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GEOCHEMISTRY REPORT  
ON OMEGA GROUP CLAIMS

54 127 N.E.  
Omenica M.D. 93L/14W and 93L/14E

by

D. A. Davidson P.Eng.

for

Climax Molybdenum Corporation of British Columbia Ltd.  
December 31, 1990

20,797

LOGICAL BRANCH  
ASSESSMENT REPORT

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## INTRODUCTION

The OMEGA Group of Mineral Claims is on the eastern flank of Hudson Bay Mountain approximately three miles northwest of Smithers, BC. (Fig. 1). This group is a large block of claims and mineral leases held by Climax Molybdenum Corporation of British Columbia Limited.

This Company has explored a large molybdenum deposit, and over 9000 feet of tunneling and 175,000 feet of diamond drilling have been completed to date.

Geological studies on the mountain suggest that mineralogical zoning in vein systems is well developed. The molybdenum deposit is located in the high temperature core of this zonal arrangement. It is surrounded by a subconcentric arsenic - zinc - gold zone, which in turn is surrounded by an outer zone characterized by arsenic - zinc - lead and silver (8).

Earlier surface studies (4,5,6)\* tested the suitability of rock geochemistry as an exploration tool at high elevations in the intermediate zone.

The present study incorporates data from the earlier work and expands the study to trace anomolous precious metal zones to the northeast to the edge of Glacier Gulch.

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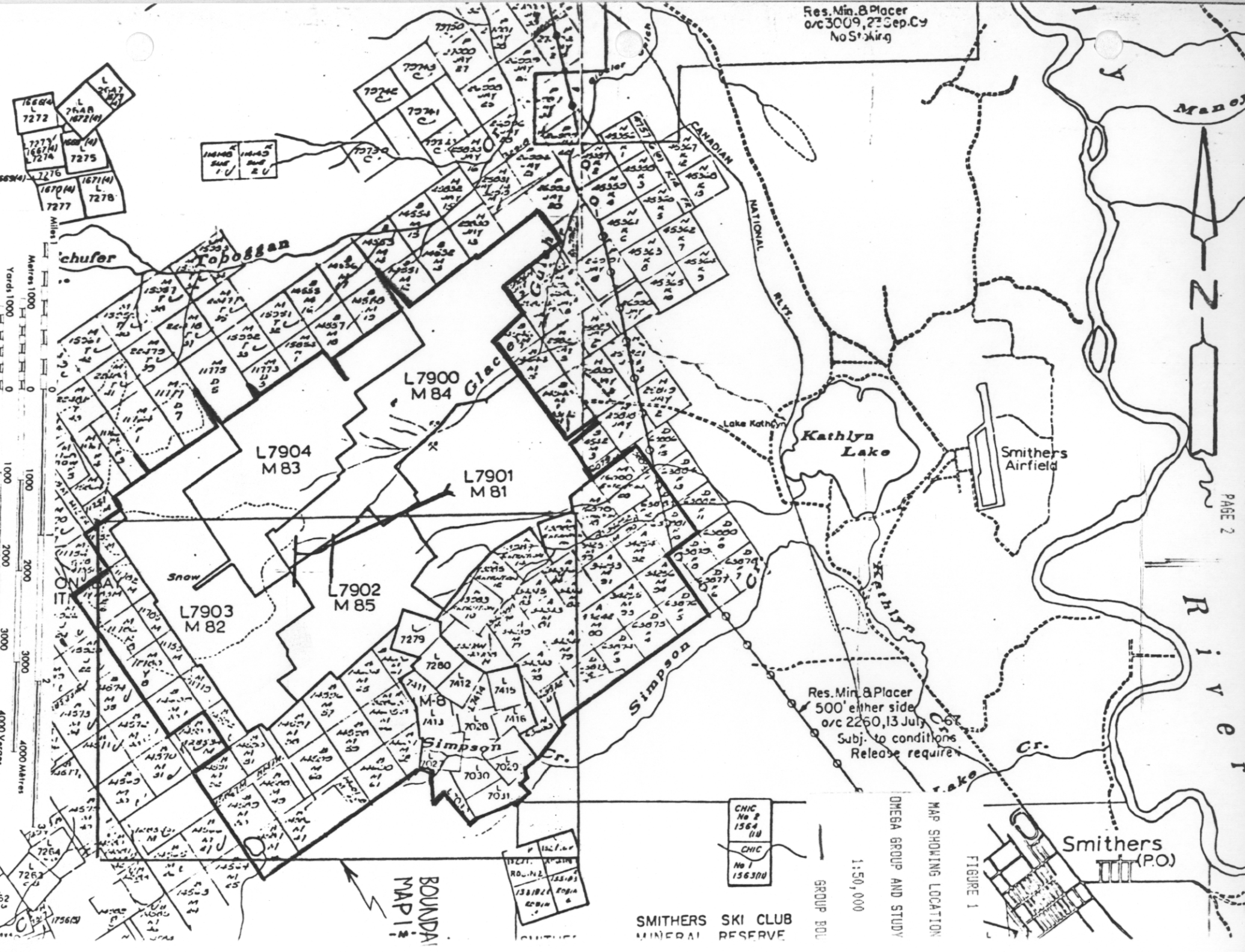
\* Numbers in parenthesis are references in the Bibliography

Res. Min. & Placer  
o/c 3009, 22 Sep. 69  
No Staking

Manor

PAGE 2

RIVER



Meters 1000  
Yards 1000  
0  
1000  
2000  
3000  
4000 Meters  
4000 Yards

CHIC  
No 2  
1564  
(11)

CHIC  
No 1  
156304

1:50,000

SMITHERS SKI CLUB  
MINERAL RESERVE

GROUP BOLL

MAP SHOWING LOCATION  
OMEGA GROUP AND STUDY

FIGURE 1

Smithers  
(P.O.)

BOUNDARY  
MAP

## PHYSIOGRAPHIC AND GEOLOGIC SETTING

### PHYSIOGRAPHY

The area of interest is near the northwestern edge of the Nechako Plateau (a sub-division of the Interior Plateau), and is about 40 miles east of the Coast Mountains. Hudson Bay Mountain is a prominent feature of the Hudson Bay Range, an isolated group of rugged mountains about 200 square miles in area. The elevations of peaks exceed 8600 feet above sea level. Slopes below 6000 feet have been modified by continental glaciation. The range is isolated by broad "U"-shaped valleys whose floors range from 1000 to 3000 feet in elevation.

Relief on the eastern flank of the Hudson Bay Range is marked. The mountain rises sharply from the Broad "U"-shaped valley of the Bulkley River at approximately 1650 to 1700 feet above sea level. Peaks in excess of 8600 feet exist slightly more than two miles west of the 2000 foot elevation near the edge of the valley. Slopes may exceed 30 degrees above the 3500 foot elevation.

The Hudson Bay Range is drained by a series of steep, incised streams. Alluvial fans are developed by some of the larger streams near the change of slope near the 2000 foot elevation. Most streams are capable of the mechanical transport of large particles. Individual channels are

charged with sub-rounded to angular material up to one foot in diameter.

Climate in the Smithers area is described as semi-arid in government publications. Average annual precipitation is less than 20 inches. However, deep snow build-up on the mountains can result in heavy spring runoff.

Timberline on the Hudson Bay Range occurs near the 4500 foot elevation. Below this, the slopes and valley floor are well forested with one or more of hemlock, spruce, balsam, poplar, jack pine, cottonwood and alder.

## GEOLOGY

### 1. ROCK TYPES

Most of the rocks exposed on the Hudson Bay Range are a bedded sequence of Hazelton volcanic rocks of intermediate composition. Small, irregular felsitic intrusions and a large, lenticular rhyolite sill occur within the pyroclastic pile. These rocks are considered to be Jurassic in age.

Continental and marine clastic sedimentary rocks of the Bowser Group unconformably overlie the volcanic strata on the eastern flank of the Hudson Bay Range. Grey to black greywacke, siltstone, argillaceous quartzite and argillite are the dominant rock types in the group. These rocks are Upper Jurassic to Lower - Cretaceous in age. Somewhat similar rocks outcrop in a few localities in the valley



floor, however, their relationship to the Bowser Group rocks has yet to be established.

Small amounts of granodiorite - quartz monzonite outcrop in the northern half of the Hudson Bay Range. These rocks appear to be of the same age as a tabular mass of granodiorite aplite that has been encountered below the surface on Hudson Bay Mountain. The age of these rocks has been designated by government geologists as Jurassic - Cretaceous (?).

A small steep sided plug of quartz porphyry intrudes the volcanic rocks and the lower portion of the granodiorite below the underground workings on Hudson Bay Mountain. This rock is mostly of pre-mineral age, but some breccia and texturally and compositionally related dykes exhibit an intermineral relationship.

A large buried stock of porphyritic (feldspar) quartz monzonite truncates the small quartz porphyry plug and the related intermineral phases. This stock appears to form the core of Hudson Bay Mountain, and is believed to be the source of a sub-radial dyke swarm. Relatively late intermineral relationships are exhibited by this unit, which has been dated as Tertiary by the G.S.C. (K/Ar dating of  $67 \pm 5$  m.y.).

## MINERALIZATION

Mineral deposits on Hudson Bay Mountain exhibit a crude mineralogical arrangement in concentric zones, centered by silica - molybdenum - tungsten - copper mineralization. This zone is successively surrounded by the Quartz Vein Zone (1 1/2 x 2 miles in area), the Pyritic Zone (2 1/2 x 4 miles in area, which includes the Quartz Vein Zone), and the Base Metal Zone comprising numerous small vein and replacement deposits distributed over several square miles. The Base Metal Zone has been subdivided into an inner zinc - gold - copper - arsenic zone, and an outer lead - silver - copper - arsenic zone.

The Hudson Bay Mountain molybdenum deposit lies in the central portion of the above zonal arrangement. Here, molybdenite-bearing veins and fractures occur over a vertical interval of 7000 feet. These veins overlap and grade outward into pyrite-quartz veins, pyrite veins, and pyrite and iron oxide coated fractures spaced 6 inches to 1 foot apart in the Pyritic Zone. Mineralogy, texture and relative ages of the veins and fractures are complex.

Molybdenite, and lesser amounts of scheelite-powellite and chalcopyrite, are the minerals of chief economic interest in the high temperature core. Other metallic minerals in the stockwork include abundant pyrite, pyrrhotite and magnetite, and minor to rare amounts of wolframite,

arsenopyrite, galena, sphalerite, bismuthinite and native arsenic. The predominant gangue mineral is quartz, and it may be accompanied by minor amounts of one or more of the following: carbonate, potash feldspar, sericite-muscovite, chlorite, biotite, amphibole, fluorite, and gypsum.

In the study area, most of the mineralization is associated with veins and sheetings of veins that trend northeasterly and dip at moderate to steep angles to the west. These braided, branching, subparallel quartz veins from hairline to two foot widths occur in zones up to fifty wide. These structures would appear to correlate with the vein systems found near the Duthie Mine on the southwest side of the mountain.

Arsenopyrite is the predominant metallic mineral found in the quartz veins, with minor amounts of sphalerite, chalcopyrite, pyrite, pyrrhotite, and rarely galena. Gold values appear to be associated with arsenopyrite. North of the present traverses gold is associated with bismuth tellurides (7).

## GEOCHEMISTRY

### GENERAL STATEMENT

Recent rock and soil geochemical studies (4,6) in the drainage basin of Simpson Creek on the eastern slopes of Hudson Bay Mountain located anomolous gold values in north



to northeasterly trending zones. The present work was designed to extend these zones to the northeast to the south edge of Glacier Gulch.

#### DESCRIPTION OF THE SURVEY AREA

Two traverses were run on the ridge on the south side of Glacier Gulch (Map 2, Figure 2). Elevations varied from the 3600 foot elevation to 7400 feet. The upper portion of the traverses was underlain by volcanic rocks of the Hazelton Group. At lower elevations, Bowser Group sedimentary rocks were encountered in traverse L1.

Hazelton Group rocks consist mostly of lenticular layers of tuffs, tuff breccias, crystal and lapilli tuffs of rhyolitic-andesitic composition. Light grey felsitic bodies of irregular shape are intrusive into the pyroclastic rocks. In general, the Hazelton rocks strike west to northwest and dip moderately north. Locally structural complexities are evident.

A large plate of Bowser Group sedimentary rocks cover Hazelton rocks below the 5800 foot elevation. These rocks strike northerly and dip moderately east. Above this small plates and infolds of Bowser rocks were noted in the volcanic sequence.

All of these units are cut by northwest striking steep dipping porphyritic (feldspar) quartz monzonite dikes that

are radial to the large buried stock that forms the core of the mountain.

#### SAMPLE COLLECTION AND PREPARATION

The traverse lines were run by tape and compass with ties to prominent topography. Samples were taken every 100 feet on slope distance. Alternate sites were staked and flagged.

Soil profiles were poorly developed below the 5000 foot elevation. Above this, material consisted of disintegrated bed rock and could be classified as "C" horizon. In all cases, the material collected was as fine as possible. Where developed, "B" horizon material was collected.

As in previous studies, sample material varied from rock fragments (up to  $-3/8$  inch) to soil.

A total of 153 samples were taken. Approximately 200 to 300 grams of material constituted a sample. The samples were subsequently dried in their bags and forwarded to the laboratory for analysis.

#### LABORATORY ANALYSIS

Samples were processed by Min-En Laboratories in North Vancouver, BC. Samples of fine material were treated as soil samples and screened to give a -80 mesh product. Coarser samples were treated as rock samples and were crushed and

pulverized to 80% -120 mesh.

A .50 gram sample was used in the 31 element ICP analysis. This was digested for 2 hours in an aqua regia mixture, then cooled and diluted to a standard volume.

Gold was determined by fire assay.

### STATISTICAL CONSIDERATIONS

Study of the distribution of gold values and related pathfinder trace elements to extend previously defined anomolous zones was the main objective of the work.

Background and anomolous values for gold, silver, and zinc were determined in previous work (6) where 330 samples were studied. These values are tabulated below:

ELEMENT	MODE	THRESHOLD	WEAK	MODERATE	STRONG	EXTREME
Au(ppb)	50	100	101-200	201-400	401-800	=>801
Ag(ppm)	.7	1.4	1.5-2.8	2.9-5.6	5.7-11.2	=>11.3
Zn(ppm)	150	300	301-600	601-1200	1201-2400	=>2401

In addition to the mode, arithmetic mean and geometric median of the data for these elements were also determined.

ELEMENT	MODE	ARITHMETIC MEAN	GEOMETRIC MEDIAN
Au(ppb)	50	188*	140
Ag(ppm)	.7	.95	.88
Zn(ppm)	150	325	265

(\* Au Values in excess of 1700 ppb cut to 1700 ppb)

Frequency diagrams were not constructed for pathfinder trace elements, however, arsenic was high in areas of anomolous gold values. Minor pathfinder trace elements include copper, antimony, manganese, bismuth, and cobalt.

#### OBSERVATIONS

Study of the results of samples taken from the two traverses (Appendix II) show that:

1. The zones of anomolous gold values have been extended over 5000 feet north to the south edge of Glacier Gulch. Values appear to weaken on the lower part of traverse L1, but this could be due to diminished host rock favourability of the Bowser Sediments (this feature was also noted in underground studies in the high temperature core, where molybdenum values were tenfold higher in Hazelton Group rocks).
2. A more weakly developed zone of anomolous gold values was noted to the east of the main zone in the 1987 and 1989 studies (4,6). A possible continuation of this lower zone appears to be more strongly developed at the lower end of traverse L2. Surface mapping and prospecting should be done in this area to preclude the possibility of this representing only a gravity transported anomaly.
3. The main (upper) anomolous zone, arsenic and copper are pathfinder elements for gold; similar to results of the 1987



and 1989 work. However, arsenic does not take on this normal role in the more easterly (lower) zone at the end of traverse L2. Relative to previous work, bismuth appears to be a stronger pathfinder element in all anomolous gold zones in both traverses. It is of interest to note the presence of a gold - bismuth - telluride deposit (7) near the 3150 foot elevation in Glacier Gulch about 1500 feet north of traverse L1.

4. Relatively high values of molybdenum, tungsten, and copper encountered in the upper part of traverse L1 correlate well with those described in 1968 work (2). These are interpreted as representing high level mineralization related to the high temperature core. The surface is about 4000 feet above the top of the quartz monzonite stock that forms the core of the mountain.

Closer to the high temperature core (e.g. near the 3500 foot level) modal values for gold and silver from 264 samples are 1.5 ppb and <1.0 ppm respectively (5). On the surface on traverse L1 (samples L16 - L42) anomolous Au-Ag is coincident with the higher temperature assemblage of Mo-W.

The relative ages of emplacement of the various elements is unknown.

CONCLUSIONS

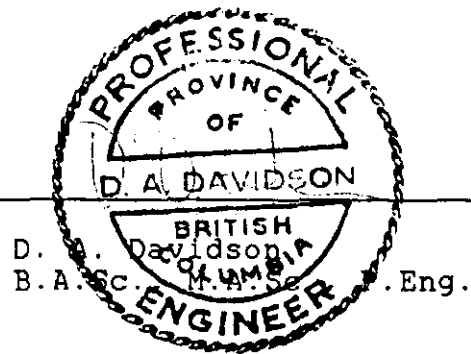
The anomolous zone was extended several thousand feet north to the south side of Glacier Gulch. The extensions will incorporate gold bearing deposits in Glacier Gulch. These include the Glacier Gulch North Side and South Side described in GSC Memoir 223 (7).

Future geochemical work should be done to trace the zone north of Glacier Gulch.

CERTIFICATE

I, Donald A. Davidson of Smithers, BC do certify that:

1. I am a geological engineer.
2. I am a graduate of the University of British Columbia B.A.Sc. 1957, M.A.Sc. 1960.
3. I am a registered Professional Engineer in the Province of British Columbia.
4. From 1954 to the present I have been involved in mining and mining exploration activities.



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APPENDIX I

LISTING OF MINERAL TITLES IN OMEGA GROUP

	RECORD NO.
MINING LEASE M-8	
MINING LEASE M-81/85 INCLUSIVE	
E-No. 5/6	11782/83
E-No. 8	11751
Extension 10, 12, 14, 16	13983,85,87,89
Extension 18/20	16078/80
F-1/F-5	63872/76
F-10, 12, 14	63881,83,85
F-2 Fr.	63600
H-14 Fr.	15867
H-26 Fr.	32863
H-31 Fr.	40708
Liz Fr.	23278
M-76/84	34238/46
M-89/94	34251/56
M-47/52	14586/91
M-57/62	14596/601
M-65/68	14604/07
S-No. 7/8	11755/56
R-No. 6	11753
R-No. 7/8	11785/86
Y-No. 7/8	11779/80

APPENDIX II

COMP: CLIMAX-MOLYBDENUM  
 PROJ: TRAVIS-SMITHERS  
 ATTN: DON DAVIDSON

MIN-EN LABS — ICP REPORT  
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
 (604)980-5814 OR (604)988-4524

FILE NO: OS-0566-SJ1+2  
 DATE: 90/10/03  
 \* SOIL \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
TRAVIS L1 - 1	1.5	10060	52	9	18	1.4	4	1020	.1	14	298	68890	630	15	6720	511	1	530	1	1250	43	3	6	5	1	36.9	74	1	4	1	1	1
TRAVIS L1 - 2	3.9	9240	3655	11	266	2.0	47	680	55.4	26	650	105640	2320	8	3020	1478	27	910	1	1230	225	91	19	1	1	32.3	279	1	2	10	1	306
TRAVIS L1 - 3	1.2	6180	240	8	42	1.5	31	190	.1	9	268	84340	690	2	420	292	9	520	1	1580	53	17	12	1	1	10.4	117	1	2	1	1	15
TRAVIS L1 - 4	.1	9210	152	11	62	2.0	10	260	.1	16	783	169210	670	3	650	116	7	980	1	3510	42	7	17	1	1	34.0	81	1	3	1	1	57
TRAVIS L1 - 5	.1	8010	230	16	49	1.5	22	160	.1	21	940	232750	870	2	480	105	146	520	1	3200	38	17	25	1	1	48.8	75	1	4	1	1	1
TRAVIS L1 - 6	1.0	17850	661	10	68	2.6	18	350	6.9	23	643	107430	1470	11	2080	1902	73	470	1	3840	52	25	16	1	1	25.7	116	1	3	1	1	68
TRAVIS L1 - 7	.6	13340	1184	13	92	2.6	17	310	15.4	30	928	156520	1430	6	1900	2079	31	580	1	2770	58	38	18	1	1	25.1	126	1	3	1	1	137
TRAVIS L1 - 8	.4	10950	1426	11	101	2.3	24	260	21.8	32	738	110530	1420	7	1770	3228	25	490	1	1290	61	36	11	1	1	22.0	169	1	3	1	1	84
TRAVIS L1 - 9	.1	10130	1541	14	102	1.4	7	220	19.2	39	542	118330	1480	6	1500	5712	40	660	1	1260	65	26	13	1	1	19.4	188	1	3	1	1	4
TRAVIS L1 - 10	.3	9620	3043	15	155	2.3	9	420	48.7	27	404	91010	1900	8	1460	4267	9	480	1	950	61	56	8	1	1	15.5	141	1	2	1	1	22
TRAVIS L1 - 11	1.5	15490	10860	12	320	2.4	18	570	173.9	59	1581	141730	1450	6	1350	6499	9	60	1	750	136	158	14	1	1	16.7	394	1	4	1	1	1
TRAVIS L1 - 12	1.0	11450	681	15	155	2.5	16	270	4.8	41	821	120970	3650	9	3520	2737	12	70	1	1440	40	13	21	1	1	52.4	167	1	4	1	1	6
TRAVIS L1 - 13	.9	7770	249	11	58	1.3	16	170	1.9	24	424	53850	1290	4	1180	1710	7	480	1	1000	41	5	10	1	1	14.7	86	1	1	1	1	38
TRAVIS L1 - 14	1.2	8470	190	10	47	1.4	20	270	3.3	15	360	53210	1470	6	1670	1179	20	530	1	1360	41	10	9	1	1	20.3	86	1	1	1	1	1
TRAVIS L1 - 15	1.3	7980	513	13	38	2.0	37	140	3.7	64	1100	121170	1090	4	1290	3509	88	360	1	1190	64	51	13	1	1	15.8	135	1	3	1	1	86
TRAVIS L1 - 16	4.3	17010	955	12	71	1.9	48	370	9.0	29	730	97630	1410	9	2430	4153	110	410	1	3220	357	50	13	1	1	34.8	311	1	2	1	1	60
TRAVIS L1 - 17	2.1	10870	1548	11	37	2.4	35	240	19.8	40	1193	155490	1490	6	1840	1953	86	430	1	2100	134	35	15	1	1	27.2	194	1	3	1	1	163
TRAVIS L1 - 18	2.2	20150	725	14	62	1.9	39	390	5.1	43	1028	147350	3750	15	5610	2138	86	370	1	2180	76	11	13	1	1	87.5	218	1	5	1	1	205
TRAVIS L1 - 19	2.6	21440	642	12	71	2.5	39	600	7.0	44	1330	136870	3380	17	5770	3077	181	370	1	2410	100	13	15	1	1	79.3	351	1	3	4	1	210
TRAVIS L1 - 20	4.8	18120	553	14	69	2.1	87	270	1.6	32	983	128760	6810	17	8140	1654	328	510	1	1610	104	16	14	1	1	83.1	202	1	4	3	1	230
TRAVIS L1 - 21	3.9	20590	2830	19	83	2.6	196	480	40.0	40	1381	173820	3970	18	5800	2345	622	540	1	2330	185	44	17	1	1	82.3	264	1	4	6	1	310
TRAVIS L1 - 22	3.2	16420	4601	18	225	4.2	48	1920	89.8	46	1282	125600	2820	12	4340	5399	315	100	1	1090	319	102	10	1	1	90.3	1470	1	3	2	1	86
TRAVIS L1 - 23	5.8	13750	3738	19	276	2.3	76	170	60.4	39	964	143840	5960	9	2550	2484	319	570	1	1110	821	297	27	1	1	43.4	473	1	5	3	1	189
TRAVIS L1 - 24	5.4	11670	7096	20	188	3.5	58	790	123.8	61	1347	159810	2310	6	1730	5131	161	480	1	2970	481	354	20	1	1	24.0	482	1	4	1	1	148
TRAVIS L1 - 25	3.3	16390	5140	17	139	3.2	69	330	85.2	62	1342	158690	3890	12	4070	4028	323	120	1	1740	300	185	17	1	1	53.9	365	1	3	2	1	144
TRAVIS L1 - 26	2.1	20330	3473	17	67	2.7	79	460	45.7	32	1304	181120	3270	14	4420	1270	239	600	1	1870	107	86	16	1	1	57.9	163	1	4	4	1	328
TRAVIS L1 - 27	2.3	29520	1433	15	144	2.6	66	300	17.9	34	1079	156830	10750	28	11620	1601	145	530	1	1250	107	32	16	1	1	111.5	190	2	4	5	32	211
TRAVIS L1 - 28	2.5	18080	1486	10	172	3.2	32	860	24.6	28	894	79120	2560	13	4500	3222	225	580	12	1180	144	52	10	1	1	51.4	411	1	2	3	1	106
TRAVIS L1 - 29	1.2	18260	673	7	74	2.3	21	840	10.5	21	410	57520	1280	13	3740	2424	122	470	13	1650	98	25	8	1	1	47.8	217	1	2	1	1	39
TRAVIS L1 - 30	2.6	18170	1618	12	116	2.8	28	310	21.6	51	981	132700	2470	12	2950	3602	120	410	1	2490	175	92	14	1	1	50.0	203	1	3	1	1	74
TRAVIS L1 - 31	2.9	7950	1872	14	296	1.9	8	2180	48.5	22	277	51160	1460	4	1600	6113	97	310	36	850	669	224	9	1	1	17.2	1772	1	1	1	1	19
TRAVIS L1 - 32	1.5	22350	589	9	68	1.3	18	770	8.1	19	337	56600	1550	11	3910	1971	59	590	5	1640	157	30	6	1	1	48.4	241	1	2	1	1	40
TRAVIS L1 - 33	1.8	18650	3538	11	153	3.0	8	1070	68.8	63	500	92280	1960	6	1760	3768	89	730	45	1230	208	124	19	1	1	21.8	622	1	2	1	1	38
TRAVIS L1 - 34	1.2	19650	747	11	160	2.6	19	2810	13.4	39	432	77420	2890	15	4750	4361	101	740	16	2350	147	31	12	1	1	50.2	405	1	3	2	1	65
TRAVIS L1 - 35	1.4	10180	667	13	529	2.1	69	3190	13.7	17	45	42650	1640	4	2070	2768	115	400	34	740	44	20	5	1	1	17.5	99	1	1	1	1	34
TRAVIS L1 - 36	1.2	17360	511	11	215	2.6	136	3580	11.2	33	351	55230	1940	14	3630	5028	158	600	31	2200	118	25	11	1	1	43.6	264	1	2	7	1	225
TRAVIS L1 - 37	3.6	15220	354	9	164	2.0	471	1010	6.6	44	487	67360	2530	15	4430	3637	122	300	37	1630	98	21	10	1	1	55.4	230	1	2	6	1	178
TRAVIS L1 - 38	.6	24390	878	14	90	1.5	46	400	10.9	46	830	140370	4600	14	4430	1818	360	330	3	2890	73	17	16	1	1	77.2	96	1	4	1	1	177
TRAVIS L1 - 39	1.0	15540	38	7	50	1.9	10	1220	.1	24	486	77560	1920	12	5250	923	32	430	13	1290	23	1	13	1	1	57.8	76	1	2	1	1	136
TRAVIS L1 - 40	1.7	30760	224	13	86	1.8	26	630	.1	27	888	182530	11080	17	10840	615	58	670	1	1670	29	1	42	1	1	88.2	59	2	6	4	1	128
TRAVIS L1 - 41	1.3	36780	331	9	69	2.1	20	720	2.6	78	1046	100810	3710	19	5680	2022	86	470	28	1380	85	2	6	1	1	63.8	143	1	3	1	1	84
TRAVIS L1 - 42	2.1	108040	41	8	67	6.6	19	2060	.1	256	3334	57650	2360	27	3060	4526	38	520	117	260	13	1	1	1	1	28.1	116	1	1	1	1	82
TRAVIS L1 - 43	.5	20530	303	11	46	1.9	70	250	.1	28	765	194990	5220	12	6280	605	49	100	1	1690	13	1	16	1	1	80.1	44	1	7	1	1	194
TRAVIS L1 - 44	.8	20130	137	10	47	1.9	26	970	.1	20	508	166480	4970	12	6550	324	16	460	1	1520	23	1	20	1	1	73.9	50	1	5	1	1	134
TRAVIS L1 - 45	.3	15770	212	11	36	2.0	24	710	.1	21	487	187690	3930	9	5330	292	16	520	1	1420	32	1	21	1	1	66.5	44	1	4	1	1	73
TRAVIS L1 - 46	1.3	25310	189	10	79	2.3	17	750	.1	28																						

COMP: CLIMAX-MOLYBDENUM  
 PROJ: TRAVIS-SMITHERS  
 ATTN: DON DAVIDSON

MIN-EN LABS — ICP REPORT  
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2  
 (604)980-5814 OR (604)988-4524

FILE NO: OS-0566-SJ3+4  
 DATE: 90/10/03  
 \* SOIL \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
TRAVIS L1 - 62	.1	28670	18	11	61	1.4	19	2050	.1	13	194	102460	760	9	2530	158	11	700	1	4490	27	1	66	1	1	57.6	68	1	4	1	1	99
TRAVIS L1 - 63	.1	8100	113	7	37	1.7	7	250	.1	9	77	83250	370	1	600	51	25	440	1	4580	46	2	34	1	1	76.9	46	1	2	1	1	5
TRAVIS L1 - 64	.5	29390	1	6	52	1.5	5	480	.1	11	73	50390	740	13	3570	280	4	490	4	760	20	1	5	1	1	64.2	66	1	1	1	1	12
TRAVIS L1 - 65	.5	9480	119	5	35	.7	8	280	.3	7	46	42720	560	2	890	111	25	390	1	1060	28	1	12	1	1	78.7	38	1	1	2	1	23
TRAVIS L1 - 66	.3	17370	54	6	40	.9	6	310	.1	9	76	57750	430	5	1590	143	23	470	1	1200	27	1	8	1	1	59.2	41	1	2	1	1	10
TRAVIS L1 - 67	.7	13980	32	5	46	1.1	3	530	.1	10	40	38220	490	8	2680	340	6	560	6	980	23	1	5	1	1	51.5	71	1	1	1	1	2
TRAVIS L1 - 68	1.0	13990	20	5	40	.9	5	460	.1	10	38	57830	370	5	2250	326	10	440	1	880	35	1	7	1	1	102.8	58	2	2	1	1	2
TRAVIS L1 - 69	.9	12910	50	5	33	.5	5	490	.1	8	36	44340	530	3	1920	181	26	440	1	890	30	1	6	1	1	108.0	43	3	1	1	1	30
TRAVIS L1 - 70	1.0	14830	64	5	57	1.4	5	410	.1	9	54	52230	440	5	1770	281	29	500	1	790	37	1	9	1	1	86.4	59	2	1	1	1	73
TRAVIS L1 - 71	.8	15770	4	5	40	.5	5	500	.1	9	41	44470	430	8	2260	311	15	410	2	1070	24	1	6	1	1	75.6	53	1	1	1	1	3
TRAVIS L1 - 72	.9	25210	1	5	38	.6	6	580	.1	10	54	43790	410	13	3060	391	15	500	3	750	28	1	2	1	1	70.6	52	1	1	1	1	1
TRAVIS L1 - 73	1.0	9530	126	4	55	.7	4	520	.3	6	38	38170	370	2	970	189	22	440	1	1530	26	1	11	1	1	75.6	43	1	1	1	1	18
TRAVIS L1 - 74	1.1	15800	118	5	44	1.4	5	490	.7	9	43	44500	560	5	1590	417	25	380	1	850	35	1	7	1	1	79.3	64	1	1	1	1	32
TRAVIS L1 - 75	.9	12730	20	5	40	.3	5	650	.1	10	41	46740	470	3	1810	379	39	390	1	910	30	1	8	1	1	96.4	53	1	1	1	1	6
TRAVIS L1 - 76	.7	17690	1	4	41	1.4	4	540	.1	11	34	50480	370	11	3410	454	11	350	4	950	28	1	4	1	1	84.7	65	1	1	1	1	1
TRAVIS L1 - 77	1.0	26360	1	5	56	1.0	4	690	.1	12	37	47890	590	17	3660	485	6	470	6	1200	25	1	4	1	1	98.0	73	1	2	1	1	11
TRAVIS L1 - 78	.8	24490	1	6	54	.9	4	840	.1	11	35	57300	530	12	3650	464	7	520	1	1630	27	1	6	1	1	110.0	74	2	1	1	1	9
TRAVIS L1 - 79	1.5	28090	1	6	66	.4	4	780	.1	10	49	45560	610	17	3790	329	7	450	4	1490	15	1	4	1	1	85.0	66	1	1	1	1	2
TRAVIS L1 - 80	.9	26170	1	5	62	.7	3	1410	.1	11	36	42410	570	14	4300	420	11	450	6	2200	21	1	7	1	1	71.3	79	1	1	1	1	16
TRAVIS L2 - 1	1.1	10620	4385	12	636	2.3	50	780	70.1	33	650	90380	2260	6	1730	3790	4	580	1	1700	500	291	16	1	1	24.8	630	1	2	1	1	300
TRAVIS L2 - 2	.3	10210	346	8	69	1.6	21	900	4.3	28	340	43170	1550	7	1770	1907	3	530	36	1000	67	21	5	1	1	25.1	216	1	1	1	1	1
TRAVIS L2 - 3	.9	15610	266	7	91	2.0	11	540	.1	27	449	68520	3860	9	3820	1407	7	690	21	1180	31	3	10	1	1	44.5	66	1	2	1	1	30
TRAVIS L2 - 4	.3	16280	477	8	96	1.8	24	590	5.5	23	452	59750	2220	9	2600	1503	6	660	19	2550	46	17	12	1	1	38.1	102	1	2	2	1	129
TRAVIS L2 - 5	1.0	23550	144	6	52	1.5	14	5240	.3	17	344	59230	1440	9	3050	635	6	380	17	2520	31	1	9	1	1	46.4	75	1	2	1	1	42
TRAVIS L2 - 6	.8	24940	269	7	87	2.0	35	1910	.5	33	523	74050	1540	14	3910	1014	10	510	35	2320	42	6	33	1	1	52.4	107	1	2	2	1	492
TRAVIS L2 - 7	.8	27730	169	6	65	1.8	24	2010	1.2	23	376	64000	1780	15	5090	1228	5	640	19	3050	36	1	9	1	1	68.9	96	1	2	1	1	76
TRAVIS L2 - 8	.1	16060	212	5	53	1.9	7	350	.1	28	233	69360	1730	15	4210	1503	11	70	25	1700	38	2	9	1	1	43.3	68	1	2	1	1	79
TRAVIS L2 - 9	.3	11660	97	4	56	1.4	206	3220	.9	21	142	49560	1300	9	3780	2712	3	430	35	2470	135	16	13	1	1	38.8	91	1	1	1	1	300
TRAVIS L2 - 10	.1	13890	459	5	51	2.3	24	500	3.7	38	300	66370	1140	11	4800	1871	6	560	39	1360	44	6	14	1	1	39.5	74	1	1	1	1	191
TRAVIS L2 - 11	.1	14930	673	6	87	2.8	19	490	7.8	48	309	80590	1870	12	4230	2621	6	410	46	1560	31	10	20	1	1	39.5	74	1	1	1	1	220
TRAVIS L2-12	1.5	13990	1441	11	152	1.5	25	620	26.5	53	509	83770	1910	11	3430	3304	19	140	32	1330	208	55	19	1	1	39.4	373	1	3	1	1	328
TRAVIS L2-13	.4	13970	403	9	58	1.6	18	570	3.5	24	470	89040	2400	9	3400	1173	23	130	2	2240	83	11	15	1	1	39.4	137	1	3	1	1	85
TRAVIS L2-14	.6	17760	255	9	44	.8	50	240	.1	28	790	124890	3940	12	4840	831	19	90	1	1680	74	5	12	1	1	56.3	95	1	4	1	1	414
TRAVIS L2-15	1.3	24570	915	8	67	.7	73	510	10.0	71	1519	110460	3110	16	5020	2835	15	100	19	1510	100	30	8	1	1	51.9	199	1	4	1	1	1900
TRAVIS L2-16	.5	16980	596	7	51	1.0	67	1550	4.0	49	854	93620	2700	15	5350	2004	12	120	6	1530	78	16	11	1	1	50.4	148	1	4	2	1	1
TRAVIS L2-17	1.2	26070	398	7	76	1.2	46	1480	2.3	23	856	102030	3580	17	6210	663	13	300	1	2410	60	3	20	1	1	63.5	113	3	3	1	1	336
TRAVIS L2-18	1.0	23010	405	7	67	1.0	51	980	1.7	45	1029	119900	3080	16	5610	1368	14	100	2	1670	92	6	14	1	1	60.4	138	2	4	1	1	354
TRAVIS L2-19	.3	21770	275	7	68	.1	40	600	.1	36	752	116260	3410	14	5580	1321	12	270	1	1710	57	3	13	1	1	58.9	103	2	3	1	1	143
TRAVIS L2-20	.7	27300	58	7	90	1.2	62	490	.1	43	760	113410	3520	13	5500	1341	32	220	3	2100	33	1	19	1	1	64.3	87	1	3	1	1	127
TRAVIS L2-21	.3	20160	182	7	79	1.7	55	890	.1	41	696	112350	2230	16	4260	1282	17	110	16	1660	45	1	16	1	1	52.9	95	1	3	1	1	198
TRAVIS L2-22	.2	18360	128	7	76	1.4	57	620	.1	39	807	117810	2020	11	3580	1169	27	140	1	1300	26	1	14	1	1	46.8	90	1	3	1	1	246
TRAVIS L2-23	.2	18590	67	6	71	1.6	38	450	.1	39	792	99120	2060	11	3640	1296	30	140	2	1310	26	1	12	1	1	45.9	91	1	3	1	1	183
TRAVIS L2-24	.7	22970	59	8	93	2.0	79	870	.1	49	1077	107480	2250	16	3990	1776	21	160	5	1380	34	1	14	1	1	48.5	131	1	3	1	1	264
TRAVIS L2-25	.2	20640	56	6	87	1.7	42	1040	.1	38	907	96730	1620	14	3690	1455	13	100	1	1390	38	1	8	1	1	43.3	114	1	2	1	1	238
TRAVIS L2-26	.4	20330	22	4	65	.8	35	760	.1	33	508	65310	1610	14	4070	1491	9	60	12	1180	27	1	7	1	1	44.8	92	1	2	1	1	402
TRAVIS L2-27	.4	22890	60	4	92	1.6	49	1000	.1	28	416	64380	1610	14	4560	1476	8	80	20	1300	20	1	9	1	1	52.7	90	1	2	1	1	701
TRAVIS L2-28	.5	20820	49	4	76	1.6	87	700	.1	27	417	63950	1640	13	4340	1196	8	90	8	1260	21	1	7	1	1	47.8	78	1	2	2	1	154
TRAVIS L2-29	.5	24190	1	4	71	1.0																										

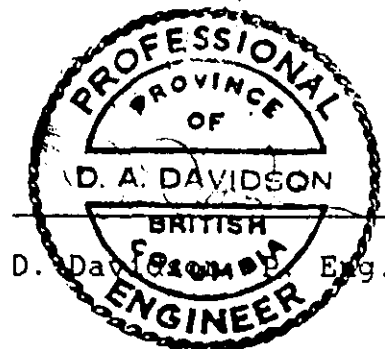


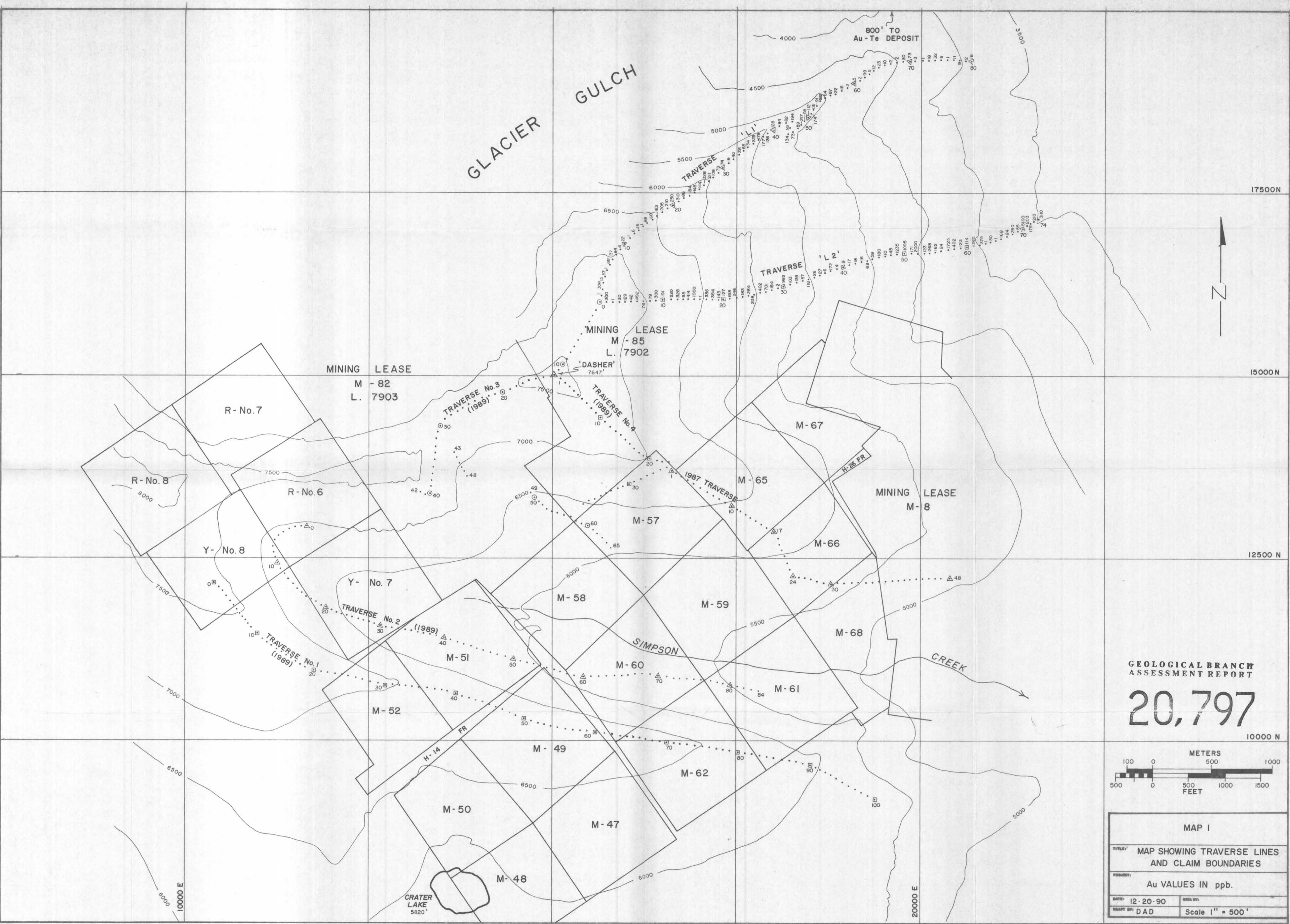


APPENDIX III

PROJECT COSTS

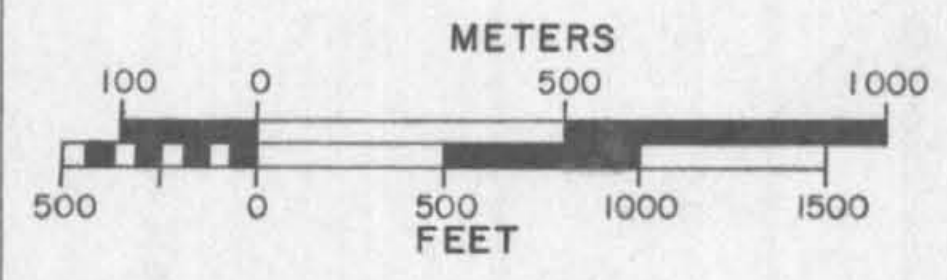
ANALYTICAL WORK - MIN-EN LABS		\$ 2 218.50
CANADIAN HELICOPTERS		291.20
LABOUR		
D. Davidson, P.Eng. Sept. 10, 11, Dec. 26, 27, 28, 31. Plan Study, mobilize, report preparation.		
5 days @ \$350/day		1 750.00
Hobson Contracting		1 100.00
RENTAL EQUIPMENT		
4X4 Truck. 2 days @ \$50 + tax		106.00
SUPPLIES AND SERVICES		
Fuel	26.00	
Stationery	19.87	
Typing	35.00	
Photocopying	22.00	
Drafting & Blueprinting	<u>106.00</u>	<u>208.87</u>
TOTAL PROJECT COST		\$ 5 674.57



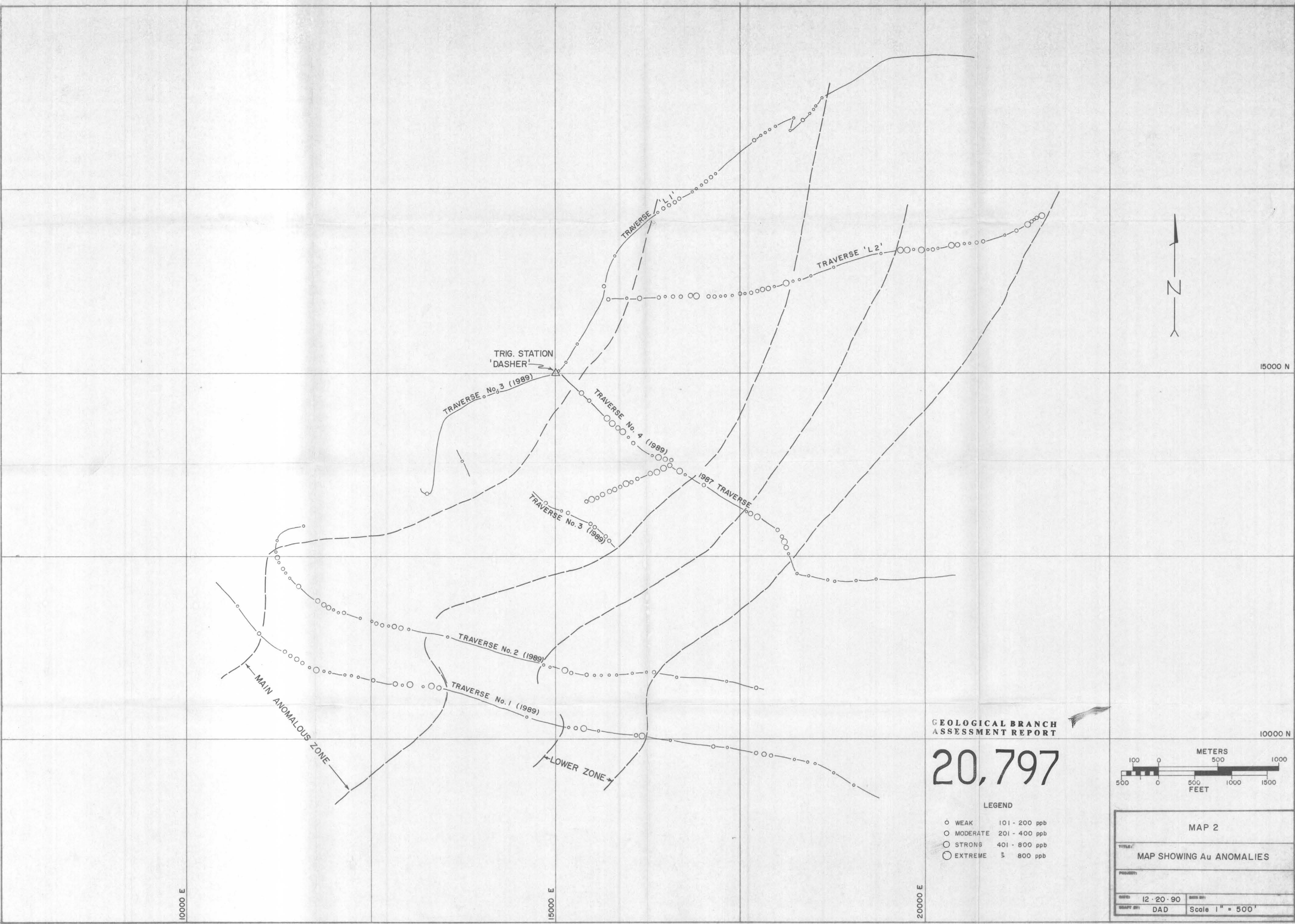


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,797



MAP I	
TITLE: MAP SHOWING TRAVERSE LINES AND CLAIM BOUNDARIES	
PROPERTY: Au VALUES IN ppb.	
DATE: 12-20-90	DRAWN BY:
MAP BY: DAD	Scale 1" = 500'

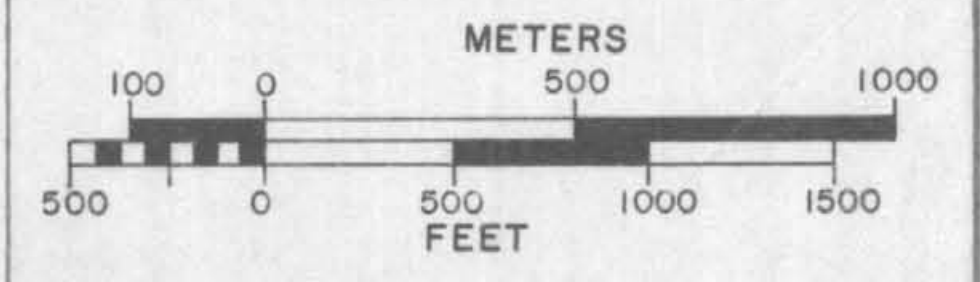


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,797

LEGEND

- WEAK 101 - 200 ppb
- MODERATE 201 - 400 ppb
- STRONG 401 - 800 ppb
- EXTREME ≥ 800 ppb



MAP 2	
MAP SHOWING Au ANOMALIES	
DATE: 12-20-90	DRAWN BY: DAD
Scale 1" = 500'	