8	279	97.0	
-25000	798	83	73	29	10	-10	15	0.07	-0.1	2.5	315	83.7	
-25000	901	108	83	85	13	-10	20	0.10	-0.1	2.2	230	68.6	
-25000	901	108	84	100	54	18	-10	18	0.05	-0.1	13.4	109	34.9
-25000	803	87	78	39	12	-10	20	0.07	-0.1	2.0	221	102	
-25000	548	155	51	147	6	-10	10	0.80	-0.1	3.8	179	52.8	
-25000	580	95	108	58	13	-10	20	0.07	-0.1	3.8	75.0	14.7	
-25000	844	142	80	33	18	-10	13	-0.05	-0.1	1.9	231	80.3	
-25000	601	264	51	-1	8	-10	-10	-0.05	-0.1	2.3	228	72.7	
-25000	625	128	77	44	10	-10	15	0.06	-0.1	2.6	233	73.4	
-25000	508	92	88	38	11	-10	16	-0.05	-0.1	2.4	200	85.0	
-25000	558	101	82	92	8	-10	13	0.10	-0.1	2.5	258	107	
-25000	524	101	91	88	10	-10	16	0.09	-0.1	2.7	216	85.5	
-25000	498	59	104	88	11	-10	16	0.06	-0.1	3.6	273	110	
-25000	879	100	93	43	17	-10	15	-0.05	-0.1	2.3	286	114	
-25000	583	111	104	117	13	-10	24	-0.05	-0.1	2.3	315	38.9	
-25000	516	81	92	84	10	-10	20	-0.05	-0.1	2.4	286	110	
-25000	638	159	78	90	11	-10	31	-0.05	-0.1	2.4	286	110	

Base Met

Co	Ni	Cu	Zn	Pb
1628	3170	4090	152	58
1806	3270	1070	1350	63
1913	4040	1570	541	61
1552	2880	2370	190	60
2002	3220	2600	261	52
1480	5120	1090	289	78
1635	3890	1920	177	133
2184	4270	3010	144	80
2825	5030	2220	270	117
1773	4390	2790	548	84
1338	4040	6090	305	78
2157	4380	1690	279	55
1838	4210	5820	170	82
1219	5230	2140	247	78
1714	3570	2430	240	102
1521	2320	2490	774	62
1901	1450	2800	2320	37
1298	1990	1100	3380	101
1345	2630	2180	2030	63
2542	6250	3520	393	114
1859	5780	1310	307	106
1628	4890	2190	554	109
806	8230	724	1980	86
1901	4210	1480	332	92
2362	4790	2710	384	94
2520	4090	2010	317	86
2011	3400	1940	632	70
2385	4070	3510	307	80
1908	2570	1740	301	50
2040	6270	2420	483	58
1797	3190	3180	249	36
2877	5300	2480	223	53
1590	2950	4200	116	74
3890	4800	2470	754	119
1530	2290	2210	1720	72
3262	6100	3850	339	61
2295	3440	1800	694	63
3397	5790	3280	632	48
2038	3290	1690	548	52
2058	8340	1210	1590	77
1257	8230	44700	281	44
1215	2450	1510	885	40
1880	940	2280	988	34
2148	779	1850	1620	33
893	1300	1960	125	30
1543	2710	1800	1790	73
1233	4300	2040	649	54
2407	3380	3050	625	79
1300	3350	3420	113	106
1527	2610	2350	270	57
1581	3850	2150	1300	106
1723				

PGE Package:

Sample ID	Oxidation Suite:													Base Metal					Base Metal - Chalcophile Associat.										High-Strength Elements:									
	S.Q.	Cl	V	As	Sa	Mo	Sb	Te	W	Re	Au	S.Q.	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ge	Se	Ag	Cd	In	Sn	Tl	Bi	S.Q.	Ti	S.Q.	Cr	Y	Zr	Nb	Hf	Ta	
4005-00W	-25000	1140	90	138	99	18	-10	17	0.09	0.1	2.2	340	103	1950.0	4740	2920	485	82	57.8	10	-25	47.6	0.5	-10	1.7	-0.5	5570	223	3890.0	4130.0	28.4	110.0	1.9					
4005-100W	-25000	828	106	110	78	13	-10	18	0.10	-0.1	1.8	327	72.5	1530.0	2910	2780	807	85	62.8	9	-25	37.1	0.8	-10	2.6	-0.5	5580	318	3650.0	3910.0	26.6	103.0	1.8					
4005-140W	-25000	883	107	120	73	17	-10	19	0.07	-0.1	1.7	357	58.9	1780.0	4530	2710	898	80	65.7	10	-25	51.1	0.8	-10	2.4	-0.5	4480	285	3660.0	3270.0	24.2	82.7	1.8					
4005-180W	-25000	741	82	133	99	13	-10	23	-0.05	-0.1	1.7	319	149.9	2280.0	4500	3960	501	83	63.9	11	-25	31.9	0.5	-10	3.9	-0.5	4380	198	5330.0	4040.0	27.0	115.0	2.9					
4005-220W	-25000	946	103	100	103	12	-10	24	0.09	0.2	2.0	317	78.0	2540.0	3500	3550	305	83	62.7	11	-25	35.7	0.4	-10	5.2	-0.5	3630	288	3980.0	2900.0	19.2	78.3	2.2					
4005-280W	-25000	533	58	117	89	10	-10	18	-0.05	-0.1	1.3	319	106	1640.0	3280	2770	728	83	67.2	13	-25	43.7	0.8	-10	4.5	-0.5	4070	238	3980.0	3390.0	24.7	98.2	2.2					
4005-300W	-25000	834	102	111	77	10	-10	22	0.05	-0.1	2.0	372	116	1980.0	3320	2440	475	135	67.7	13	-25	43.7	0.8	-10	5.3	-0.5	5570	277	4380.0	3750.0	29.9	107.0	2.9					
4005-340W	-25000	906	78	115	88	16	-10	24	-0.05	0.2	1.8	343	131	2560.0	3100	3700	771	87	58.9	9	-25	31.6	0.5	-10	4.1	-0.5	4500	181	4680.0	3620.0	23.7	101.0	2.3					
4005-380W	-25000	757	110	102	120	12	-10	20	0.06	0.1	1.8	331	107	1800.0	2840	1470	488	112	71.3	11	-25	29.2	0.6	-10	3.8	-0.5	5560	224	3790.0	3280.0	26.2	94.8	2.2					
4005-420W	-25000	583	91	59	95	7	-10	22	-0.05	-0.1	1.8	391	106	2000.0	3260	1280	1310	121	63.5	11	-25	32.3	0.4	390	3.5	-0.5	4690	169	3830.0	3680.0	32.4	108.0	2.1					
4005-480W	-25000	631	165	72	118	8	-10	26	-0.05	0.1	1.9	361	117	1360.0	2750	3500	421	77	67.9	11	-25	48.2	0.8	-10	14.5	0.5	5050	626	3650.0	3820.0	31.6	92.7	2.3					
4005-500W	-25000	1360	230	80	43	18	-10	19	-0.05	0.4	4.6	161	48.7	1930.0	3650	5510	1170	101	80.8	15	-25	38.4	0.6	-10	10.0	-0.5	4980	258	4940.0	4580.0	37.3	112.0	2.6					
5005-20E	-25000	2270	208	121	45	39	-10	23	0.14	0.3	2.5	322	60.4	2090.0	5360	7380	408	90	60.0	12	-25	37.9	0.4	-10	3.9	-0.5	4080	224	3840.0	3320.0	22.7	82.2	1.8					
5005-80E	-25000	849	120	91	24	12	-10	18	-0.05	0.1	1.8	327	110	1880.0	3640	3290	559	88	67.8	12	-25	32.9	0.5	-10	3.4	-0.5	3430	172	4230.0	2490.0	17.7	67.0	2.1					
5005-100E	-25000	697	53	133	47	15	-10	20	0.15	0.1	1.7	285	123	2230.0	5360	5370	246	80	65.4	10	-25	31.8	0.4	-10	4.4	-0.5	2380	399	3960.0	2110.0	13.3	57.2	2.0					
5005-200E	-25000	665	75	122	74	13	-10	22	-0.05	0.1	1.3	244	88.8	1190.0	2400	1670	1380	86	60.4	10	-25	37.7	0.5	-10	4.2	-0.5	3510	174	3450.0	2530.0	15.8	70.2	1.7					
5005-280E	-25000	1020	71	105	64	22	-10	19	0.18	0.3	1.3	265	38.1	1790.0	4050	2920	496	83	72.8	13	-25	29.8	0.3	-10	5.1	-0.5	2590	160	4830.0	2400.0	15.1	70.3	2.1					
5005-300E	-25000	482	78	98	111	10	-10	16	-0.05	-0.1	1.0	298	85.7	2010.0	3820	2490	872	82	61.8	11	-25	44.7	0.6	-10	3.9	-0.5	4530	331	4340.0	3590.0	22.7	94.9	2.3					
5005-340E	-25000	74	53	112	85	12	-10	17	-0.05	-0.1	1.6	273	68.3	1780.0	3870	1670	1670	81	71.0	11	-25	39.9	0.3	-10	5.0	-0.5	3440	204	3520.0	2270.0	15.9	64.9	2.1					
5005-380E	-25000	1150	102	110	73	13	-10	17	-0.05	-0.1	1.6	310	131	1960.0	3640	2300	548	99	68.4	9	-25	43.2	0.7	-10	3.7	-0.5	3550	191	4080.0	3630.0	24.9	94.3	1.9					
5005-420E	-25000	783	65	103	85	13	-10	18	-0.05	-0.1	1.0	304	159.3	2210.0	3780	1680	1530	127	68.8	14	-25	38.4	0.6	-10	5.9	-0.5	8480	256	3940.0	4310.0	30.2	87.2	2.3					
5005-480E	-25000	812	63	94	79	12	-10	18	-0.05	-0.1	1.0	304	68.3	1590.0	2690	1900	1700	85	71.9	12	-25	26.5	0.4	-10	3.5	-0.5	6190	358	3920.0	4110.0	32.5	118.0	2.0					
5005-500E	-25000	814	86	101	106	11	-10	28	0.12	-0.1	1.2	369	153	1950.0	3930	3370	941	101	62.4	8	-25	28.0	0.3	-11	3.5	-0.5	4470	373	3910.0	3070.0	28.0	88.1	2.4					
BL500S	-25000	800	122	80	55	11	-10	19	0.08	-0.1	2.1	215	78.0	2280.0	4250	2560	814	121	62.0	14	-25	44.5	0.4	-10	3.0	-0.5	4370	217	3590.0	3930.0	29.2	103.0	2.1					
5005-20W	-25000	1090	129	77	108	14	-10	20	-0.05	0.1	2.0	282	121	2350.0	4700	2730	543	120	62.4	8	-25	28.0	0.3	-11	3.5	-0.5	5560	287	4820.0	4800.0	34.4	137.0	3.0					
5005-80W	-25000	888	93	89	83	9	-10	19	-0.05	-0.1	1.2	312	83.2	2580.0	5400	3780	298	135	80.2	16	-25	29.2	0.6	-10	6.8	-0.5	3650	358	5330.0	3040.0	20.3	90.1	2.6					
5005-100W	-25000	947	78	91	70	9	-10	23	-0.05	-0.1	1.0	365	83.4	2270.0	5630	3080	289	126	66.3	9	-25	36.8	0.4	-10	5.1	-0.5	3920	306	3870.0	3480.0	21.5	94.1	1.9					
5005-140W	-25000	1120	91	83	47	17	-10	16	-0.05	0.1	1.3	335	84.2	1650.0	2910	2220	886	101	76.8	13	-25	38.6	0.5	-10	3.2	-0.5	3880	238	3810.0	2880.0	19.8	82.1	1.6					
5005-180W	-25000	845	57	108	61	6	-10	16	-0.05	-0.1	1.4	330	69.3	1700.0	2890	2210	723	172	73.3	12	-25	30.9	0.5	-10	6.2	-0.5	4330	340	4270.0	2940.0	21.4	81.0	2.1					
5005-280W	-25000	700	68	94	83	8	-10	19	-0.05	-0.1	1.7	379	95.0	2450.0	4770	2130	315	121	57.1	10	-25	28.2	0.4	-10	4.0	-0.5	4890	214	3220.0	2780.0	25.0	74.7	1.9					
5005-300W	-25000	822	73	100	117	10	-10	25	-0.05	-0.1	2.0	361	92.7	839.0	2010	3930	91	30	65.0	15	-25	21.1	0.2	-10	24.1	-0.5	3490	180	4810.0	3760.0	19.3	84.0	2.2					
5005-380W	-25000	1179	98	129	103	10	-10	24	0.17	-0.1	1.6	319	77.8	1810.0	2970	2240	247	79	70.3	12	-25	39.4	0.5	-10	3.5	-0.5	5780	320	3930.0	3610.0	27.4	101.0	1.9					
5005-420W	-25000	782	105	103	154	14	-10	19	0.12	-0.1	1.9	321	90.9	2080.0	3450	2530	621	142	59.9	13	-25	29.6	0.2	-10	4.2	0.5	6110	379	3690.0	4220.0	32.0	123.0	2.0					
5005-480W	-25000	683	66	107	82	9	-10	14	-0.05	-0.1	1.1	349</																										



	N	Mean	Std. Dev.	Minimum	Percentiles							Maximum
					25	50	70	80	90	95	98	
AS	359	98	68	34	62	81	103	117	162	208	280	584
AU	359	0.08	0.13	0.05	0.05	0.05	0.05	0.05	0.14	0.22	0.35	2.29
BA	359	51199	13106	6320	43680	50800	57900	61500	67520	73100	78136	103000
BE	359	27	8	2	22	27	31	34	37	40	45	57
BI	359	0.25	0.03	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.56
CD	359	36	15	13	28	33	38	44	51	63	79	138
CE	359	6656	2112	750	5227	6615	7560	8280	9446	10140	11691	13900
CL_SQ	359	13529	11507	12500	12500	12500	12500	12500	12500	12500	12500	204000
CO	359	1879	578	143	1562	1908	2156	2320	2580	2774	2948	3880
CR_SQ	359	191	76	20	141	176	213	240	288	340	381	629
CS	359	6.1	3.4	1.0	3.8	5.3	6.7	8.0	10.6	13.9	16.7	20.4
CU	359	3201	5840	385	1880	2440	2960	3320	4040	5510	9348	88000
DY	359	736	189	110	641	735	803	853	949	1082	1169	1596
ER	359	435	108	62	379	435	476	507	560	609	693	877
EU	359	223	60	33	190	224	245	260	288	314	354	588
GA	359	68	14	14	61	68	75	79	85	88	92	105
GD	359	765	205	117	651	772	855	911	1016	1100	1227	1600
Ge	359	12	4	2	9	12	13	15	16	19	19	23
HF	359	74	23	5	63	76	85	92	100	110	117	148
HG_SQ	359	2.2	1.3	0.8	1.6	2.0	2.3	2.6	3.2	3.7	5.2	13.4
HO	359	147	37	22	128	147	162	169	190	210	228	314
IN	359	0.46	0.19	0.1	0.3	0.44	0.5	0.6	0.7	0.78	1	1.7
LA	359	2845	823	661	2410	2830	3120	3378	3730	4160	5092	7948
LI_SQ	359	143	100	11	109	130	145	159	191	211	316	1232
LU	359	63	14	12	55	63	68	72	79	87	103	119
MN	359	323441	114383	3556	254000	314000	370000	409479	473000	520499	581730	837200
MO	359	85	87	1	49	73	94	106	128	161	254	1154
NB	359	25	9	1	19	25	29	32	36	38	44	53
ND	359	4026	1029	782	3534	4050	4440	4782	5250	5859	6296	7812
NI	359	3958	1406	409	3040	3930	4660	5010	5660	6490	6934	8790
OS	359	0.05	0.02	0.05	0.05	0.05	0.05	0.05	0.05	0.11	0.14	0.24
PB	359	82	34	12	59	79	95	106	121	140	160	363
PD	359	1.29	0.74	0.5	0.5	1	2	2	2	2	3	4
PR	359	882	228	170	768	886	977	1046	1150	1273	1385	1783
PT	359	0.07	0.05	0.05	0.05	0.05	0.05	0.11	0.16	0.19	0.25	0.37
RB	359	242	91	64	184	229	278	305	365	416	487	561
RE	359	0.07	0.12	0.03	0.03	0.03	0.06	0.08	0.13	0.2	0.49	1.13
RU	359	0.12	0.09	0.1	0.1	0.1	0.1	0.1	0.1	0.28	0.4	1.41
SB	359	12.1	6.2	0.5	8.3	10.8	13.5	15.5	18.5	22.7	31.8	45.3
SC_SQ	359	354	91	101	293	355	403	431	472	503	552	603
SE	359	84	20	26	72	83	92	100	109	121	129	153
SM	359	899	235	136	774	911	996	1070	1163	1310	1412	1786
SN	359	15.5	32.8	5	5	5	5	14	31	67	121	390
SR	359	18130	10821	6689	12766	15200	17760	21120	26520	32880	65448	87600
TA	359	1.1	0.7	0.1	0.5	0.8	1.7	1.9	2.1	2.2	2.6	3.0
TH	359	268	73	46	227	265	297	318	348	391	457	594
TI_SQ	359	4784	1752	352	3490	4658	5560	6190	7130	7970	9024	10500
TL	359	5.9	5.0	0.25	3.2	4.6	6	8	10	14	22	52
TM	359	56	14	8	49	56	62	66	72	79	88	111
U	359	96	128	15	63	88	108	121	137	156	182	2410
V	359	739	275	232	577	680	811	868	1020	1242	1533	2768
W	359	19.3	4.9	5.0	17.0	19.0	21.1	22.8	25.0	27.0	30.8	39.0
Y	359	3590	872	507	3140	3640	3970	4180	4580	4990	5546	6630
YB	359	378	91	51	330	381	415	434	481	532	581	734
ZN	359	606	562	10	288	421	621	870	1290	1620	2288	3950
ZR	359	3394	1097	255	2670	3460	3969	4250	4750	5140	5517	6640

Table 3: Statistics by SPSS  
Elements arranged alphabetically

## **GM CLAIM GROUP - 92I/9W**

### **SELF - POTENTIAL SURVEY - 2001**

**BY: Larry D. Lutjen**

**SELF-POTENTIAL** voltages both positive and negative will occur over blind mineralized deposits as they form a galvanic cell from the interaction of ground water flowing through the mineralization. Potentials above the mineralized deposit are almost always negative with positive background potentials at the outer limits of the mineralized deposit. The level of these potentials are proportional to the thickness of the over-burden over the deposit and in the case of the GM Claims it is estimated to be 20 to 30 meters. A model for this type of deposit is a galvanic cell extending into the earth at an angle equivalent to the dip of the ore body, with an electrical negative voltage at the surface of the earth and a positive voltage at the bottom of the deposit. This cell will set-up galvanic currents from negative to positive with resultant surface expressions of negative voltages over the deposit and positive voltages on the flanks at distances proportional to the dip of the ore body. Several problems with measuring these voltages are telluric currents induced into the earth by the solar winds blowing off of the sun and the inability to get repeatable contact with the earth when measuring millivolt levels of voltages. To solve the telluric problem we used a common ground reference that we measured every morning and night and adjusted the telluric effects by normalizing the data as you would on a magnetometer survey. To solve the contact problem we used 15 to 20 centimeter holes to make contact with the earth and the ceramic pots. We would then measure the resistance of the contact and dig deeper and deeper until the resistance dropped to our reference value. Often times we had to dig multiple hole to make the correct contact. We have done many self-potential surveys, but this one was over the most over-burden that we have ever surveyed. The results were voltage potentials from minus 15 millivolts to plus 18 millivolts which made the survey most difficult at these low levels. Once the ceramic pots resistance was equal to or lower than our reference value we would take our millivolt readings on a Micronta auto-range digital voltmeter, serial number 16210, which proved to be very durable and dependable.

**SELF-POTENTIAL RESULTS** in figure 1 show a negative anomaly that runs for over 800 meters at an azimuth of approximately 300 degrees with flanking positive anomalies on either side. Between line 800 south and 900 south there appears to be some strike-slip faulting that I have approximated at 20 degrees. If this off-set is part of the original anomaly, it represents another 300 meters of extension to first 800 meters. The Cherry Creek Fault appears to run through the GM Claims at approximately 300 degrees, the same as the negative anomaly. With anomalous negative and positive voltages running off of the original grid it will be very important to expand the existing baseline and gridlines. The final results will come from the drill core, but preliminary results from the self-potential survey are very promising.

## GM CLAIM GROUP - 921/9W

### TERRASOL SURVEY - 2002

By: Larry D. Lutjen

**TERRASOL LEACH** selectively leaches the amorphous oxide coatings on soil grains by dissolving the manganese oxide amorphous coatings and most of the limonite. As a result, trapped trace elements are released into the leach solution. Copper and Moly (Cu/Mo) anomalies form strong terrasol halos around shallowly buried deposits, suggesting the presence of an underlying Cu/Mo porphyry.

In figure 1, Copper values of 3440 ppb to 88000 ppb in the terrasol leach form an anomalous zone paralleling the Cherry Creek Fault at approximately a 300 degree azimuth across 800 meters of grid lines. The data strongly suggests a potentially buried unexplored Co/Mo porphyry system, with structurally controlled mineralization radiating from the inferred porphyry that could underlie the GM Claims.

In figure 2 the Moly values of 100 to 1154 ppb in the terrasol leach also follow the Cherry Creek Fault system at approximately a 300 degree azimuth, the same as the copper anomalies. Additional Moly values form conjugate shear zones which appear to strike through the Cherry Creek Fault at azimuths of 20 to 60 degrees. The conjugate shears also appear to be off-set along strike-slips that trend northerly.

In figure 3 the Rhenium values of .05 to 1.13 ppb strike along the Cherry Creek Fault at 300 degrees. Rhenium is the ninth rarest element and often forms halos above the margins of a buried Cu/Mo porphyry. In addition there are several Rhenium anomalies that appear to be leakage in the conjugate shear zones.

In figure 4 the Thallium values of 10 to 52 ppb also strike with the Cherry Creek Fault at 300 degrees and the conjugate shears at 20 to 60 degrees. Thallium terrasol results suggest subsurface structural zones trending with the Cherry Creek Fault and the conjugate shears.

In figure 5 the Niobium values of 26 to 53 ppb in the terrasol leach also trend with the Cherry Creek Fault and the conjugate shears. Niobium halos also form around deep seated fault structures. The Niobium trends appear to represent structures that guided the flow of mineralized fluids out of the porphyry system.

In figure 6 the Palladium values from 2 to 4 ppb in the terrasol leach also shows a trend with the Cherry Creek Fault and the conjugate shears. The data strongly suggests that some of the Palladium values extend off of the grid lines and warrant further exploration.

**TERRASOL DATA** from the B-horizon soil samples from the GM Claims have yielded diagnostic signatures indicative of a blind Copper/Moly porphyry. Porphyry deposits are marked by their large scale zoned metal and alteration assemblages. Central parts of the mineralized zone appear to have higher Au/Cu ratios than the margins. The Copper Porphyry deposits are found mostly in the Triassic/Jurassic volcanic terranes and the presence of hydrothermally altered clasts in coarse pyroclastic deposits can be used to locate mineralized intrusive centers.

**GOLD MASK VENTURES LTD. ITEMIZED COST STATEMENT**

**FOR PHASE ONE OF THE 2001 – 2002  
TWO PHASE MINERAL EXPLORATION PROGRAM ON THE GM CLAIMS**

*September 28, 2001 to February 6, 2002*

---

<b>1. Geologists Field Trip:</b>	
Colin Dunn, Project Geologist, 1 Day	\$ 680.00
Plus Vehicle Rental Expense	
Air Fare	578.66
Hotel	97.18
Richard Lodmell, 1 Day	250.00
Larry Lutjen, 1 Day	250.00
1 Truck (200 km) at \$0.35 KM	70.00
Meals (3 Man Days) at \$30.00 Per Day	90.00
<b>2. Labour for Field Work:</b>	
Preparation of 1.5 Km of Baseline and 15.5 Km of Grid Lines	
Richard Lodmell, 5 Days at \$250.00 Per Day	1,250.00
Larry Lutjen, 5 Days at \$250.00 Per Day	1,250.00
Collection of 416 Terrasol Soil Samples of Uniform Color and Texture	
Richard Lodmell, 9 Days at \$250.00 Per Day	2,250.00
Larry D. Lutjen, 8 Days at \$250.00 Per Day	2,000.00
Self-Potential Geophysical Survey	
Richard Lodmell, 17 Days at \$250.00 Per Day	4,250.00
Larry D. Lutjen, 17 Days at \$250.00 Per Day	4,250.00
<b>3. Transportation for Field Work:</b>	
Richard Lodmell, 31 Days at 40 KM Per Day and \$0.35 / KM	434.00
Larry D. Lutjen, 30 Days at 200 Km Per Day and \$0.35 / KM	2,100.00
<b>4. Meals for Field Days:</b>	
Richard Lodmell, 31 Days at \$30.00 Per Day	930.00
Larry D. Lutjen, 30 Days at \$30.00 Per Day	900.00
<b>5. Field Supplies and Shipping Costs:</b>	
Bags, Boxes, Radios, Flagging, Hip Chain, Etc.	853.74
<b>6. Self-Potential Equipment Rental:</b> at \$500.00 Per Month	500.00
<b>7. Terrasol Soil Sample Analysis:</b>	11,381.59
<b>8. Drafting of Plates 1 to 7 for 2 Days Per Plate (S.P. and Terraol Surveys):</b>	3,750.00
at \$250.00 Per Day – Larry D. Lutjen	
<b>9. Interpretation and Report on Terrasol Survey:</b>	5,211.00
For 8 Days Plus Costs By Dr. Collin Dunn	
<b>TOTAL OF EXPENDITURES ON THE GM CLAIMS TO FEBRUARY 6, 2002</b>	<b>\$43,326.17</b>

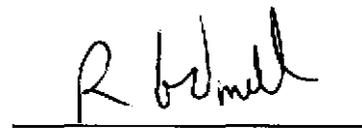
February 6<sup>th</sup>, 2002

I, **RICHARD LODMELL**, of Box 1192, Kamloops, BC, V2C 6H3, state:

that I have received a Certificate for Industrial Records at Malaspina  
College, BC

that I have received a Statement of Course Completion in Mineral  
Exploration for Prospectors; and

that I have been active in Mineral Exploration in BC for over 20 years.

A handwritten signature in black ink, appearing to read "R. Lodmell", is written above a horizontal line.

Richard Lodmell

# MALASPINA COLLEGE

## Statement of Course Completion

RICHARD LODMELL

has

Successfully Completed 180 Hours of Instruction  
in

MINERAL EXPLORATION FOR PROSPECTORS

PRESENTED BY B.C. MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

B.C. MINISTRY OF EDUCATION

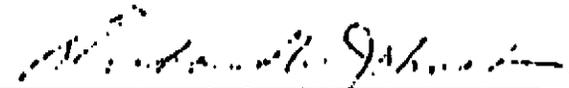
APRIL 16 to 30, 1983 - MESACIITE LAKE, B.C.

MAY 2, 1983

Dated at Nanaimo,  
British Columbia, Canada



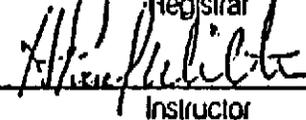
Malaspina  
College



Director/Dean



Registrar



Instructor

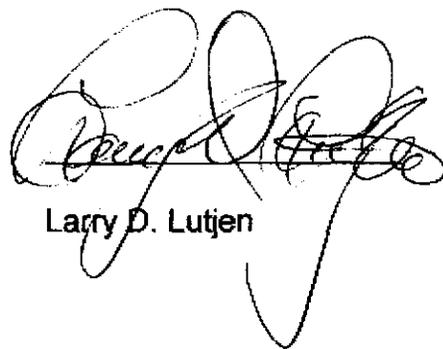
February 6<sup>th</sup>, 2002

I, **LARRY D. LUTJEN**, of RR #1, Site 11, Box 12, Chase, BC, V0E 1M0, state:

that I have received a Degree in Electrical Engineering at the College of San Mateo, California;

that I have received a Statement of Course Completion in Mineral Exploration for Prospectors; and

that I have been active in Mineral Exploration in BC for over 20 years.



Larry D. Lutjen

# MALASPINA COLLEGE

## Statement of Course Completion

LARRY D. LUTJEN

has

Successfully Completed 180 Hours of Instruction  
in

MINERAL EXPLORATION FOR PROSPECTORS

PRESENTED BY B.C. MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES  
B.C. MINISTRY OF EDUCATION

APRIL 16 to 30, 1983 - MESACHIE LAKE, B.C.

MAY 2, 1983

Dated at Nanaimo,  
British Columbia, Canada



*[Signature]*

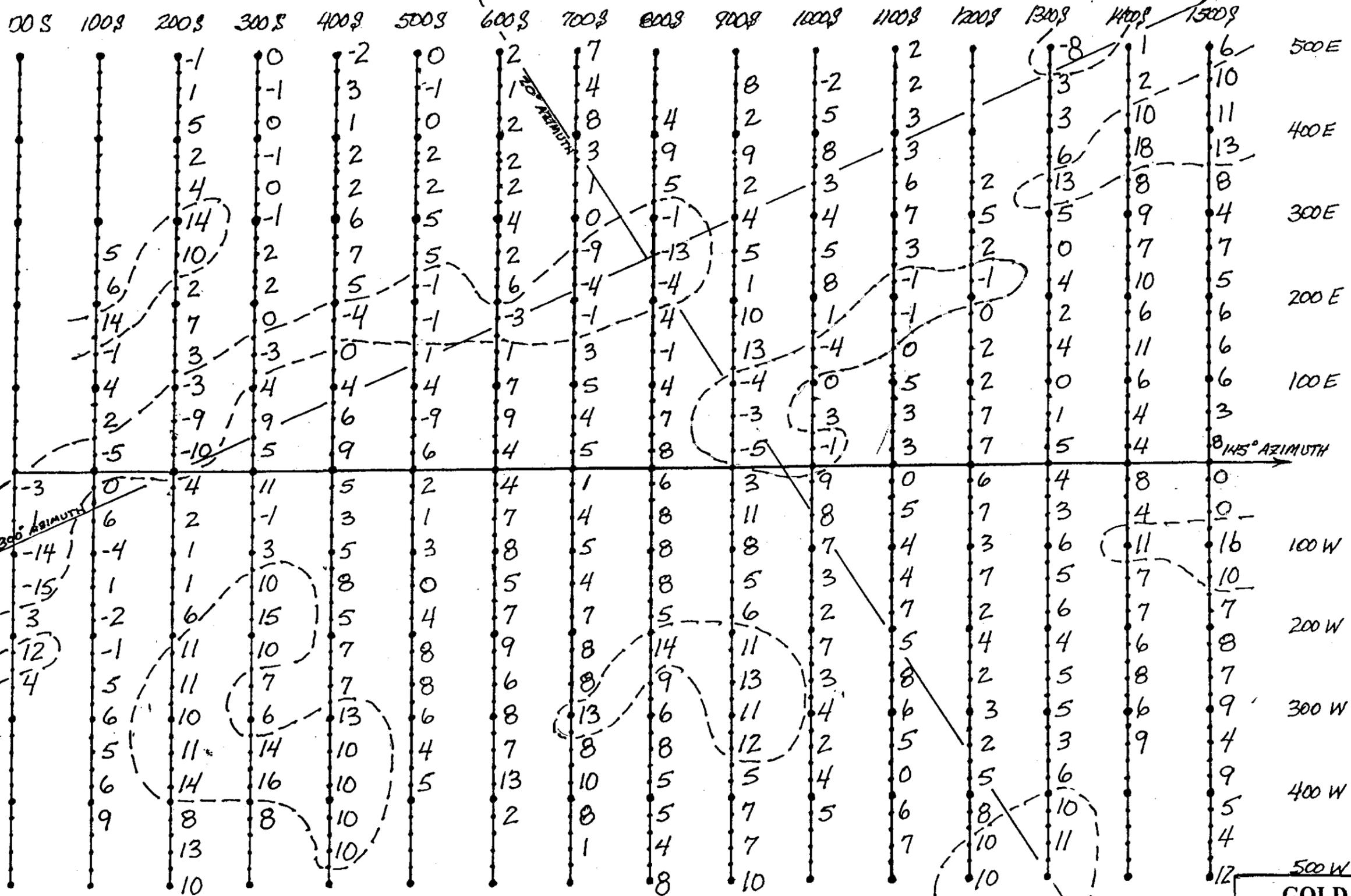
Director / Dean

*[Signature]*

Registrar

*[Signature]*

Instructor

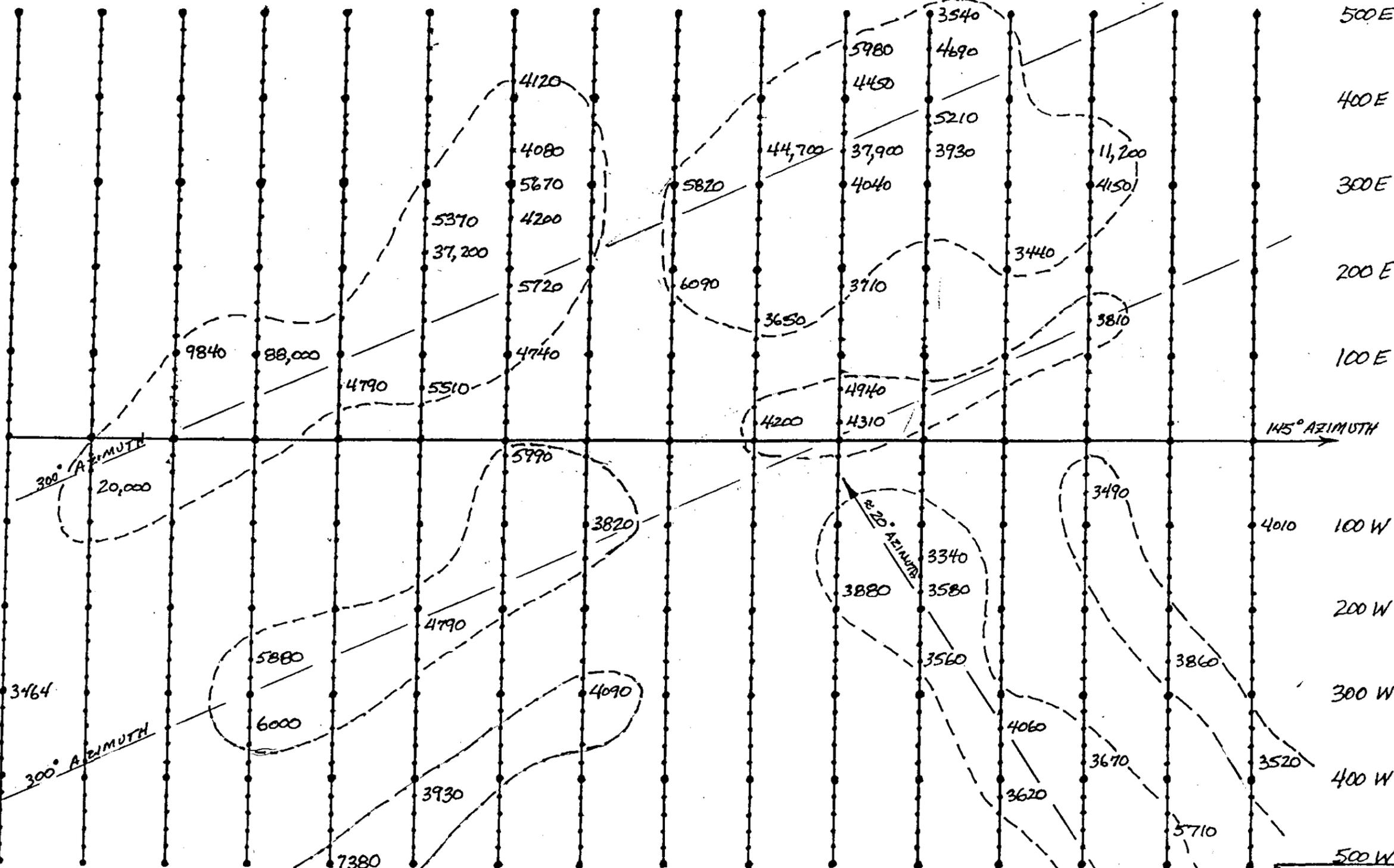


GEOLOGICAL SURVEY BRANCH  
ASSESSMENT FRONT

26,848 a

GOLD MASK VENTURES LTD.		
GM CLAIM GROUP		
SELF - POTENTIAL SURVEY		
921/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 1

00 S 100 S 200 S 300 S 400 S 500 S 600 S 700 S 800 S 900 S 1000 S 1100 S 1200 S 1300 S 1400 S 1500 S



GEOLOGICAL SURVEY BRANCH  
ADJUTANT GENERAL

26,848 b

GOLD MASK VENTURES LTD.

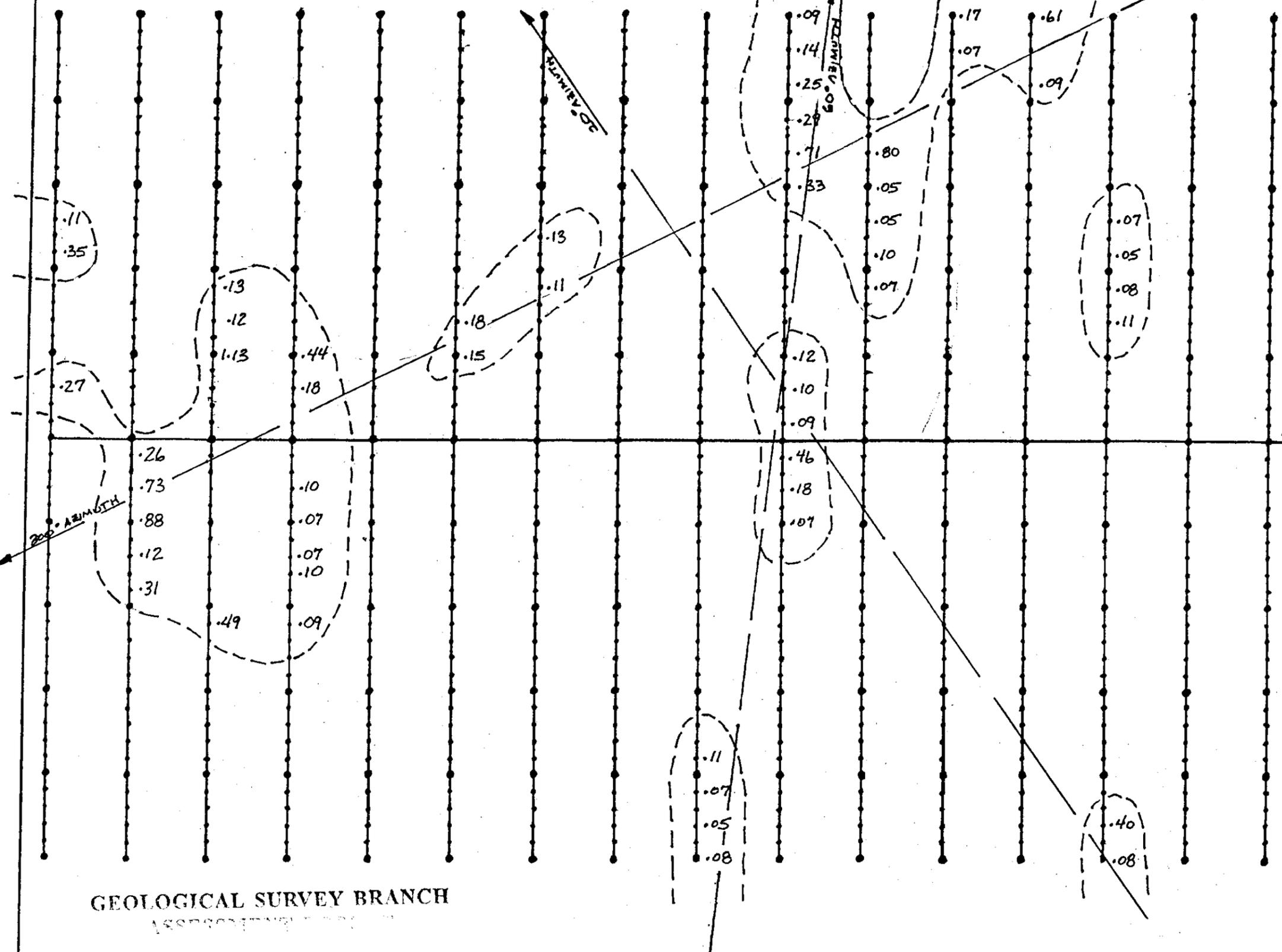
GM CLAIM GROUP  
TERRASOL SURVEY - Cu

921/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 1



00S 100S 200S 300S 400S 500S 600S 700S 800S 900S 1000S 1100S 1200S 1300S 1400S 1500S

500E  
400E  
300E  
200E  
100E  
100W  
200W  
300W  
400W  
500W

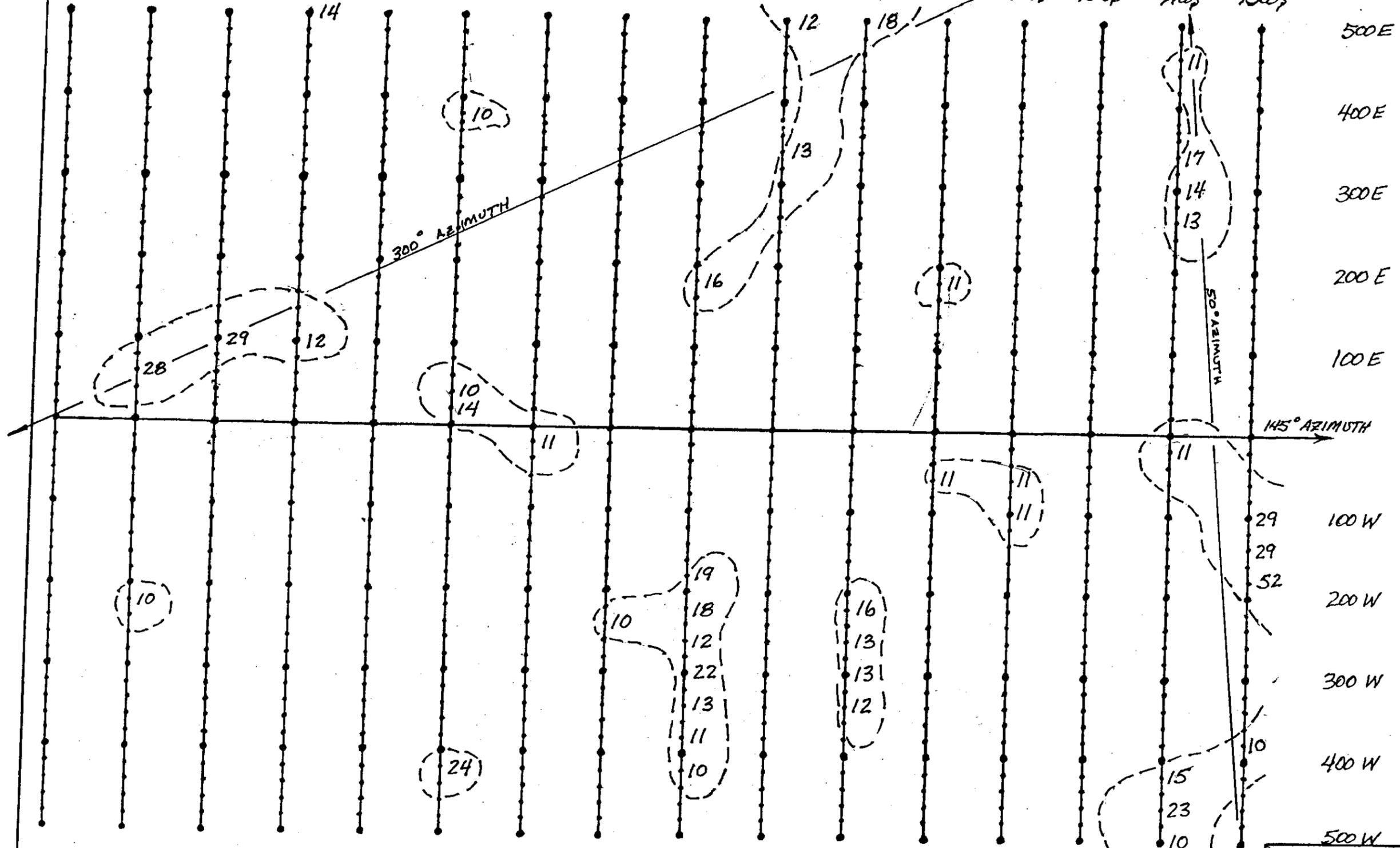


GEOLOGICAL SURVEY BRANCH  
ASSOCIATED COMPANY

26,848 d

GOLD MASK VENTURES LTD.		
GM CLAIM GROUP		
TERRASOL SURVEY - Re		
921/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 3

00S 100S 200S 300S 400S 500S 600S 700S 800S 900S 1000S 1100S 1200S 1300S 1400S 1500S

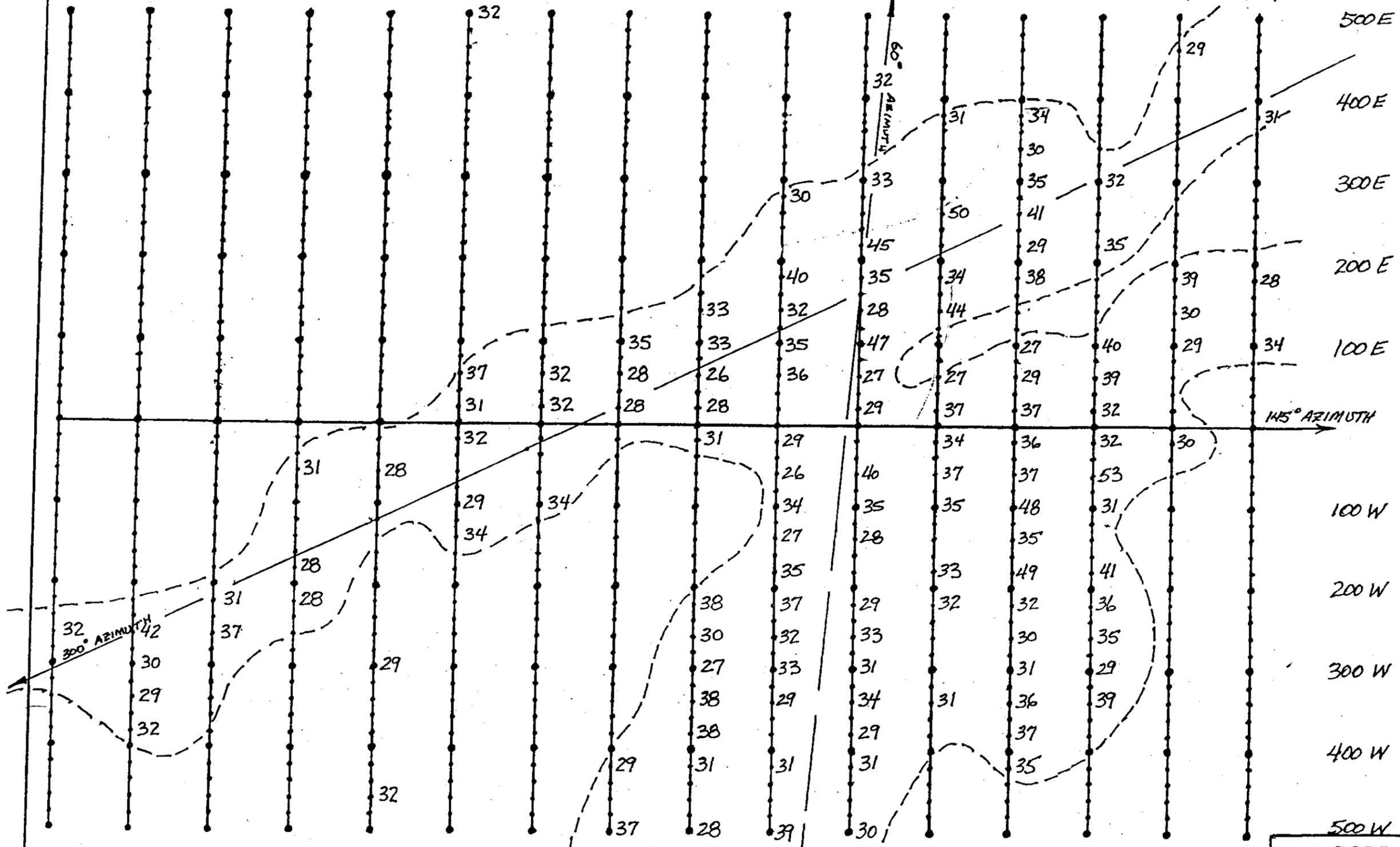


GEOLOGICAL SURVEY BRAN.  
ASSOCIATION

26,048 e

GOLD MASK VENTURES LTD.		
GM CLAIM GROUP		
TERRASOL SURVEY - TI		
92I/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 4

00S 100S 200S 300S 400S 500S 600S 700S 800S 900S 1000S 1100S 1200S 1300S 1400S 1500S



GEOLOGICAL SURVEY BRANCH  
 MINISTRY OF ENERGY AND MINES

26,048 P

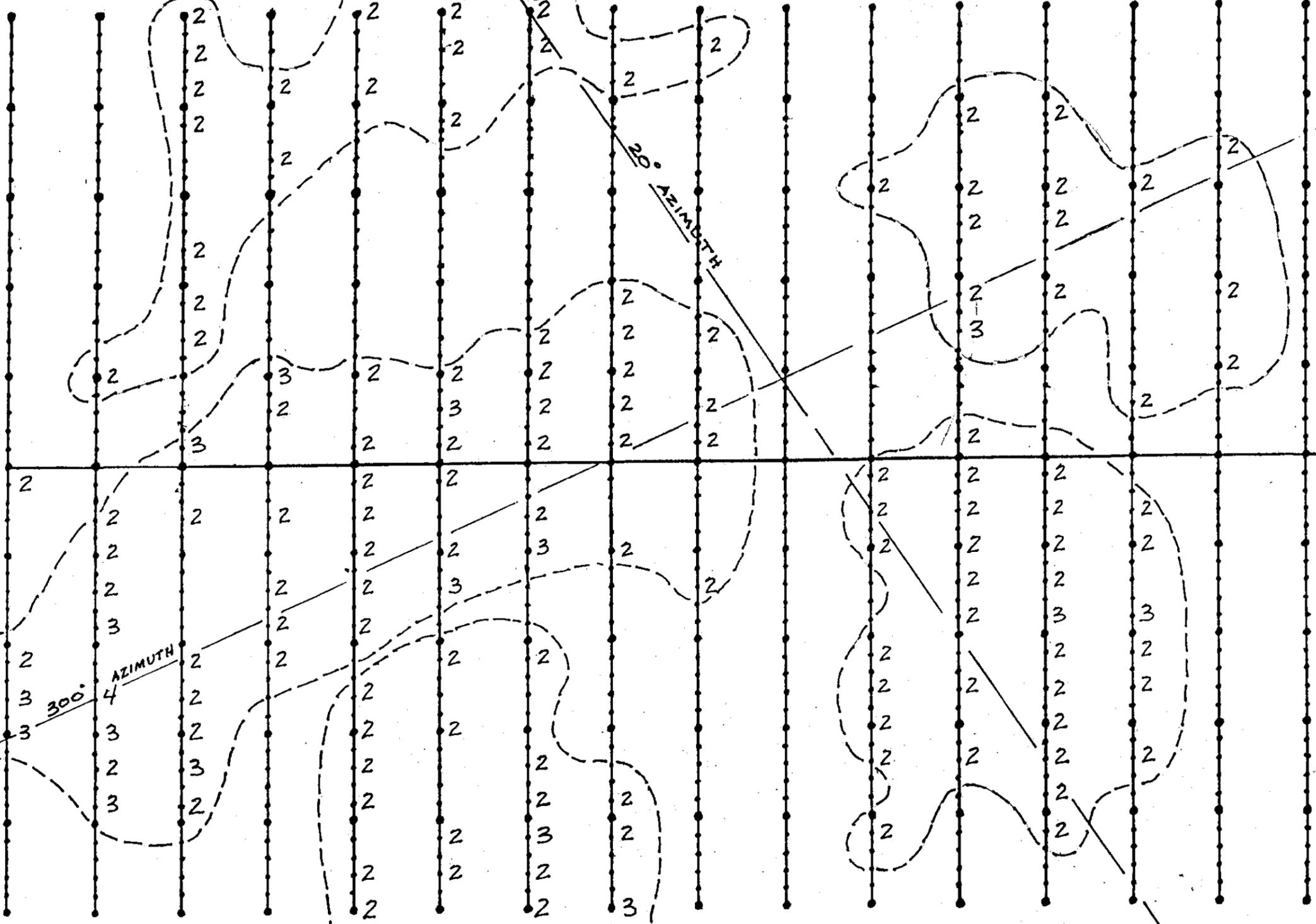
GOLD MASK VENTURES LTD.

GM CLAIM GROUP  
 TERRASOL SURVEY - Nb

92I/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 5

00S 100S 200S 300S 400S 500S 600S 700S 800S 900S 1000S 1100S 1200S 1300S 1400S 1500S

500E  
400E  
300E  
200E  
100E  
100W  
200W  
300W  
400W  
500W



GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

26,848 9

GOLD MASK VENTURES LTD.		
GM CLAIM GROUP		
TERRASOL SURVEY - Pd		
921/9W	Kamloops M.D.	February 2002
Drawn: L.D.L.	Scale 1:5,000	Figure 6