

84-#125 - 12080

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL  
ASSESSMENT REPORT

NOBLE 1 - 6 CLAIMS

KAMLOOPS MINING DIVISION

82M/12W

Latitude 51° 38'

Longitude 119° 48'

Owned and Operated by:  
Placer Development Limited

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

R.H. Pinsent

February 1984

**12,080**

TABLE OF CONTENTS

(i)

Page

1.0	Summary .....	1
2.0	Introduction .....	2
2.1	Location and Access .....	2
2.2	Property History and Ownership .....	2
3.0	Regional Geological Setting .....	4
4.0	Work Performed .....	5
4.1	Introduction .....	5
4.2	Mount McClennan Area .....	6
4.2.1	Geology .....	6
4.2.2	Mineralization .....	8
4.2.3	Soil Geochemistry .....	14
4.2.4	Ground Geophysics .....	15
4.3	McCorvie Lake Area .....	16
4.3.1	Geology .....	16
4.3.2	Mineralization .....	17
4.3.3	Soil Geochemistry .....	17
4.3.4	Ground Geophysics .....	18
4.4	Peavine Creek Area .....	19
4.4.1	Geology .....	19
4.4.2	Mineralization .....	19
4.4.3	Silt Geochemistry .....	20
5.0	Discussion .....	21
6.0	Conclusions .....	22
7.0	Statement of Expenditures .....	23
8.0	Statement of Qualifications .....	24

LIST OF TABLES AND ILLUSTRATIONS

(ii)

Table I	"Massive Sulphide" Chip Sample Analyses
Figure 1	Claim Location Map: Regional Scale
Figure 2	Claim Location Map: 1:50,000 Scale
Figure 3	Regional Geological Map: 1:250,000 Scale
Figure 4	Geological Map Mount McClennan Area: 1:5,000 Scale
Figure 5	Geological Sketch of the Sunrise Showing
Figure 6	Geological Sketch of the Snow Showing
Figure 7	Noble Claim Soil Geochemistry (Cu): 1:5,000 Scale
Figure 8	Noble Claim Soil Geochemistry (Zn): 1:5,000 Scale
Figure 9	Noble Claim Soil Geochemistry (Pb): 1:5,000 Scale
Figure 10	Noble Claim Soil Geochemistry (Ag): 1:5,000 Scale
Figure 11	Noble Claim Geophysical Survey: Magnetometer and In Phase Data: 1:5,000 Scale
Figure 12	Noble Claim Geophysical Survey: VLF In Phase and Quadrature Data: 1:5,000 Scale
Figure 13	Noble Claim Geophysical Survey: VLF Fraser Filter and In Phase Data: 1:5,000 Scale
Figure 14	Noble Claim Geophysical Survey: VLF Data with Interpretation: 1:5,000 Scale
Figure 15	Location Map: McCorvie Grid: 1:20,000 Scale
Figure 16	McCorvie Grid Soil Geochemistry (Cu): 1:5,000 Scale
Figure 17	McCorvie Grid Soil Geochemistry (Zn): 1:5,000 Scale
Figure 18	McCorvie Grid Soil Geochemistry (Pb): 1:5,000 Scale
Figure 19	McCorvie Grid Soil Geochemistry (Ag): 1:5,000 Scale
Figure 20	McCorvie Grid Soil Geochemistry (Hg): 1:5,000 Scale
Figure 21	McCorvie Grid Geophysical Survey: VLF In Phase and Quadrature Data: 1:5,000 Scale
Figure 22	McCorvie Grid Geophysical Survey: VLF Fraser Filter and In Phase Data: 1:5,000 Scale
Figure 23	McCorvie Grid Geophysical Survey: VLF Data with Interpretation: 1:5,000 Scale

## APPENDICES

(iii)

- Appendix I      Soil Geochemical Data: Noble Grid
- Appendix II     Soil Geochemical Data: McCorvie Grid
- Appendix III    Soil Geochemical Data: McCorvie Road Section
- Appendix IV     Bulk Sediment Geochemical Data: Peavine Creek

## 1.0 Summary

The Noble Claims on Mount McClennan, near Clearwater, were staked to cover three small exhalative Pb, Zn, Ag mineral prospects which are located in deformed strata belonging to the Eaglebay Formation. The claims also cover two vein Pb, Ag prospects, a Au occurrence and a Au, As stream sediment anomaly.

The exhalative mineralization had been explored previously and the programme conducted by Placer Development Ltd. was designed both to assess the nature of the mineralization and the quality of the existing data. Company personnel examined the mineralization, conducted a limited geochemical survey and ran geophysical surveys over the main area of interest. The results confirm the presence of several small layers of exhalative Pb, Zn, Ag mineralization within a thick (300 m) and extensive package of pyritic quartz sericite schist. The package appears to be warped into an east-west oriented antiform which displays a shallow plunge to the east.

A small geochemical and geophysical programme was conducted over the inferred location of an old Au showing. The workings were not located. The grid was constructed over a till-choked topographic depression which reflects a major fault system running down the axis of the McCorvie Lake System. The fault was located but no mineralization was detected.

Bulk sediment samples were used to bracket the source of a heavy mineral Cu, Pb, Zn, Cd, Ag, Au and As anomaly previously located in Peavine Creek. The source is inferred to be located at approximately the 3800' (1158 m) contour. The metal source appears to be roughly coincident with an occurrence of boulders of quartz-carbonate altered meta-basalt.

## 2.0 Introduction

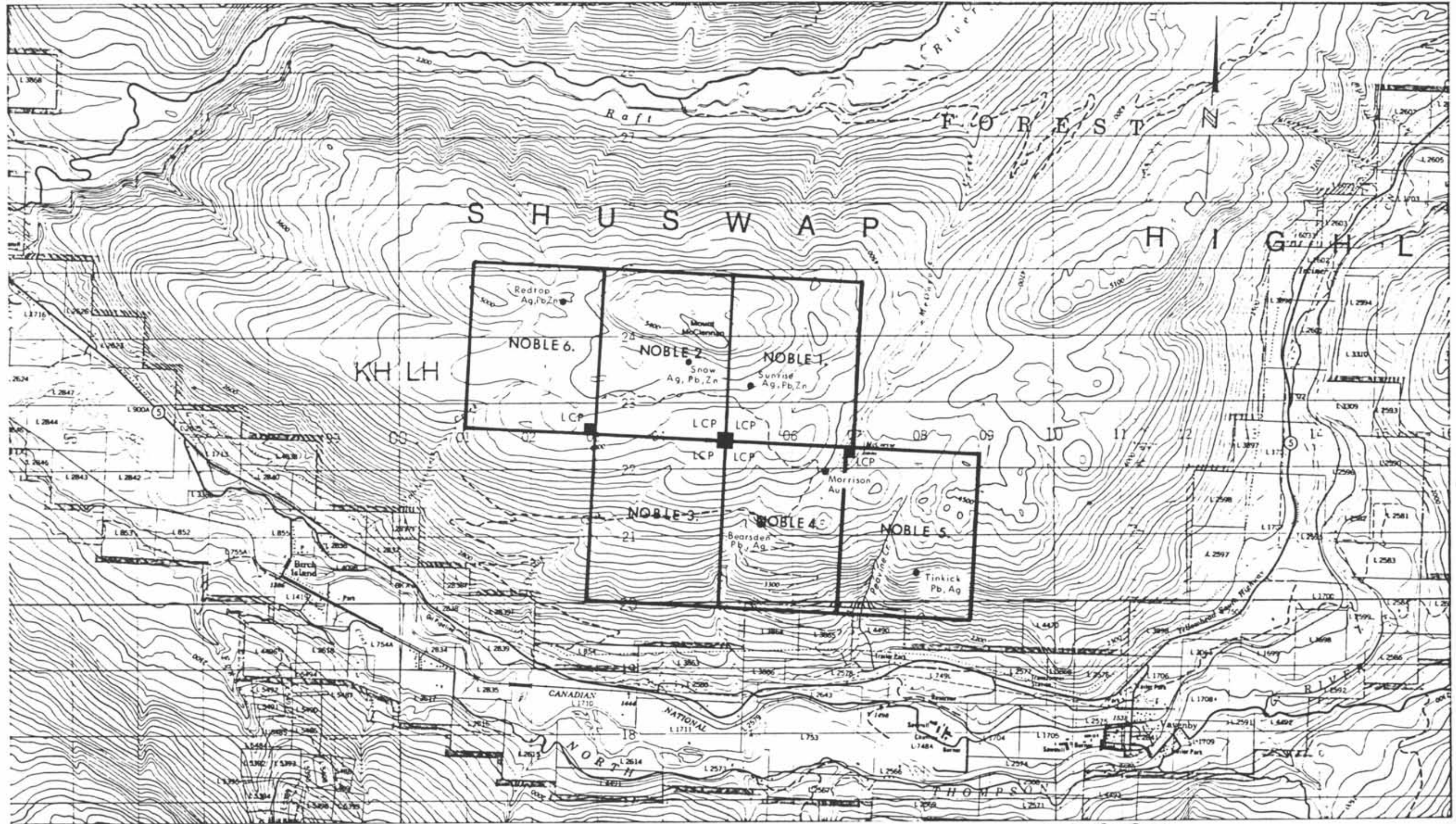
### 2.1 Location and Access

The Noble Claims (1-6) consist of 120 contiguous units located on the south facing flank of Mount McClennan (latitude 51° 38', Longitude 119° 48') in N.T.S. area 82M/12W. The claims are located to the north of the North Thompson River, midway between the communities of Birch Island and Vavenby (Figures 1 & 2). The claims are readily accessible by means of forestry roads which switchback their way up the lower slopes of Mount McClennan from the main highway in the valley of the North Thompson River.

### 2.2 Property History and Ownership

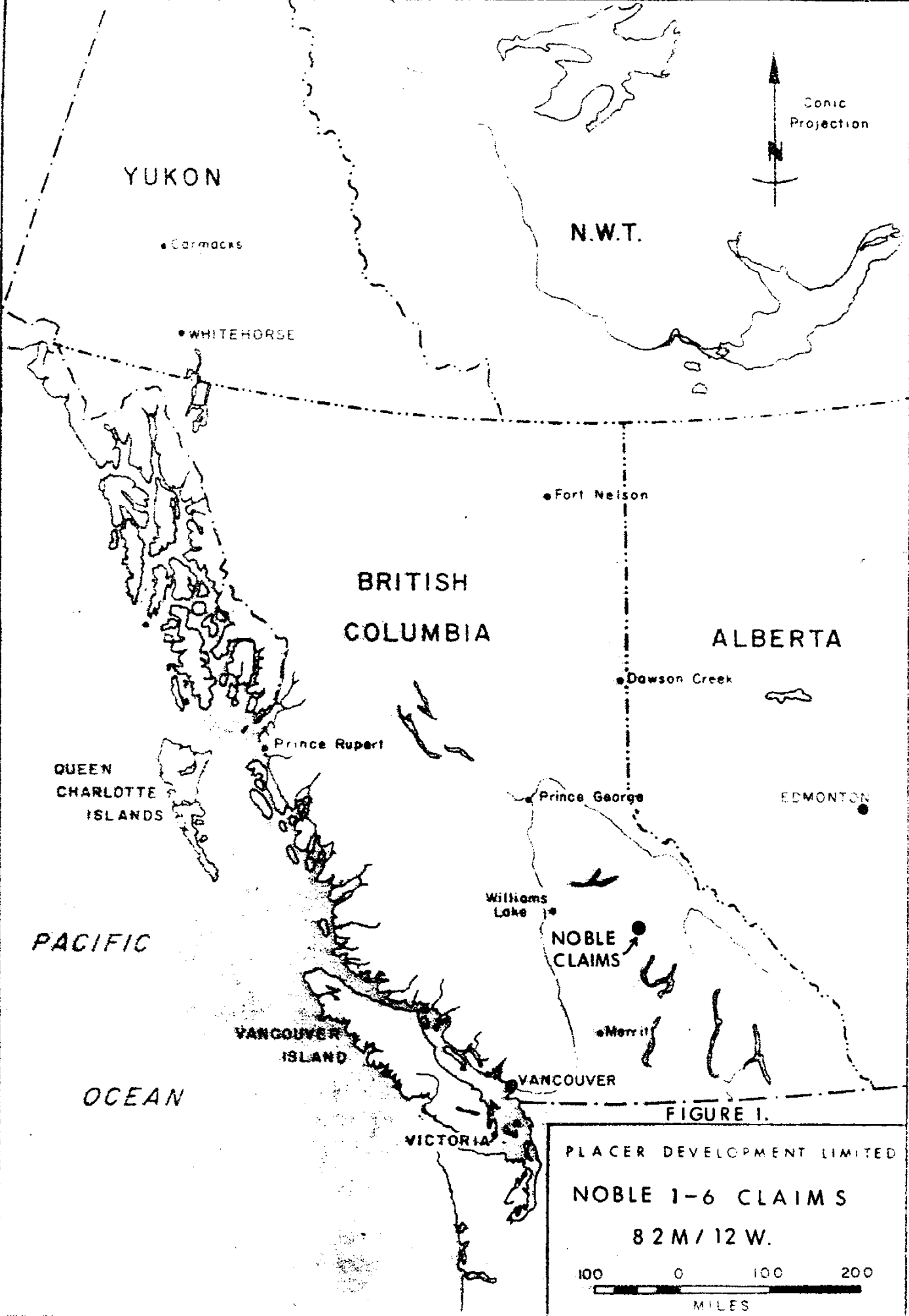
The Noble Claims were staked to cover (1) three Pb, Zn, Ag mineral prospects (Redtop, Snow, Sunrise) located on an upland plateau immediately below the summit of Mount McClennan; (2) two Pb, Ag showings (Bearsden and Tinkirk) on the steep south facing slope of the mountain and (3) a Au occurrence (Morrison) thought to be located in the vicinity of McCorvie Lake (Figure 2).

The Redtop, Snow and Sunrise properties were located and trenched in the 1920's and the first holes were drilled in the 1940's (reference assessment report 6931). The Mount McClennan property was subsequently examined by H.C.B. Leitch in 1960 (assessment reported 436) and it was acquired by Crowpat Minerals Ltd. in 1966. Crowpat drilled three holes on the property for a combined depth of 1,505' (459 m). Calbay Mining Corporation Ltd. staked the same ground in 1969 and did a considerable amount of trenching. The company also drilled five short holes for a total combined depth of 1,218' (371 m). The results of these programmes are not available.



12080

FIGURE 2.  
CLAIM LOCATION MAP  
NOBLE CLAIMS  
82M/12W - SCALE 1: 50,000





The Nimsic Claim Group was staked on Mount McClennan by John Kerr of Kerr, Dawson and Associates Ltd. in 1975. Kerr-Dawson conducted a preliminary examination of the Snow and Sunrise (Naomi) mineral prospects and recognized the exhalative nature of the mineralization (assessment report 5813). Castlemaine Explorations Ltd. acquired the Nimsic property in 1976 and optioned it to Canadian Nickel Co. Ltd.

Canadian Nickel Co. Ltd. constructed a 98.75 line-km grid on the property in 1976 and conducted a major surface exploration programme in 1977. The company mapped the property at a scale of 1:5,000; analyzed 1600 soil samples for Cu, Zn, Pb and Ag and ran a magnetometer survey over the entire grid. In addition, they ran a more limited VLF EM survey (assessment report 6603). The option passed to Craigmont Mines Ltd. in 1978. Craigmont conducted additional geophysical surveys and put in five drill holes for a combined depth of 382.9 m (assessment report 6931).

The Nimsic and neighbouring Quartz claims were subsequently allowed to lapse and the Noble claims were staked by Placer Development Ltd. personnel in 1983. The Noble 1-5 claim group, consisting of 100 contiguous units, was staked between 22nd and 25th of March 1983 and the Noble 6 claim, consisting of an additional 20 units, was added on the 8th of June 1983. The claim blocks were recorded on 30th of March, 1983 and 27th of June, 1983 respectively.

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Noble 1	20	4388(3)	March 30, 1984
Noble 2	20	4389(3)	" " "
Noble 3	20	4390(3)	" " "
Noble 4	20	4391(3)	" " "
Noble 5	20	4392(3)	" " "
Noble 6	20	4561(6)	June 27, 1984

### 3.0 Regional Geological Setting

Figure 3, a detail from the 1:250,000 scale geological map of the Adams Lake Area (Map 48-1963 by R.B. Campbell) shows that the Noble Claims are underlain by dark grey and brown phyllite, limestone, sericitic quartzite, minor greenstone, quartz-feldspar-chlorite gneiss and meta-conglomerate (Unit 4a) which is Permian or earlier in age. The strata are currently assigned to Mississippian Eaglebay Formation (Schiarizza; B.C.M. of E.M. and P.R. Geological Fieldwork, 1981, Paper 1982-1).

The Eaglebay Formation was deformed and metamorphosed during regional uplift of the Shuswap Metamorphic Complex to the east and it was subsequently cut by two east-west oriented, post-orogenic, Cretaceous, quartz monzonite batholiths (Unit 7a; Figure 3). The Raft River Batholith truncates the succession on the north face of Mount McClennan and the Baldy Batholith cuts the formation south of the North Thompson River (Figure 3).

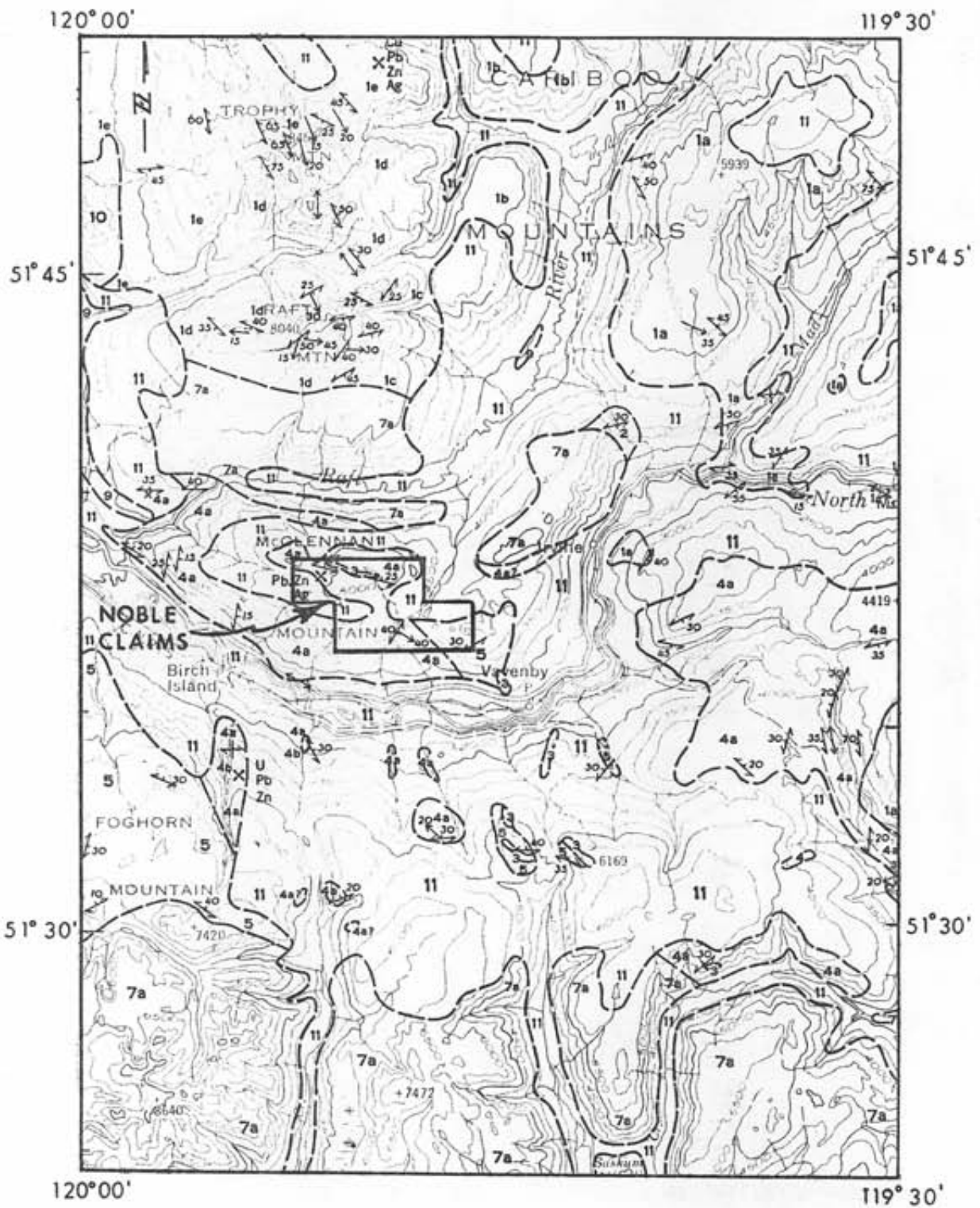

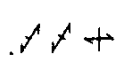



FIGURE 3.

REGIONAL GEOLOGICAL MAP  
 Mount McClennan Area  
 detail from GSC Map 48-1963

LEGEND

CENOZOIC	<b>PLEISTOCENE AND RECENT</b>	
	11	Glacial deposits and recent alluvium; till, gravel, sand, silt, and clay; few if any bedrock exposures
	<b>PLEISTOCENE AND/OR EARLIER</b>	
	10	Olivine basalt; cinder cones, blocky flows, breccia, and agglomerate
MESOZOIC	<b>TERTIARY</b>	
	<b>MIOCENE OR PLOIOCENE</b>	
	9	Flat-lying olivine basalt flows; minor breccia and gravel
PALAEOZOIC OR EARLIER	<b>TERTIARY (?)</b>	
	8	Conglomerate
	<b>JURASSIC AND/OR CRETACEOUS AND (?) EARLIER</b>	
	7	7a, biotite granodiorite and granite; 7b, hornblende diorite; 7c, muscovite granite; 7d, biotite-hornblende syenite, biotite granodiorite, hornblende diorite, and felsite; includes septa and inclusions of intruded rocks
	6	Serpentinite
	<b>PERMIAN OR EARLIER</b>	
	5	Greenstone, greenachist, chlorite schist, phyllite, limestone, quartz-sericite schist, quartzite, volcanic agglomerate
	4	4a, dark grey and brown phyllite (commonly limy), limestone, sericitic quartzite; minor greenstone, quartz-feldspar-chlorite gneiss, and meta-conglomerate; 4b, trachytic tuff and breccia
3	Grey and buff weathering, white, grey, and buff marble and limestone; minor greenstone and phyllite	
2	Undivided; includes rock types common to 4a and 5; minor quartz-mica schist and amphibolite	
<b>AGE UNCERTAIN</b>		
1	<b>SHUSWAP METAMORPHIC COMPLEX</b> 1a, characterized by well foliated granitic gneiss; quartz-feldspar-biotite gneiss, quartz-feldspar-hornblende gneiss, amphibolite; minor quartz-mica schist, quartzite, marble, and skarn; abundant and locally dominant pegmatite, muscovite granite, and biotite granodiorite; 1b, exclusively or dominantly biotite granodiorite; 1c, characterized by quartz-mica schistose gneiss (commonly garnetiferous), amphibolite, quartzite, marble, and skarn; pegmatite, muscovite granite, biotite granodiorite; minor granitic gneiss; 1d, similar to unit 1c with abundant and locally dominant dykes and sills of pegmatite, muscovite granite, and biotite granodiorite; 1e, undivided, may include all rock types found in units 1a and 1c. The granitic rocks may be equivalent to those of 7	
Small rock outcrop . . . . . x		
Geological boundary (defined, approximate, and assumed). . . . . 		
Foliation including rock cleavage, schistosity, gneissosity, and bedding (inclined, vertical, and horizontal). . . . . 		
Lineation including fold axes, crenulations, mineral lineations, and bedding-cleavage intersections (plunging, horizontal). . . . . 		
Fossil locality. . . . . ⊕		
Mineral prospect. . . . . Ag X		

#### **4.0 Work Performed**

##### **4.1 Introduction**

Placer Development Ltd. personnel conducted two exploration programmes on the Noble Claim Group (8-14th June and 10-20th September) for a total of 67 man-days of field activity.

The programme involved (1) an examination and assessment of the Pb, Zn, Ag mineralization exposed in the Redtop, Snow and Sunrise workings (2) an attempt to locate the Morrison Au occurrence and to test the Au potential of a structural break underlying the McCorvie Lake system and (3) an attempt to locate the source of a Au, As stream sediment anomaly in Peavine Creek.

The mineralization exposed on Mount McClennan was sampled and the grid utilized by Canadian Nickel Co. Ltd. was reconstructed. A total of 27 line km of ground geophysical data (VLF EM and Magnetometer) was obtained utilizing the grid and 300 soil samples were collected to check and to extend the original soil data.

A small (3.4 line km) grid was constructed perpendicular to an inferred structure which runs down the axis of McCorvie Lake (azimuth N37°E). The grid was located over the probable site of the Morrison Au showing (Figure 2). The showing was not located. A VLF EM 16 survey was conducted on the grid and 71 B horizon soil samples were collected for analysis.

The Au As anomaly on Peavine Creek was bracketed by means of bulk silt sediment samples which were collected at approximately 200' (61 m) elevation intervals between the 2600, (792 m) and the 4300' (1311 m) contours.

## 4.2 Mount McClennan Area

### 4.2.1 Geology

Figure 4, adapted from the work of Craigmont Mines Ltd. (assessment report 6931), shows the distribution of outcrop and the inferred geology of the plateau portion of Mount McClennan. Natural outcrop is largely confined to the cliff section below the summit of the mountain. All the exposures on the plateau appear to have been created by past exploration activity.

The Eaglebay succession on Mount McClennan is comprised of a mixed package of largely undifferentiated meta-sedimentary and meta-volcanic strata. It consists of siliceous quartz sericite (+ biotite and /or chlorite) schist (Unit 1), recrystallized but recognizable acid volcanic tuff (Unit 2), recrystallized mafic volcanic tuff (Unit 3), meta-andesite (Unit 4), recrystallized limestone (Unit 5) and locally graphitic meta-argillite (Unit 6). In addition, there is local development of an epidote-magnetite rich calc silicate "skarn" (Unit 7). The detail of the stratigraphy is poorly known and there appears to be considerable variation in facies.

The Redtop, Snow and Sunrise mineral showings consist of stratabound lenses of massive, semi-massive and disseminated Pb, Zn, Ag mineralization in a package of weakly to strongly pyritiferous, siliceous, recrystallized acid volcanic tuff and related sediment (Units 1 and 2). The mineralized section is estimated to be approximately 300 m thick in the Redtop trenches in the northwest and it can be traced for a distance of 3 km to the Sunrise prospect in the southeast. The mineralized part of the section appears to overlie limestone at Redtop and it includes a minor amount of intercalated limestone, meta-argillite and recrystallized mafic tuff. The package strikes northwest to southeast and it dips to the northeast under a prominent limestone bluff, located below the summit of the mountain. The mineralized unit is directly overlain by limestone in the south east but it is separated from it by a small amount of argillaceous tuff in the vicinity of the Snow prospect. At Redtop the pyritic unit is overlain by meta-argillite.

The Eaglebay strata on Mount McClennan have been metamorphosed to lower greenschist facies. The strata are intensely deformed and the rocks commonly display a pronounced foliation parallel to bedding.

The assemblage as a whole appears to have been deformed into a shallow antiform about an axis which runs east west, subparallel to the

Canadian Nickel Co. Ltd. baseline (Figure 4), and plunges at a shallow angle to the east. The southern limb of the fold is very poorly exposed.

#### 4.2.2 Mineralization

The character of the mineralization exposed on Mount McClennan has been discussed in detail by Dr. J.F. Walker of the G.S.C. (Summary Report: 1930 A); H.C.B. Leitch, 1962 (Assessment report 436) and J.M. Dawson; 1976 (Assessment report 5813). The early reports describe the occurrence of a "replacement" sulphide desposits. Since the work of J.M. Dawson, it is generally accepted that the mineralization has an exhalative origin.

##### (1) Sunrise Showing

The Sunrise showing (Figure 4) was mapped and sampled by Leitch. His map of the area, reproduced in Figure 5, shows that a large number of pits and trenches had been dug on the property in the early days of exploration. According to Dawson, the workings expose "at least two massive sulphide horizons (mostly pyrrhotite, pyrite and sphalerite) varying from 1-4 feet thick (0.3-1.2m) and two (?) thinner bands less than 6 inches (0.15m) in width". The mineralized layers are nearly flat lying and Leitch suggested that they were located close to the nose of an easterly plunging anticline.



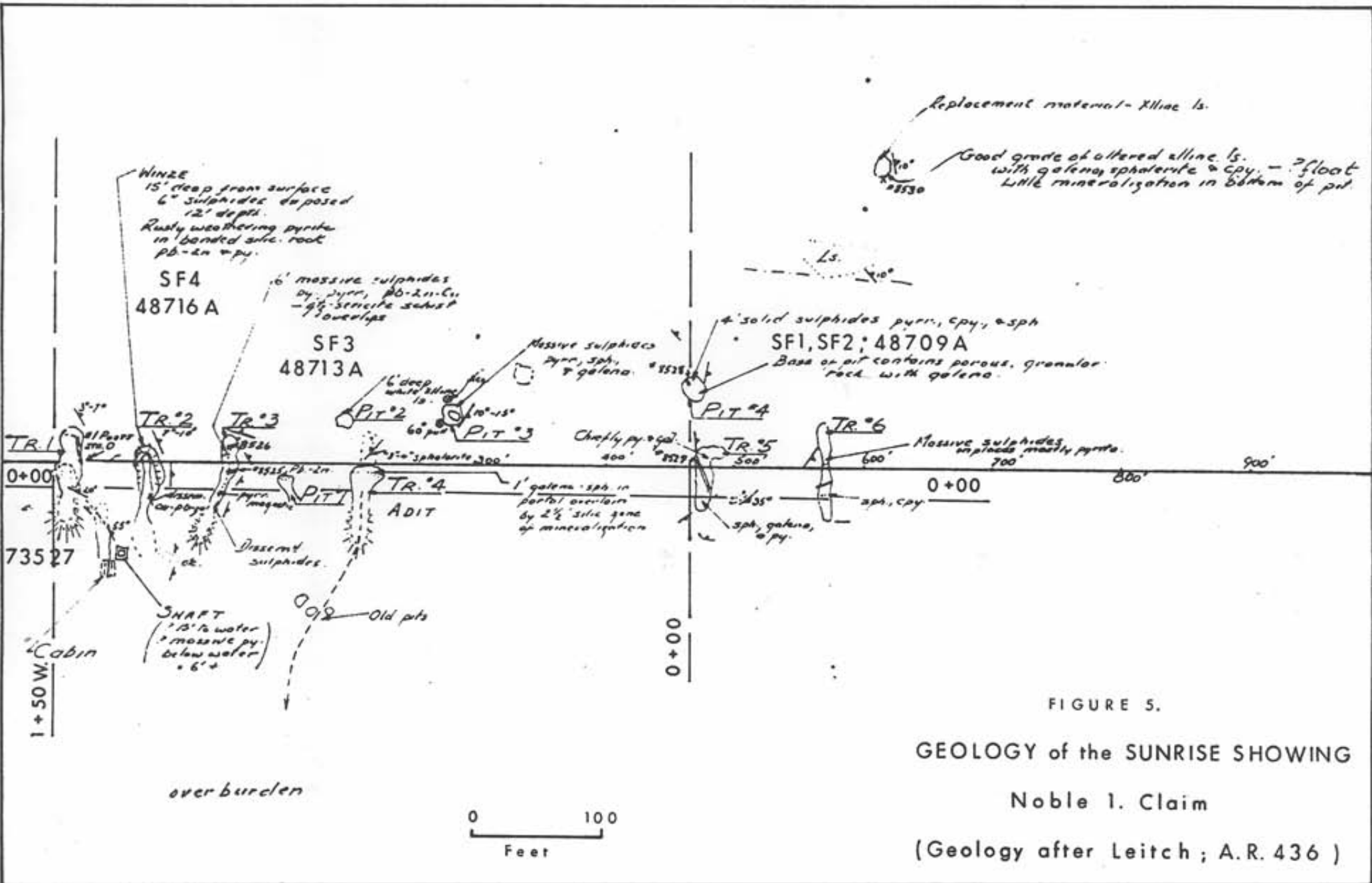


FIGURE 5.

GEOLOGY of the SUNRISE SHOWING  
Noble 1. Claim  
(Geology after Leitch ; A.R. 436 )

TABLE 1  
"MASSIVE SULPHIDE" CHIP SAMPLE ANALYSES  
Sunrise Prospect: Noble 1 Claim

Main Showing (1.2 m massive pyrrhotite with traces of  
chalcopyrite and sphalerite)

<u>Chip Sample</u>	Cu (%)	Zn (%)	Pb (ppm)	Ag (ppm)	Au (ppm)
1) SF1	0.17	0.11	134	1.2	0.04
2) SF2	0.16	0.12	72	1.0	0.03
3) 48709A	0.18	0.06	260	8.0	<0.02

East Trench (1.0 m pyrite, pyrrhotite, sphalerite with minor  
chalcopyrite and galena)

<u>Chip Sample</u>	Cu (ppm)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
1) SF 3	610	3.02	0.51	73	0.59
2) 48713A	400	0.34	0.21	42	0.26

Central Trench (2.0 m massive pyrite, pyrrhotite, sphalerite  
galena and minor chalcopyrite)

<u>Chip Sample</u>	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
1) SF4	0.13	18.3	2.62	225	1.73
2) 48716A	0.13	14.9	2.09	179	1.29

West Trench (Chips from blocks of massive pyrite,  
pyrrhotite and sphalerite)

<u>Chip Sample</u>	Cu (ppm)	Zn (%)	Pb (ppm)	Ag (ppm)	Au (ppm)
1) 73527	600	12.0	820	38	0.05

TABLE 1 Cont'd...  
**"MASSIVE SULPHIDE" CHIP SAMPLE ANALYSES**

**Snow Prospect: Noble 2 Claim**

Old Trench Showing (Chips from mineralized blocks: pyrite, pyrrhotite, sphalerite and minor chalcopyrite)

<u>Chip Sample</u>	Cu (%)	Zn (%)	Pb (ppm)	Ag (ppm)	Au (ppm)
1) 73502	0.17	0.39	620	50	<0.02

New Trench Showing (Chips from mineralized blocks: pyrite, minor pyrrhotite, sphalerite, galena and chalcopyrite)

<u>Chip Sample</u>	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
1) 48704A	1.18	0.80	2.10	140	0.12
2) 73501	0.76	0.78	0.08	87	<0.02

Upper Snow Trench (Chips taken across 2.0 m of massive to semi-massive pyrite)

<u>Chip Sample</u>	Cu (ppm)	Zn (ppm)	Pb (ppm)	Ag (ppm)	Au (ppm)
1) 73524	95	25	3	<0.2	<0.02

**Redtop Prospect: Noble 6 Claim**

West Trench (2.0 m semi-massive pyrite with minor sphalerite and galena in quartz-sericite schists)

<u>Chip Sample</u>	Cu (ppm)	Zn (ppm)	Pb (ppm)	Ag (ppm)	Au (ppm)
1) 73513	145	470	810	3.4	<0.02

Continuous chip samples were collected across lenses of massive sulphide exposed in three of the old workings and random chips were collected from mineralized blocks adjacent to a fourth. The samples were analyzed for Cu, Zn, Pb, Ag and Au. The results are shown in Table 1. The data show that the main pyrrhotite-rich sulphide lens is weakly mineralized and that the more pyritic sulphide lenses contain variable amounts of Pb, Zn and Ag. The main, east and central showing were sampled on two occasions to test for reproducibility. The data in Table 1 suggest that the mineralization is reasonably homogenous.

(2) Snow Showing

The Snow showing, which was also described by J.M. Dawson and H.C.B. Leitch, is reported to consist of four "semi-conformable" massive sulphide bands in a package of essentially flat-lying, carbonate-bearing, quartz sericite schist 40 feet (12.2m) thick. The mineralization is described as consisting of one band 4 feet (1.2m) thick and three others 1-2 feet (0.3-0.6m) thick.

The bands were originally exposed in a north-south oriented trench which was mapped by Leitch in 1960 (Figure 6). The walls of the trench have since collapsed and it is no longer possible to identify the mineralization in situ. Sample 73502, in Table 1, represents a

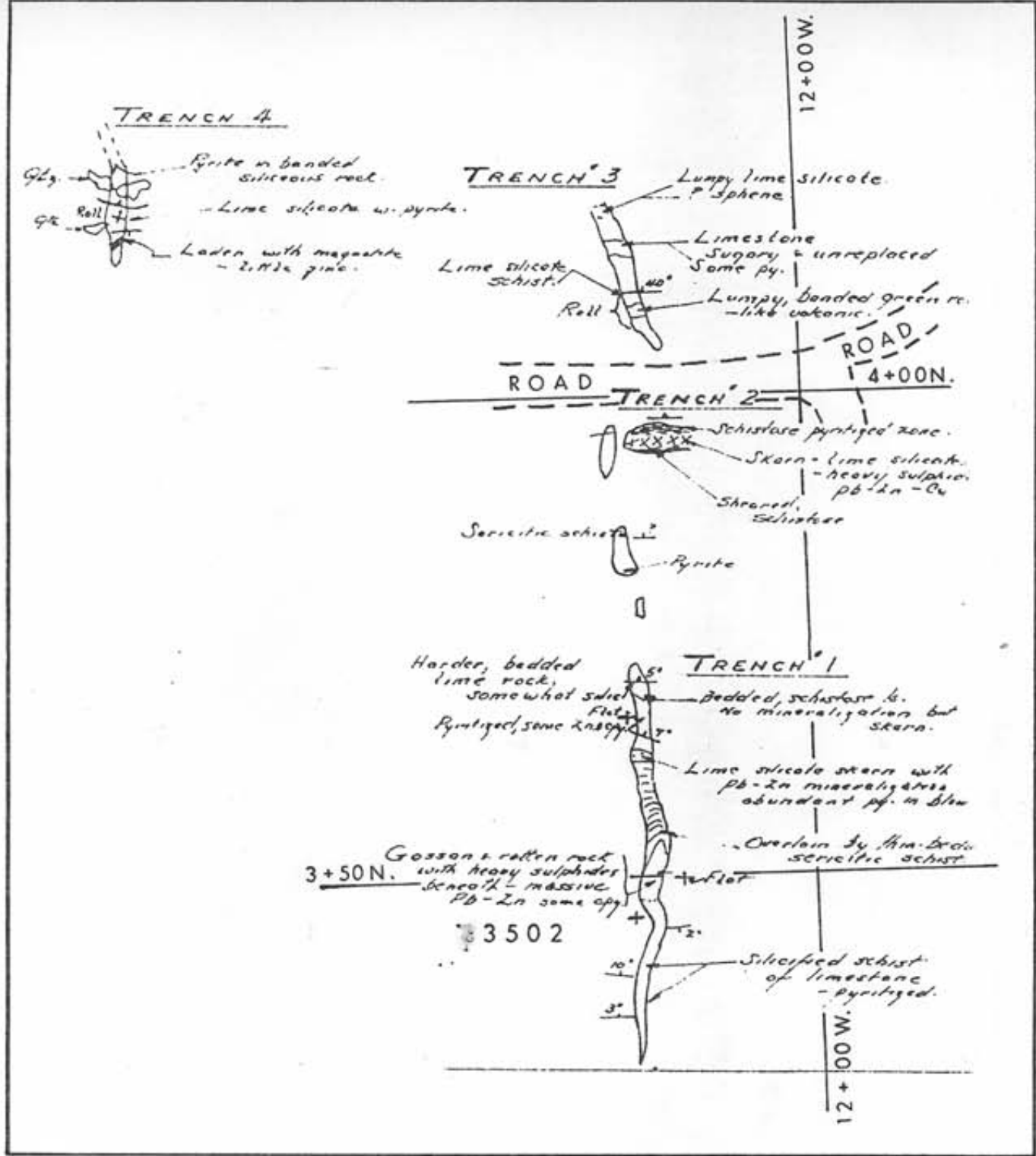


FIGURE 6.

GEOLOGY of the SNOW SHOWING

Noble 2 Claim

(Geology after Leitch ; A.R. 436)



random chip sample of "massive sulphide" collected from blocks adjacent to the inferred location of the main zone of mineralization. The sulphide sample consists of coarse granular pyrite with minor sphalerite, galena and chalcopyrite. Similar material, presumably from the same horizon, appears to be exposed in a more recent trench located 150 m to the west (Figure 4). The floor of the trench consists of angular blocks of relatively fresh, massive and semi-massive, coarse-grained, bedded, sulphide. Two random chip samples were also collected from the mineralized blocks in the floor of the trench. All three samples contain a minor amount of Cu, Zn and Pb and a significant (>50 ppm) amount of Ag (Table 1).

Figure 4 shows that acid volcanic tuffs (Unit 2) are exposed in two trenches immediately below the limestone bluffs to the north of the Snow mineral showing. The tuffs are weakly to intensely pyritic and semi-massive to massive, coarse, pyrite is exposed over a 2.0 m width close to the top of the section. A chip sample across the zone (sample 73524: Table 1) shows it to be barren.

Hunter (assessment report 6603) examined the lower Snow mineralization in detail and concluded that the sulphides occurred in units which display definite graded bedding of both quartz and pyrite. He concluded that Zn

rich bands graded upward into Cu rich within a given unit. In addition, he noted that chalcopyrite appears to be partially mobilized into north-south oriented tension fractures.

(3) Redtop Showing

The Redtop showings, (Figure 4) are described by J.F. Walker (1930) and H.C.B. Leitch (1962). The occurrence appears to consist of several pyrite, sphalerite and galena "replacements" in silicified and altered limestone. The best showing is described by Leitch as follows:

"Number 4 workings, pit or trench, contain crystalline limestone and silicified rock in which massive sulphide mineralization occurs among thin bands of disseminated sulphides. The sulphides consist chiefly of pyrite, galena, sphalerite but chalcopyrite shows at a number of points."

The Redtop trench system has been altered and expanded since Leitch visited the property and the above occurrence has not, so far, been located. A 5' (1.5m) chip sample (B8531-B) collected by H.C.B. Leitch across the better mineralized portion of the above section was reported to run 0.005 oz/ton Au, 0.55 oz/ton Ag, 0.08% Cu, 2.75% Pb and 3.15 % Zn.

The four new trenches on the Redtop prospect expose a 300 m thick section of rusty, pyritic, quartz sericite schist with local intercalations of shale and limestone. The mineralization consists mainly of disseminated pyrite but trace amounts of sphalerite and galena were also observed in calcareous schist above and below the main limestone interbed (Figure 4). Sample 73513 (Table 1) is a chip sample collected from a 2.0 m thick, highly pyritic, interbed close to the base of this limestone unit in the western-most of the Redtop trenches.

#### 4.2.3 Soil Geochemistry

Canadian Nickel Co. Ltd. constructed a grid on the Mount McClennan property in 1976 and collected 1600, B-horizon soil samples. The samples were initially collected at 100 m intervals on north-south lines spaced 150 m apart. The sample spacing was subsequently reduced to 50 m over much of the grid and locally it was reduced to 25 m. In addition, the spacings between lines was reduced by half in a few critical areas (assessment report 6603). The -80 mesh fraction was analyzed for Cu, Zn, Ag and, in some cases, Pb.

The soil data obtained by Canadian Nickel Co. Ltd. was not effective in outlining known areas of mineralization and it was not able to demonstrate continuity between the mineral showings. The results define two broad zones of single point anomalies which appear to correlate with the two limbs of the antiform.



Placer Development Ltd. personnel collected 300 B-horizon soils samples on selected areas of the property. The samples were shipped to the Company Research Laboratory in Vancouver and the -80 mesh fraction was analyzed for Mo, Cu, Zn, Pb and Ag. A total of 183 samples were also analyzed for Cd and Mn. The results are listed in Appendix I and the values for Cu, Zn, Pb and Ag are posted in Figures 7, 8, 9 and 10.

The results show broad agreement with the Canadian Nickel Co. Ltd. data. Chemical dispersion appears to be inhibited both by the presence of carbonate in the soil and the local presence of a transported till. Individual samples anomalous in one or more of Cu (>120 ppm), Zn (>250 ppm), Pb (>50 ppm) or Ag (>0.6 ppm) define point anomalies within the over all trend. The data is consistent with the observed presence of a large number of mineralized horizons within a thick stratigraphic package.

#### 4.2.4 Ground Geophysics

A total of 27 line km of ground magnetometers and VLF (E-M 16) data was collected on the existing grid. Data was recorded at 10 m intervals on lines spaced 150 m apart.

The ground magnetic data (Figure 11) show that the pyrrhotite lens on the Sunrise prospect is limited in extent and that there is no indication of extensive pyrrhotite mineralization on the north limb of the inferred

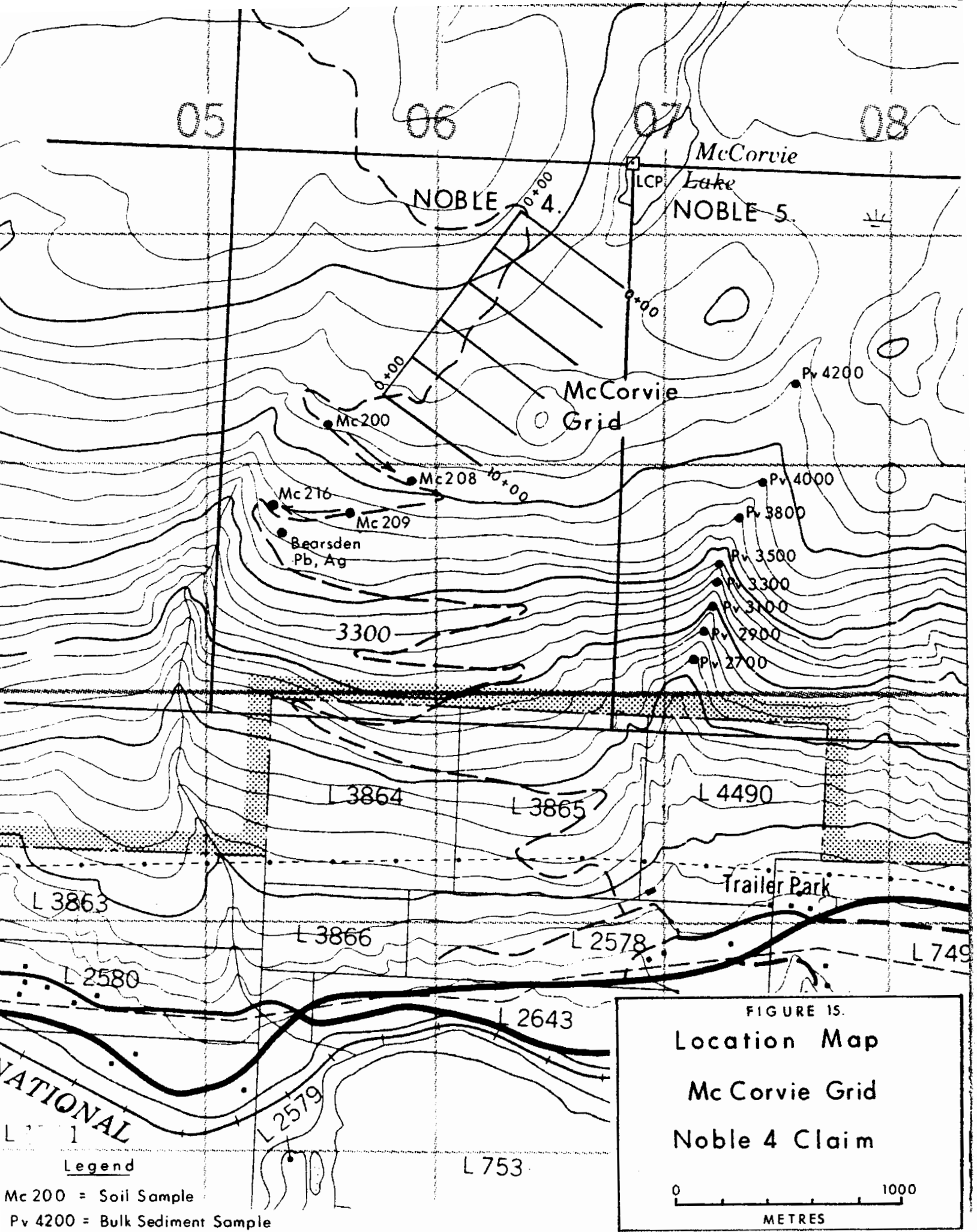
antiform, between the Redtop and Sunrise mineral prospects. Local magnetic peaks were observed on many of the north-south lines. These are attributed to local, minor, development of pyrrhotite within the over-all, 300 m thick, pyritic rock package. Four lines of magnetic data in the southwest corner of the survey area show a strong and coherent magnetic anomaly which correlates with a moderate to weak VLF conductor. The anomaly is located in an area of calc-silicate "skarn" (Unit 7) on the southern limb of the inferred antiform.

The VLF survey was undertaken using base stations at Annapolis and Cutler. The survey reveals the presence of a series of semi-continuous conductors which appear to represent pyritic, pyrrhotitic and/or graphitic interbeds within the Eaglebay Formation (Figures 12-14). The surface trace of the conductors is consistent with the presence of an inferred antiform which strikes roughly east-west and plunges a few degrees to the east (Figure 4).

### 4.3 McCorvie Lake Area

#### 4.3.1 Geology

The McCorvie grid was constructed over a topographic depression which is defined by the axis of McCorvie Lake (Figure 15). The depression is presumed to be controlled by a fault which strikes approximately northeast - southwest. The depression is filled with glacial till and there is very little outcrop exposed on the grid. An outcrop of deformed and carbonatized graphitic and chloritic sericite schist is exposed in a road cut in the south



west corner of the grid and an outcrop of deformed meta-basalt was located off the grid to the northeast.

Canadian Nickel Co. Ltd. mapped deformed quartz sericite schist in a number of road cut outcrops on the projection of the fault system exposed on the lower slopes of the mountain (assessment report 6603). The fault is inferred to dip at approximately  $45^{\circ}$  to the southeast.

#### **4.3.2 Mineralization**

No mineralization has so far been located on the McCorvie grid although it was constructed over the inferred location of the Morrison Au showing (assessment report 436). Leitch describes the showing as consisting of a short shaft leading to a some-what caved tunnel. A channel sample taken across quartz lenses and altered country rock is reported to have run 0.4 oz/ton Au.

The Bearsden Pb, Ag prospect appears to be a quartz vein occurrence located in the fault zone on the lower slopes of the mountain.

#### **4.3.3 Soil Geochemistry**

The McCorvie grid was established by running a base line at an azimuth of  $217^{\circ}$  from a point 500 m west and 210 m south of the legal post for Noble 5. The line was marked at 200 m intervals and six grid lines, approximately 500 m in length were constructed to the east of the baseline (Figure 15).

A total of 71 standard, B-horizon, soil samples were collected from the underlying till at 50 m intervals along the grid lines. The samples were shipped to the Company laboratory and the -80 mesh fraction was analyzed for Mo, Cu, Zn, Pb, Ag, Au, As and Hg. The results are listed in Appendix II and the Cu, Pb, Zn, As and Hg values are posted in Figures 16 to 20. No coherent geochemical anomalies were identified on the grid but a few, weak, point anomalies were detected.

A further 17 B-horizon soil samples (MC200-MC216) were collected at intervals of approximately 50 m along the upper switchbacks of the old forestry road which intersects the projection of the fault zone on the lower slopes of about McClennan (Figure 15). The -80 mesh fraction was analyzed for Mo, Cu, Zn, Pb, Ag, Au, As, Mn and Hg. The results are listed in Appendix III. No significant anomalies were detected.

#### 4.3.4 Ground Geophysics

A total of 3.4 line km of EM-16 data was gathered on the six-line McCorvie Grid. Data was collected at 10 m intervals using a base station at Seattle. In phase and quadrature data were noted. The in phase data was subjected to the Fraser Filter and profiles were generated for the grid. (Figures 21-23).

The survey revealed three continuous and several sympathetic conductors which traverse the grid from northeast to southwest. The conductors are presumed to represent the surface expression of the McCorvie Fault Zone. Anomaly amplitudes decrease markedly at the south end of the grid, between lines 8+00 and 10+00 south.

#### 4.4 Peavine Creek Area

##### 4.4.1 Geology

Peavine Creek is an incised drainage which descends rapidly from a upland plateau at elevation 4250' (1295 m) to the valley of the North Thompson River at elevation 1500' (457 m). The Creek cuts a section through a mixed package of Eaglebay Formation strata. Outcrop exposed in the section includes a small amount of fractured meta-basalt which strikes at 150° and dips 40° NE at elevation 3900' (1189 m); a mixed and deformed black meta-argillite and recrystallized limestone package at 3700' elevation (1128 m) and a thick meta-basalt unit which extends from the 3600' (1097 m) elevation to the 2800' elevation (853 m).

Blocks of meta-basalt located in the creek bed below an elevation of 3700' (1128 m) are veined and they show signs of weak to intense quartz-carbonate alteration.

##### 4.4.2 Mineralization

There is no known source of mineralization on Peavine Creek but a heavy

mineral sample previously collected at an elevation of 2600' (792 m) was found to contain anomalous amounts of Cu, Pb, Zn, Cd, Ag, Au and As.

#### 4.4.3 Silt Geochemistry

A total of eight, -20 mesh, bulk sediment samples were collected from the Creek bed at elevation intervals of approximately 200' (61 m) using an altimeter. A correction of 100' (33 m) was later applied (Figure 15). The 5 lb (2.3 kg) samples were collected at an elevation of 2600' (792 m), 2800' (853 m), 3000' (914 m), 3100' (945 m), 3400' (1036 m), 3700' (1128 m), 3900' (1189 m) and 4100' (1250 m). Each sample was subsequently shipped to the Company laboratory in Vancouver, dried, shaken and sieved to -150 mesh. The -150 mesh sample was analysed for Mo, Cu, Zn, Pb, Ag, Au, Hg and Sb. The Au analysis was conducted in triplicate. The analytical results are listed in Appendix IV.

The bulk sediment data show that Cu, Zn, Pb and As enter the creek system somewhere between the 3400' (1036 m) and 3700' (1128 m) elevation contours. The data also show that Au and minor As enter the creek at a slightly higher level, between 3700' (1128 m) and 3900' (1189 m) elevation.

The analytical data and the presence of boulders of quartz-carbonate altered rock at 3700' (1128 m) elevation suggests that the source of the mineralization is located above the main section of meta-basalt.

## 5.0 Discussion

The exploration programme carried out on Mount McClennan confirms some of the results of the programme carried out by Canadian Nickel Co. Ltd. in 1976. The exhalative Pb, Zn, Ag mineralization exposed on the plateau portion of the mountain appears to consist of several narrow mineralized horizons within a 300 m thick package of weakly to intensely pyritized quartz-sericite schists. The package appears to extend from Redtop to Sunrise and beyond and it appears to be warped about an east-west axis into an antiform which has a shallow easterly plunge. The southern limb of the fold is poorly exposed and it has not been fully evaluated. The package contains numerous semi-continuous VLF conductors which include pyritic and pyrrhotitic horizons, with or without Pb, Zn, Ag mineralization, and interbeds of graphitic schist. The best combination of geophysical conductors is located at the west end of the southern limb, in an area underlain by calc-silicate "skarn". The geochemical survey was used to evaluate the existing data from Canadian Nickel Co. Ltd. and to test the application of soil geochemistry in a few key areas. The results confirm that the geochemically active rock package can be traced by geochemistry, but that it is not possible to define coherent geochemical anomalies related to specific bodies of mineralization.

The exploration programme carried out on the McCorvie Grid located a major fault system running down the axis of McCorvie Lake. The fault was thought to control the location of the Morrison Au occurrence, as defined by Leitch (assessment report 436). The occurrence was not located and no significant mineralization was detected.



Bulk sediment samples collected in Peavine Creek have bracketed the source of a Au, As and base metal anomaly detected in a heavy mineral sample previously collected from the creek. The specific source and nature of the mineralization is not known but it appears to be related to quartz-carbonate alteration.

## 6.0 Conclusion

The principal conclusions derived from the above can be summarized as follows:

(1) The exhalative mineralization on Mount McClennan consists of small lenses within a thick over-all package which has been deformed into an antiform. The down plunge and southern limbs of the fold are not well exposed and they are largely unexplored. There is still potential for a large exhalative, Ag rich, massive sulphide deposit.

(2) The McCorvie Grid was constructed over a fault controlled, till-choked, topographic depression. The Morrison Au showing was not located and no mineralization was detected. The presence of carbonate alteration in outcrop suggests that there is some potential for epithermal Au mineralization.

(3) The results show that there is a reasonably well defined source area for the Au, As anomaly on Peavine Creek. The presence of quartz-carbonate altered rock in the creek bed suggests an epithermal mineral occurrence.

**7.0 Statement of Expenditures**

**Labour Cost - Personnel**

R. Pinsent (Project Geologist)		
June 7-17th & Sept. 9-21st	24 days @ \$260.	= 6,240.
R. Boyce (Geologist)		
June 7-17th & Sept. 9-21st	24 days @ \$200.	= 4,800.
J. Thornton (Geophysicis)		
June 7-17th & Sept.13-21st	20 days @ \$210.	= 4,200.
B. Ott (Technician)		
Sept. 13-18th	6 days @ \$200.	= <u>1,200.</u>
		\$ 16,440.00

**Room & Board**

"Jasper Way Inn" Clearwater, B.C.		
67 man days & \$40./man day		\$ 2,680.00

**Vehicle Expense**

1 4x4 Suburban @ \$40./day	June 7-17th (11 days)	\$440.	
1 3/4 ton Chev 4x4 P.U. @ \$35./day	June 7-17 (11 days)	385.	
1 4x4 Suburban @ \$40./day	Sept. 7-21 (13 days)	520.	
1 4x4 Suburban @ \$40./day	Sept.13-18 (6 days)	<u>240.</u>	\$1,585.00

**Sample Preparation & Assay Cost**

127 soil samples geochem for: Mo,Cu,Pb,Zn,Ag		
@ \$4.90/sample plus .65¢ sample preparation		\$704.85
183 soil samples geochem for: Mo,Cu,Pb,Zn,Ag		
plus Cd & Mn @ \$10.30/sample		\$1,884.90
71 soil samples geochem for: Mo,Cu,Zn,Pb,Ag		
As & Hg @ \$14.95/sample		\$1,061.45
8 bulk samples geochem for: Mo,Cu,Zn,Pb,		
Ag(Aux3) As,Hg & Sb @ \$23.05/sample		
plus \$10./sample preparation		\$264.40
30 rock samples geochem for: Mo,Cu,Zn,Pb,Cd		
Au,As,Mn,Hg & Sb @ \$21.15/sample plus		
sample preparation @ \$2.50/sample		<u>\$709.50</u>
		\$4,635.10

**Report Preparation - Personnel**

R. Pinsent	10 days @ \$260./day	\$2,600.
J. Thornton	5 days @ \$210./day	1,050.
A. Kemp (Draftman)	3 days @ \$175./day	525.
D. Dussault (Typist)	1 day @ \$150./day	150.

**Map Reproductions** \$ 300.

**Computer Time** 150. \$4,775.00

TOTAL \$ 30,105.10

=====

**8.0 Statement of Qualifications**

I, Robert H. Pinsent of 108-2080 Maple Street, Vancouver, British Columbia (V6J 4P9), do hereby certify that:

1. I am a geologist employed by Placer Development Ltd., of 1200 - 1055 Dunsmuir Street, Vancouver, British Columbia (V7X 1P1).
  
2. I am a geology graduate of the following Universities:  
  
Aberdeen University, B.Sc., Hon., (1968)  
  
University of Alberta, M.Sc. (1971)  
  
Durham University, PhD. (1975)
  
3. I have been engaged in the practice of geology since graduation in 1968.
  
4. I have supervised and carried out the fieldwork, and interpreted the data from the exploration programme on the Noble Claim Group (Latitude 51° 38', Longitude 119° 48') in the Kamloops Mining District.

Respectfully submitted,



R.H. Pinsent

## APPENDICES

- Appendix I      Soil Geochemical Data: Noble Grid
- Appendix II     Soil Geochemical Data: McCorvie Grid
- Appendix III    Soil Geochemical Data: McCorvie Road Section
- Appendix IV     Bulk Sediment Geochemical Data: Peavine Creek

GEOCHEMICAL DATA LISTING: Mount McClennan soil grid, Noble Claims, 82m12w

DATE: 84-03-22

PDL lab data file: P3067  
 AREA: NOBLE CLAIMS  
 MAPSHEET NO: 82M-12W  
 VENTURE: 188  
 GEOLOGIST: R. PINSENT  
 LAB PROJECT NO: 3067

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. PINSENT I. THOMSON S. TENNANT  
 R. SHKLANKA B. HODGSON

PDL lab data file: P3174  
 AREA: NOBLE CLAIMS  
 MAPSHEET NO: 82M12W  
 VENTURE: 188B  
 GEOLOGIST: R. PINSENT  
 LAB PROJECT NO: 3174

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. PINSENT S. TENNANT B. HODGSON  
 I. THOMSON R. SHKLANKA

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:  
 ALL RESULTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW  
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.  
 SAMPLE NUMBERS FOLLOWED BY \* ARE DUPLICATE ANALYSES.

MO	UNITS	WT. G	ATTACK USED	TIME	RANGE	METHOD
CU	PPM	0.5	C HCL04/HN03	4HRS	1-1000	ATOMIC ABSORPTION
ZN	PPM	0.5	C HCL04/HN03	4HRS	2-4000	ATOMIC ABSORPTION
PB	PPM	0.5	C HCL04/HN03	4HRS	2-3000	ATOMIC ABSORPTION
CD	PPM	0.5	C HCL04/HN03	4HRS	2-3000	A.A. BACKGROUND COR.
NI	PPM	0.5	C HCL04/HN03	4HRS	0.2-200	A.A. BACKGROUND COR.
CO	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
AG2	PPM	0.5	C HCL04/HN03	4HRS	0.2-20	A.A. BACKGROUND COR.
AU	PPM	10.0	AQUA REGIA	2HRS	0.02-4.00	A.A. SOLVENT EXTRACT
U	PPM	0.25	DIL HN03	3HRS	0.02-4.00	A.A. SOLVENT EXTRACT.
V	PPM	0.5	C HF/HCL04/HN03/HCL	2HRS	1-1000	FLOURIMETRY SOLV. EX.
W	PPM	1.0	C HF/HN03/HCL/H2SO4	6HRS	5-1000	ATOMIC ABSORPTION
F	PPM	0.25	NA2CO3/KNO3 FUSION	4HRS	5-500	A.A. SOLVENT EXTRACT.
AS	PPM	0.5	C HCL04/HN03	30MIN	40-4000	SPECIFIC ION ELECTODE
SB	PPM	0.5	C HCL04/HN03	4HRS	2-1000	A.A. BACKGROUND COR.
BI	PPM	0.5	C HCL04/HN03	4HRS	2-1000	A.A. BACKGROUND COR.
MN	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
FE	X	0.5	C HF/HCL04/HN03/HCL	4HRS	2-3000	ATOMIC ABSORPTION
HG	PPB	0.5	DIL HN03	6HRS	0.02-20X	ATOMIC ABSORPTION
BA	X	0.25	C HF/HI/OXALIC	2HRS	5-2000PPB	A.A. COLD VAPOR GEN.
NA	X	0.5	C HF/HCL04/HN03/HCL	4HRS	0.02-20X	ATOMIC ABSORPTION
K	X	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2 -20X	ATOMIC ABSORPTION
CA	X	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2 -20X	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HCL04/HN03/HCL	6HRS	0.02-20X	ATOMIC ABSORPTION
MG	X	0.5	C HF/HCL04/HN03/HCL	6HRS	10-2000	ATOMIC ABSORPTION
SN	PPM	1.0	NH4I FUSION	6HRS	0.2-20X	ATOMIC ABSORPTION
LOT	%	1.0	ASH 600 DEG C	15MIN	5-500	A.A. SOLVENT EXTRACT.
				2HRS	0.02-99X	WEIGH RESDUE



GRID	SAMPLE	PROJECT	MO	CU	ZN	PB	CD	AG	MN
22	55	30	1	37	150	33			
22	55	30	2	28	147	23			
22	55	30	3	27	142	23			
22	55	30	4	15	111	23			
22	55	30	5	15	103	23			
22	55	30	6	14	120	23			
22	55	30	7	10	182	23			
22	55	30	8	17	186	23			
22	55	30	9	17	193	23			
22	55	30	10	17	181	23			
22	55	30	11	10	122	23			
22	55	30	12	14	122	23			
22	55	30	13	14	138	23			
22	55	30	14	10	134	23			
22	55	30	15	10	146	23			
22	55	30	16	10	133	23			
22	55	30	17	10	144	23			
22	55	30	18	10	137	23			
22	55	30	19	11	125	23			
22	55	30	20	11	149	23			
22	55	30	21	11	173	23			
22	55	30	22	11	173	23			
22	55	30	23	11	190	23			
22	55	30	24	11	190	23			
22	55	30	25	11	180	23			
22	55	30	26	11	180	23			
22	55	30	27	11	180	23			
22	55	30	28	11	180	23			
22	55	30	29	11	180	23			
22	55	30	30	11	180	23			
22	55	30	31	11	180	23			
22	55	30	32	11	180	23			
22	55	30	33	11	180	23			
22	55	30	34	11	180	23			
22	55	30	35	11	180	23			
22	55	30	36	11	180	23			
22	55	30	37	11	180	23			
22	55	30	38	11	180	23			
22	55	30	39	11	180	23			
22	55	30	40	11	180	23			
22	55	30	41	11	180	23			
22	55	30	42	11	180	23			
22	55	30	43	11	180	23			
22	55	30	44	11	180	23			
22	55	30	45	11	180	23			
22	55	30	46	11	180	23			
22	55	30	47	11	180	23			
22	55	30	48	11	180	23			
22	55	30	49	11	180	23			
22	55	30	50	11	180	23			
22	55	30	51	11	180	23			
22	55	30	52	11	180	23			
22	55	30	53	11	180	23			
22	55	30	54	11	180	23			
22	55	30	55	11	180	23			
22	55	30	56	11	180	23			
22	55	30	57	11	180	23			
22	55	30	58	11	180	23			
22	55	30	59	11	180	23			
22	55	30	60	11	180	23			
22	55	30	61	11	180	23			
22	55	30	62	11	180	23			
22	55	30	63	11	180	23			
22	55	30	64	11	180	23			
22	55	30	65	11	180	23			
22	55	30	66	11	180	23			
22	55	30	67	11	180	23			
22	55	30	68	11	180	23			
22	55	30	69	11	180	23			
22	55	30	70	11	180	23			
22	55	30	71	11	180	23			
22	55	30	72	11	180	23			
22	55	30	73	11	180	23			
22	55	30	74	11	180	23			
22	55	30	75	11	180	23			
22	55	30	76	11	180	23			
22	55	30	77	11	180	23			
22	55	30	78	11	180	23			
22	55	30	79	11	180	23			
22	55	30	80	11	180	23			
22	55	30	81	11	180	23			
22	55	30	82	11	180	23			
22	55	30	83	11	180	23			
22	55	30	84	11	180	23			
22	55	30	85	11	180	23			
22	55	30	86	11	180	23			
22	55	30	87	11	180	23			
22	55	30	88	11	180	23			
22	55	30	89	11	180	23			
22	55	30	90	11	180	23			
22	55	30	91	11	180	23			
22	55	30	92	11	180	23			
22	55	30	93	11	180	23			
22	55	30	94	11	180	23			
22	55	30	95	11	180	23			
22	55	30	96	11	180	23			
22	55	30	97	11	180	23			
22	55	30	98	11	180	23			
22	55	30	99	11	180	23			
22	55	30	100	11	180	23			









GRID	SAMPLE	PROJECT	MO	CU	ZN	PB	CD	AG	MN
2222	9+50N	3174	1	19	113	21	AAA	AAA	200
2222	10+75N	3174	1	19	88	11	AAA	AAA	300
2222	10+00CN	3174	1	18	88	13	AAA	AAA	140
2222	10+25N	3174	2	16	88	13	AAA	AAA	129
2222	10+50N	3174	2	16	55	13	AAA	AAA	204
2222	10+75N	3174	1	22	73	15	AAA	AAA	250
2222	11+00CN	3174	1	22	92	15	AAA	AAA	230
2222	11+25N	3174	1	25	127	20	AAA	AAA	420
2222	11+50N	3174	1	25	127	20	AAA	AAA	330
2222	11+75N	3174	1	25	97	13	AAA	AAA	117
2222	12+00CN	3174	1	18	165	13	AAA	AAA	380
2222	12+25N	3174	3	18	100	22	AAA	AAA	200
2222	12+50N	3174	1	18	111	22	AAA	AAA	280
2222	12+75N	3174	1	18	111	22	AAA	AAA	200
2222	13+00CN	3174	1	18	111	22	AAA	AAA	260
2222	13+15N	3174	1	18	111	22	AAA	AAA	200
2222	13+30N	3174	1	18	111	22	AAA	AAA	200
2222	13+45N	3174	1	18	111	22	AAA	AAA	200
2222	13+60N	3174	1	18	111	22	AAA	AAA	200
2222	13+75N	3174	1	18	111	22	AAA	AAA	200
2222	13+90N	3174	1	18	111	22	AAA	AAA	200
2222	14+00CN	3174	1	16	73	17	AAA	AAA	200
2222	14+15N	3174	1	16	91	18	AAA	AAA	200
2222	14+30N	3174	1	16	90	18	AAA	AAA	200
2222	14+45N	3174	1	16	90	18	AAA	AAA	200
2222	14+60N	3174	1	16	90	18	AAA	AAA	200
2222	14+75N	3174	1	16	90	18	AAA	AAA	200
2222	14+90N	3174	1	16	90	18	AAA	AAA	200
2222	15+00CN	3174	1	14	70	20	AAA	AAA	200
2222	15+15N	3174	1	14	70	20	AAA	AAA	200
2222	15+30N	3174	1	14	70	20	AAA	AAA	200
2222	15+45N	3174	1	14	70	20	AAA	AAA	200
2222	15+60N	3174	1	14	70	20	AAA	AAA	200
2222	15+75N	3174	1	14	70	20	AAA	AAA	200
2222	15+90N	3174	1	14	70	20	AAA	AAA	200
2222	16+00CN	3174	1	14	70	20	AAA	AAA	200
2222	16+15N	3174	1	14	70	20	AAA	AAA	200
2222	16+30N	3174	1	14	70	20	AAA	AAA	200
2222	16+45N	3174	1	14	70	20	AAA	AAA	200
2222	16+60N	3174	1	14	70	20	AAA	AAA	200
2222	16+75N	3174	1	14	70	20	AAA	AAA	200
2222	16+90N	3174	1	14	70	20	AAA	AAA	200
test	STD	3174	13	99	74	110	AAA	AAA	127
test	STD	3174	15	99	80	109	AAA	AAA	135
test	STD	3174	16	99	77	112	AAA	AAA	133
test	STD	3174	16	99	77	112	AAA	AAA	133
test	STD	3174	13	99	77	109	AAA	AAA	133
test	STD	3174	14	97	74	108	AAA	AAA	133
test	STD	3174	14	97	74	108	AAA	AAA	133
test	STD	3174	13	99	74	112	AAA	AAA	133
test	STD	3174	14	99	74	112	AAA	AAA	133

PDL lab data file: P3071-1  
 AREA: REXSPAR  
 MAPSHEET NO: 82M-12W  
 VENTURE: 188  
 GEOLOGIST: R. PINSENT  
 LAB PROJECT NO: 3071

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. PINSENT I. THOMSON S. TENNANT  
 R. SHKLANKA B. HODGSON

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:  
 ALL RESLTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW  
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.  
 SAMPLE NUMBERS FOLLOWED BY \* ARE DUPLICATE ANALYSES.

NO	UNITS	WT. G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	C.5	C HClO4/HNO3	4HRS	1-100C	ATOMIC ABSORPTION
CU	PPM	C.5	C HClO4/HNO3	4HRS	2-400C	ATOMIC ABSORPTION
ZN	PPM	C.5	C HClO4/HNO3	4HRS	2-300C	ATOMIC ABSORPTION
PB	PPM	C.5	C HClO4/HNO3	4HRS	2-300C	A.A. BACKGROUND COR.
CD	PPM	C.5	C HClO4/HNO3	4HRS	0.2-20C	A.A. BACKGROUND COR.
NI	PPM	C.5	C HClO4/HNO3	4HRS	2-200C	ATOMIC ABSORPTION
CO	PPM	C.5	C HClO4/HNO3	4HRS	2-200C	ATOMIC ABSORPTION
AG1	PPM	C.5	C HClO4/HNO3	4HRS	0.2-20C	A.A. BACKGROUND COR
AG2	PPM	C.5	C HNO3	2HRS	0.02-4.0C	A.A. SOLVENT EXTRACT
AU	PPM	10.0	AQUA REGIA	3HRS	0.02-4.0C	A.A. SOLVENT EXTRACT.
U	PPM	C.25	DIL HNO3	2HRS	1.0-100C	FLOURIMETRY SOLV. EX.
V	PPM	C.5	C HF/HClO4/HNO3/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	1.0	C HF/HNO3/HCL/H2SO4	4HRS	5-50C	A.A. SOLVENT EXTRACT.
F	PPM	0.25	NA2CO3/KNO3 FUSION	30MIN	40-400C	SPECIFIC ION ELECTRODE
AS	PPM	C.5	C HClO4/HNO3	4HRS	2-100C	A.A. BACKGROUND COR.
SB	PPM	C.5	C HClO4/HNO3	4HRS	2-100C	A.A. BACKGROUND COR.
BI	PPM	C.5	C HClO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
MN	PPM	C.5	C HClO4/HNO3	4HRS	2-300C	ATOMIC ABSORPTION
FE	%	C.5	C HF/HClO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	C.5	DIL HNO3	2HRS	5-200C/PPB	A.A. COLD VAPOR GEN.
BA	%	0.25	C HF/HI/OXALIC	4HRS	0.02-20%	ATOMIC ABSORPTION
NA	%	C.5	C HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	C.5	C HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	C.5	C HF/HClO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	C.5	C HF/HClO4/HNO3/HCL	6HRS	10-200C	ATOMIC ABSORPTION
MG	%	C.5	C HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
SN	PPM	1.0	NH4I FUSION	15MIN	5-500	A.A. SOLVENT EXTRACT.
LOI	%	1.0	ASH 600 DEG C	2HRS	0.02-99%	WEIGH RESIDUE



GRID	SAMPLE	PROJECT	MO	CU	ZN	PB	AG	AU	AS	HG
8+00	4+00	CE	1	15	64	8				42
10+00	5+00	CE	<1	13	220	1				9
10+00	0+50	CE	1	13	97	1				13
10+00	1+00	CE	1	15	151	1				25
10+00	1+00	CE*	1	15	79	1				10
10+00	1+50	CE*	1	10	30	1				9
10+00	2+00	CE	2	26	115	2				21
10+00	2+50	CE	2	14	100	4				21
10+00	3+00	CE	<<	15	122	1				20
10+00	4+00	CE	1	18	88	1				23
10+00	4+50	CE	1	22	77	1				7
10+00	5+00	CE*	1	13	36	1				9
test	STD	G	1	9	77	1				
test	STD	G	1	9	74	1				
test	STD	G	1	9	75	1				
test	STD	G	1	9	78	1				
test	STD	FG								176
test	STD	HG								176
test	STD	HG								189
test	STD	FE								182
test	STD	AU						1.54		
test	STD	AU						1.90		
test	STD	AL						1.32		
test	STD	AL						1.55		

END OF LISTING - 87 RECORDS PRINTED  
 GCLIST RUN AT: 09:11:03

PLACER DEVELOPMENT LTD (RESEARCH CENTRE)

GEOCHEMICAL DATA LISTING: Soil Samples on road section, McCorvie Grid Area,

DATE: 84-03-26

PDL Lab data file: P3176-1  
 AREA: NOBLE CLAIMS  
 MAPSHEET NO: 82M12W  
 VENTURE: 188B  
 GEOLOGIST: R. PINSENT  
 LAB PROJECT NO: 3176

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. PINSENT S. TENNANT B. HODGSON  
 I. THOMSON R. SHKLANKA

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:  
 ALL RESULTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW  
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.  
 SAMPLE NUMBERS FOLLOWED BY \* ARE DUPLICATE ANALYSES.

MO	UNITS	WT G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	1-100C	ATOMIC ABSORPTION
CU	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-400C	ATOMIC ABSORPTION
ZN	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-300C	ATOMIC ABSORPTION
PB	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-300C	A.A. BACKGROUND COR.
CD	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	0.2-20C	A.A. BACKGROUND COR.
NI	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-2000C	ATOMIC ABSORPTION
CO	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-2000C	ATOMIC ABSORPTION
AG1	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	0.2-20C	A.A. BACKGROUND COR
AG2	PPM	0.5	C HNO <sub>3</sub>	2HRS	0.02-4.0C	A.A. SOLVENT EXTRACT
AU	PPM	10.0	AQUA REGIA	3HRS	0.02-4.0C	A.A. SOLVENT EXTRACT.
U	PPM	0.25	DIL HNO <sub>3</sub>	2HRS	1.0-100C	FLUORIMETRY SOLV. EX.
V	PPM	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	5-100C	ATOMIC ABSORPTION
W	PPM	1.0	C HF/HNO <sub>3</sub> /HCL/H <sub>2</sub> SO <sub>4</sub>	4HRS	5-50C	A.A. SOLVENT EXTRACT.
F	PPM	0.25	NA <sub>2</sub> CO <sub>3</sub> /KNO <sub>3</sub> FUSION	30MIN	40-400C	SPECIFIC ION ELECTRODE
AS	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-1000C	A.A. BACKGROUND COR.
SB	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-100C	A.A. BACKGROUND COR.
BI	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-300C	ATOMIC ABSORPTION
MN	PPM	0.5	C HClO <sub>4</sub> /HNO <sub>3</sub>	4HRS	2-300C	ATOMIC ABSORPTION
FE	%	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	0.5	DIL HNO <sub>3</sub>	2HRS	5-2000PPB	A.A. COLD VAPOR GEN.
BA	%	0.25	C HF/HI/OXALIC	4HRS	0.02-20%	ATOMIC ABSORPTION
NA	%	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	10-200C	ATOMIC ABSORPTION
MG	%	0.5	C HF/HClO <sub>4</sub> /HNO <sub>3</sub> /HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
SN	PPM	1.0	NH <sub>4</sub> I FUSION	15MIN	5-500	A.A. SOLVENT EXTRACT.
LOI	%	1.0	ASH 600 DEG C	2HRS	0.02-99%	WEIGH RESIDUE

PLASTER GEOTHERM ASSAY SYSTEM: DATA FROM SOLE SAMPLES ON ROAD SECTION, MCCURTIE GFTD AREA, NOBLE C/DATE: 04-71

GRID	SAMPLE	PROJECT	MO	CU	ZN	PB	AG	AU	AS	MN	HG
0808	MC22C1	3176	<1	20	66	8	<C	<C	<2	202	9
0808	MC22C2	3176	<1	13	64	12	<C	<C	<2	173	
0808	MC22C3	3176	<1	14	64	12	<C	<C	<2	212	13
0808	MC22C4	3176	<1	6	65	10	<C	<C	<2	216	14
0808	MC22C5	3176	<1	23	62	13	<C	<C	<2	240	18
0808	MC22C6	3176	<1	36	54	11	<C	<C	<2	490	12
0808	MC22C7	3176	<1	46	77	21	<C	<C	<2	3100	10
0808	MC22C8	3176	<1	11	70	15	<C	<C	<2	2200	15
0808	MC22C9	3176	<1	9	98	22	<C	<C	<2	3200	22
0808	MC22C10	3176	<1	10	96	19	<C	<C	<2	370	17
0808	MC22C11	3176	<1	14	68	16	<C	<C	<2	3300	12
0808	MC22C12	3176	<1	9	210	23	<C	<C	<2	2500	15
0808	MC22C13	3176	<1	43	96	55	<C	<C	<2	2500	23
0808	MC22C14	3176	<1	14	110	18	<C	<C	<2	2900	19
0808	MC22C15	3176	<1	10	70	10	<C	<C	<2	2200	12
0808	MC22C16	3176	<1	14	59	11	<C	<C	<2	183	19
0808	MC22C17	3176	<1	18	141	10	<C	<C	<2	300	19
test	STD G	3176	15	9888	76	105	<C	<C	74	135	
test	STD G	3176	14	9888	75	110	<C	<C	66	135	
test	STD AL	3176						1.60			
test	STD AU	3176						1.63			
test	STD HG	3176									157
test	STD FE	3176									159

END OF LISTING - 24 RECORDS PRINTED  
 GCLIST RUN AT: 09:13:47



GEOCHEMICAL DATA LISTING: Bulk Samples, Peavine Creek, Noble 5 Claim 82m12w

DATE: 84-03-26

PDL lab data file: P3178-1  
 AREA: NOBLE CLAIMS  
 MAPSHEET NO: 82M12W  
 VENTURE: 188B  
 GEOLOGIST: R. PINSENT  
 LAB PROJECT NO: 3178

REMARKS: PLEASE DISTRIBUTE RESULTS TO: R. PINSENT S. TENNANT B. HODGSON  
 I. THCMSCN R. SHKLANKA

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:  
 ALL RESULTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW  
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.  
 SAMPLE NUMBERS FOLLOWED BY \* ARE DUPLICATE ANALYSES.

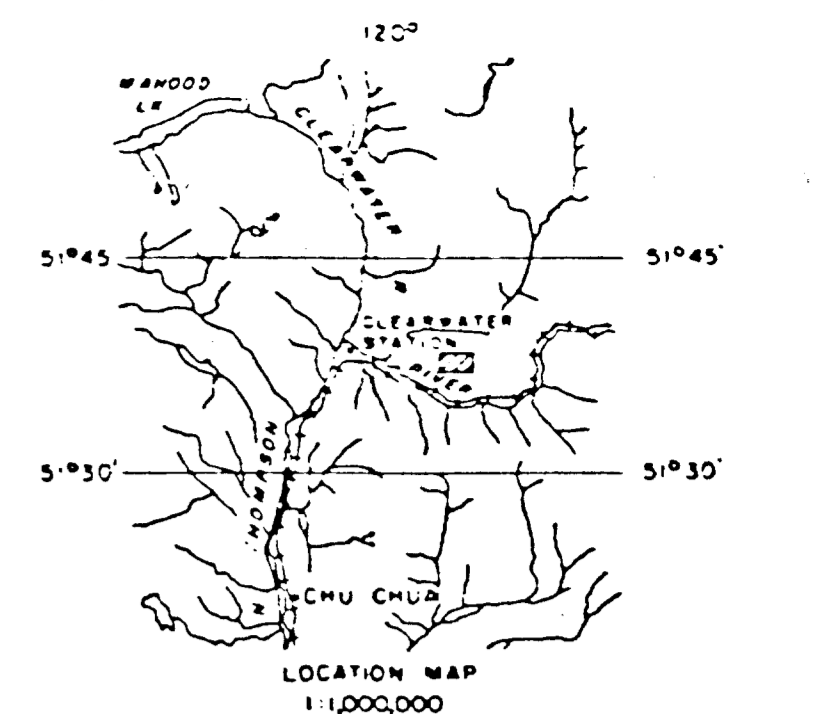
MO	UNITS	WT.G	ATTACK	USED	TIME	RANGE	METHOD
MO	PPM	C.5	C	HClO4/HNO3	4HRS	1-1000	ATOMIC ABSORPTION
CU	PPM	C.5	C	HClO4/HNO3	4HRS	2-4000	ATOMIC ABSORPTION
ZN	PPM	C.5	C	HClO4/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
PB	PPM	C.5	C	HClO4/HNO3	4HRS	2-3000	A.A. BACKGROUND COR.
CD	PPM	C.5	C	HClO4/HNO3	4HRS	0.2-200	A.A. BACKGROUND COR.
NI	PPM	C.5	C	HClO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
CO	PPM	C.5	C	HClO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	C.5	C	HClO4/HNO3	4HRS	0.2-20	A.A. BACKGROUND COR
AG2	PPM	C.5	C	HNO3	2HRS	0.02-4.00	A.A. SOLVENT EXTRACT
AU	PPM	10.0	AQUA REGIA		3HRS	0.02-4.00	A.A. SOLVENT EXTRACT.
U	PPM	0.25	DIL	HNO3	2HRS	1.0-1000	FLOURIMETRY SOLV. EX.
V	PPM	C.5	C	HF/HClO4/HNO3/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	1.0	C	HF/HNO3/HCL/H2SO4	4HRS	5-500	A.A. SOLVENT EXTRACT.
F	PPM	C.25	NA2CO3/KNO3	FUSION	30MIN	40-4000	SPECIFIC ION ELECTRODE
AS	PPM	C.5	C	HClO4/HNO3	4HRS	2-1000	A.A. BACKGROUND COR.
SB	PPM	C.5	C	HClO4/HNO3	4HRS	2-1000	A.A. BACKGROUND COR.
BI	PPM	C.5	C	HClO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
MN	PPM	C.5	C	HClO4/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
FE	%	C.5	C	HF/HClO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	C.5	DIL	HNO3	2HRS	5-2000PPB	A.A. COLD VAPOR GEN.
BA	%	C.25	C	HF/HI/OXALIC	4HRS	0.02-20%	ATOMIC ABSORPTION
NA	%	C.5	C	HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	C.5	C	HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	C.5	C	HF/HClO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	C.5	C	HF/HClO4/HNO3/HCL	6HRS	10-2000	ATOMIC ABSORPTION
MG	%	C.5	C	HF/HClO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
SN	PPM	1.0	NH4I	FUSION	15MIN	5-500	A.A. SOLVENT EXTRACT.
LOI	%	1.0	ASH	600 DEG C	2HRS	0.02-99%	WEIGH RESDUE

PLACER GEOCHEM ASSAY SYSTEM: DATA FROM Bulk Samples, Peavine Creek, Noble 5 Claim 82m12w

DATE: 84-(

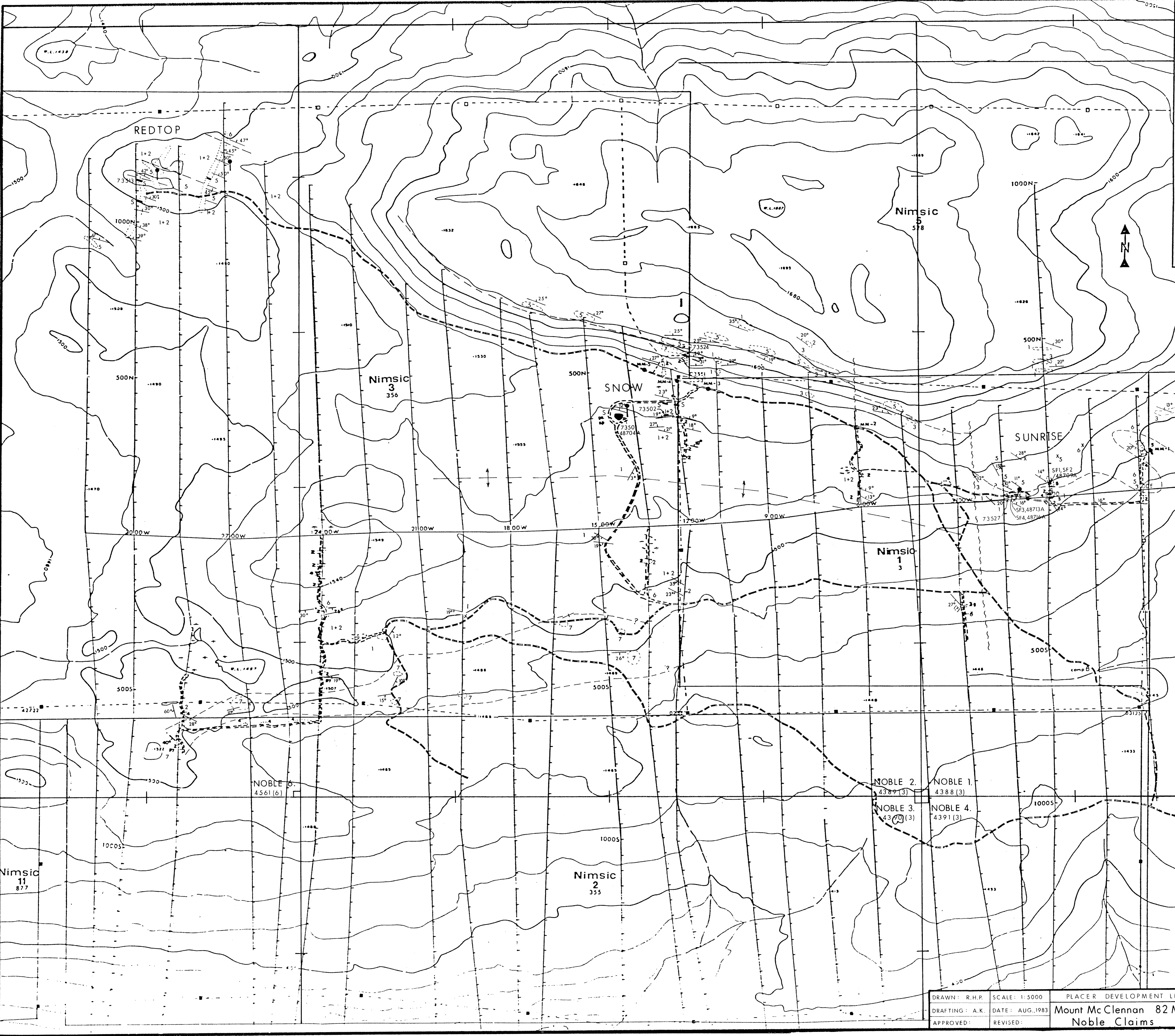
GRID	SAMPLE	PROJECT	MO	CU	ZN	PB	AG	AU	AS	HG	SB
82M12W	PV27CC	3178	1	58	166	65	0.2	0.07	200	38	<2
82M12W	PV27CC*	3178						0.13			
82M12W	PV27CC*	3178						0.22			
82M12W	PV29CC	3178	2	54	130	57	<0.2	<0.02	160	95	<2
82M12W	PV29CC*	3178						0.09			
82M12W	PV29CC*	3178						0.32			
82M12W	PV31CC	3178	2	55	129	72	<0.2	<0.02	180	68	<2
82M12W	PV31CC*	3178						0.03			
82M12W	PV31CC*	3178						0.04			
82M12W	PV33CC	3178	2	57	132	60	<0.2	<0.03	166	80	<2
82M12W	PV33CC*	3178						0.03			
82M12W	PV33CC*	3178						0.06			
82M12W	PV35CC	3178	2	57	140	74	<0.2	0.05	296	101	<2
82M12W	PV35CC*	3178						0.07			
82M12W	PV35CC*	3178						0.30			
82M12W	PV38CC	3178	1	36	86	22	<0.2	0.50	32	23	<2
82M12W	PV38CC*	3178						0.03			
82M12W	PV38CC*	3178						0.02			
82M12W	PV40CC	3178	1	43	90	15	<0.2	<0.02	<2	15	<2
82M12W	PV40CC*	3178						0.02			
82M12W	PV42CC	3178	1	24	70	16	<0.2	<0.02	<2	26	<2
82M12W	PV42CC*	3178						0.02			<2
82M12W	PV42CC*	3178						0.02			<2
82M12W	PV42CC*	3178	1	23	69	15	<0.2	<0.02	2		
test	STD E	3178	14	94	72	110	U.8		68		
test	STD AU	3178						1.43			
test	STD SB	3178									156
test	STD HG	3178								172	

END OF LISTING - 29 RECORDS PRINTED  
 GCLIST RUN AT: 09:07:56



**LEGEND**

- 5 Limestone
- 4 Andesite
- 3 Mafic tuff
- 2 Sulfides
- 1 Acid tuff
- Quartz Sericite schist
- 7 Calc-Silicate "skarn"
- 6 Argillite; locally graphitic
- Chip Sample Location - SF1, 48709A
- Road, all weather
- Road, four wheel drive
- Limit of timber
- Open swamp, meadow
- Claim Post, known
- Claim Post, assumed
- Drill Hole, drilled
- Drill hole proposed



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**12,080**

NOTE: Topography and soil grid location taken from Craigmont Mines Ltd. Assessment Report 6931.

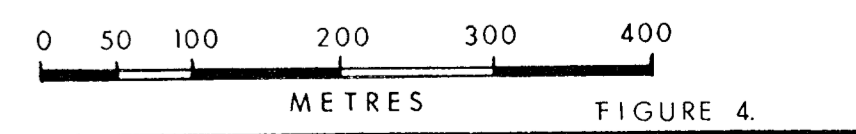
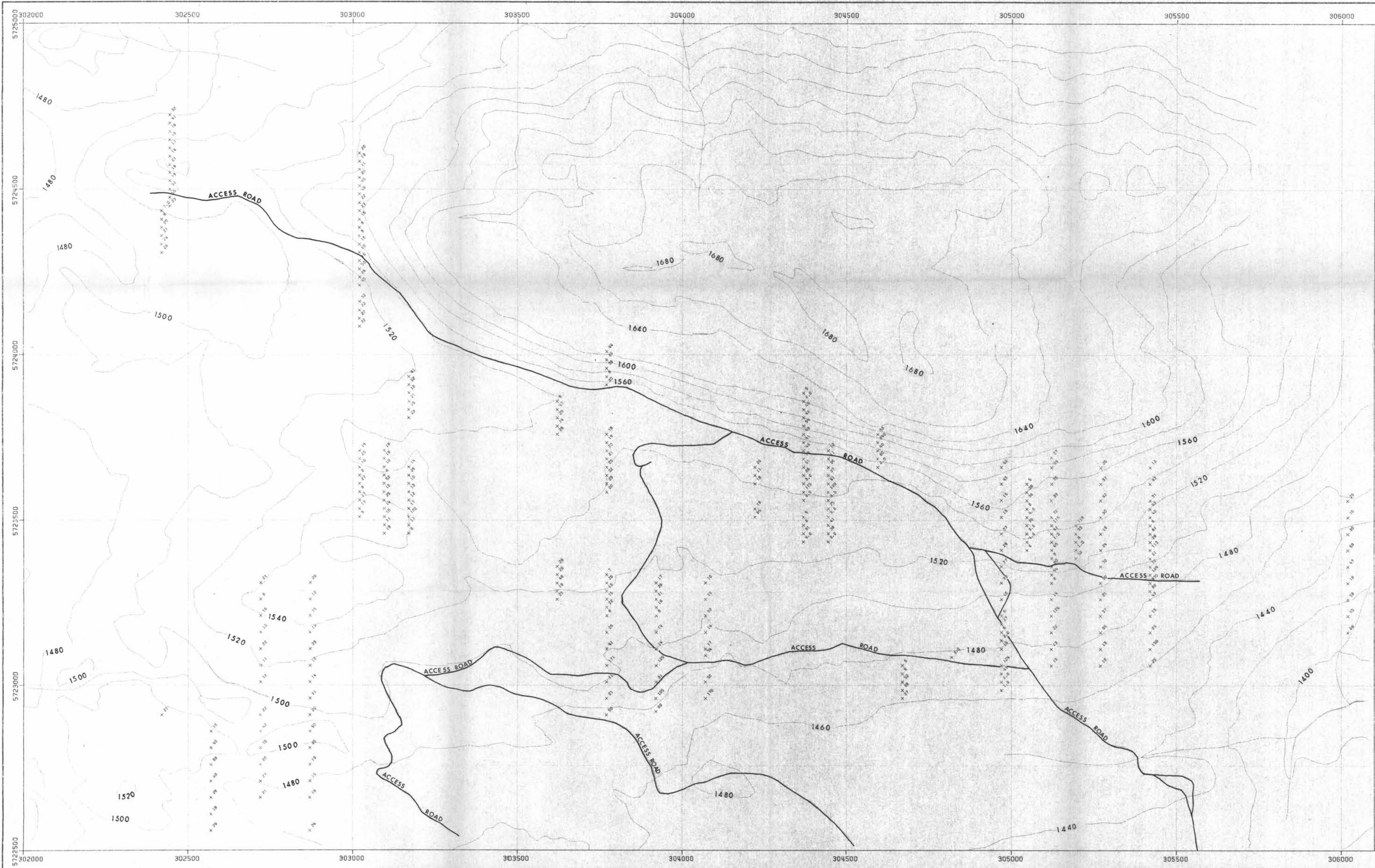


FIGURE 4.

DRAWN: R.H.P.	SCALE: 1:5000	PLACER DEVELOPMENT LIMITED	GEOLOGY
DRAFTING: A.K.	DATE: AUG. 1983	Mount Mc Clellan 82 M/12W	
APPROVED:	REVISED:	Noble Claims	
FILE REF. No.:			



NOBLE CLAIMS SOIL GEOCHEM (CU)  
GEOCHEMICAL DATA IN PPM

DATA PLOTTED ON THIS MAP:  
 FIELD FILE  
 X POINTS: CU EXPL\*V-188.GCH-S01/NOBLE  
 LINES: EXPL\*V-188B.TOPOG

DIRECTION OF NORTH AT CENTRE OF MAP  
**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**



**12,080**



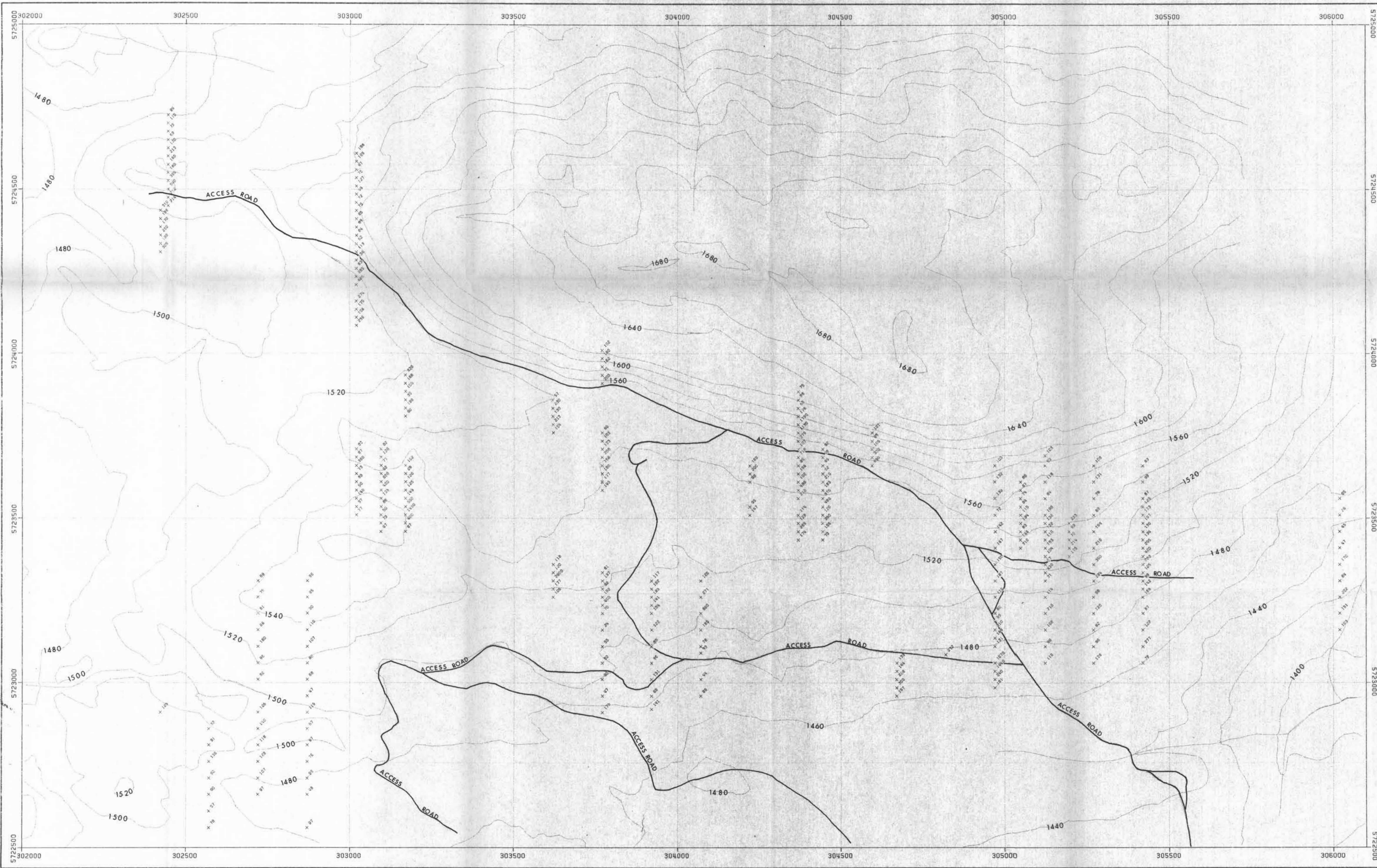
FIGURE 7

PLACER DEVELOPMENT LIMITED	
DRAWN AP	NOBLE CLAIMS SOIL GEOCHEM (CU)
DATE 04/03/19	
SCALE 1:5000	
NO.	

5725000  
5724500  
5724000  
5723500  
5723000  
5722500

302000 302500 303000 303500 304000 304500 305000 305500 306000

NOBLE CLAIM SOIL GEOCHEM (ZN)  
ANALYTICAL DATA IN PPM



DATA PLOTTED ON THIS MAP:  
 - FIELD FILE  
 x POINTS: ZN EXPLWV-188.GCH-S01/NOBLE  
 LINES: EXPLWV-188B.TOPOG

DIRECTION OF NORTH AT CENTRE OF MAP

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

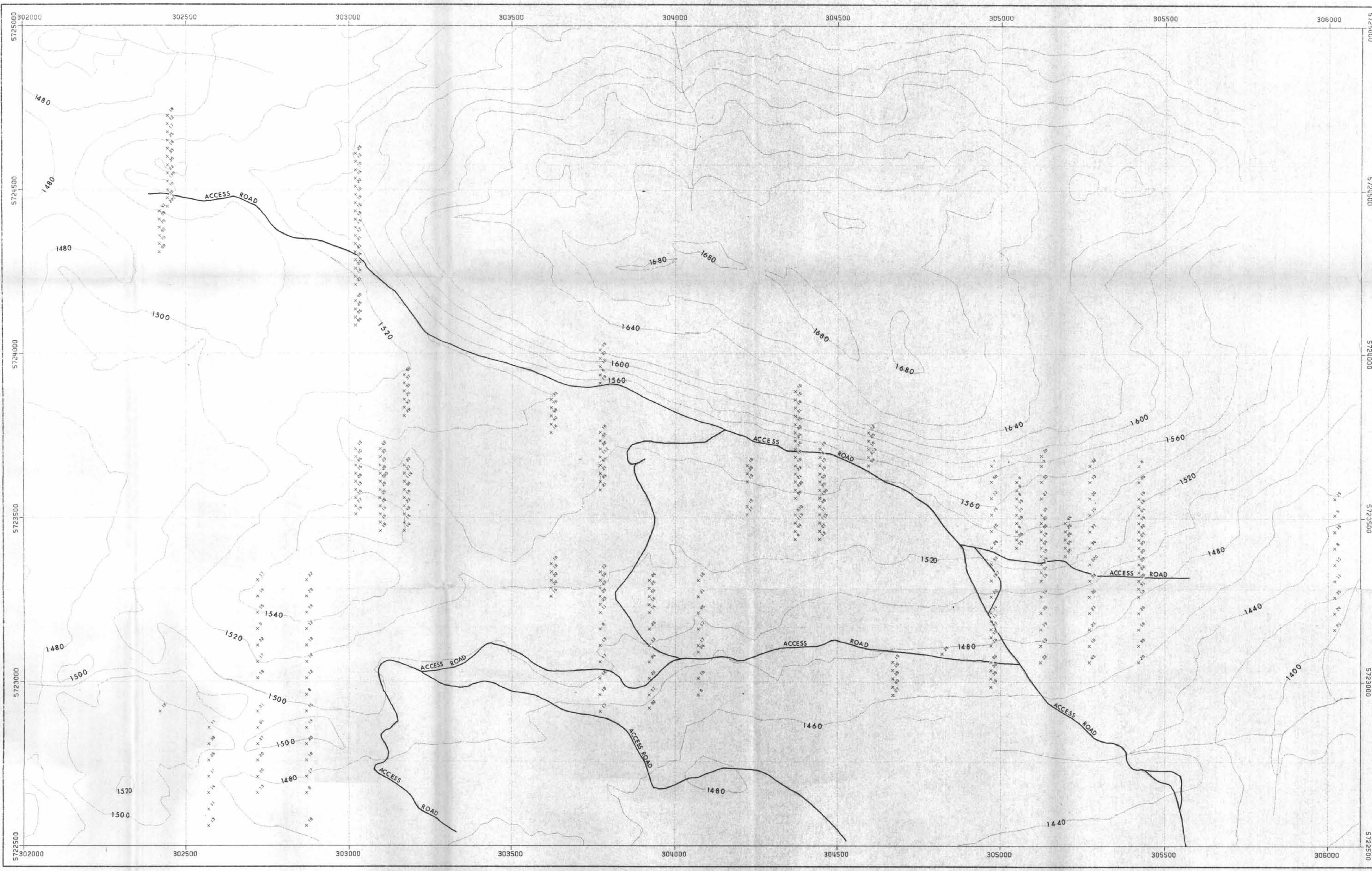
**12,080**



FIGURE 8.

DRAWN BWB		NOBLE CLAIM SOIL GEOCHEM (ZN)	
DATE 84/03/19			
SCALE 1:5000			
		NO.	

NOBLE CLAIM SOIL GEOCHEM (PB)  
ANALYTICAL DATA IN PPM



DATA PLOTTED ON THIS MAP:  
 FIELD FILE  
 \* POINTS: PB EXPLWV-188.GCH-S01/NOBLE  
 LINES: EXPLWV-188B.TOPOG

DIRECTION OF NORTH AT CENTRE OF MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,080

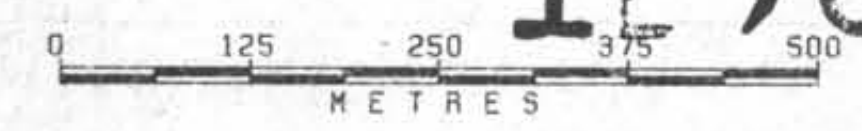
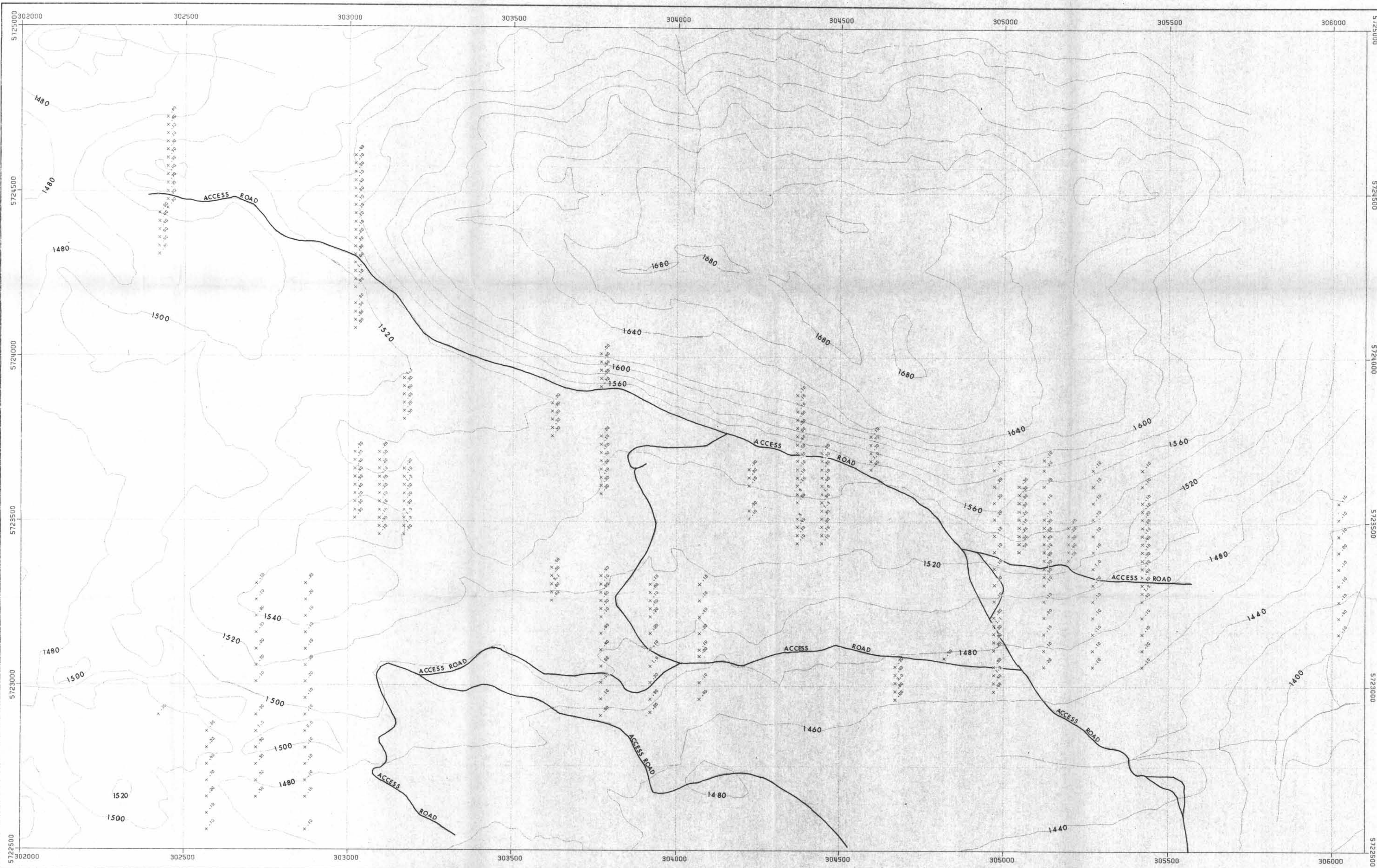


FIGURE 9.

DRAWN BMB		NOBLE CLAIM SOIL GEOCHEM (PB)	
DATE 84/03/19			
SCALE 1:5000			
		No.	

NOBLE CLAIM SOIL GEOCHEM (AG)  
ANALYTICAL DATA IN PPM



DATA PLOTTED ON THIS MAP:  
 FIELD FILE  
 X POINTS: AG EXPLV-188.GCH-S01/NOBLE  
 LINES: EXPLV-188B.TOPOG

DIRECTION OF NORTH AT CENTRE OF MAP

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,080**

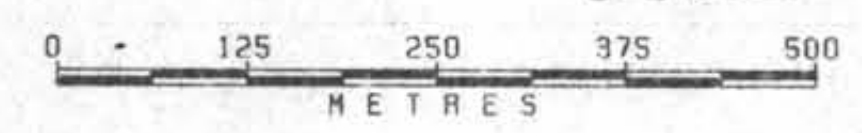
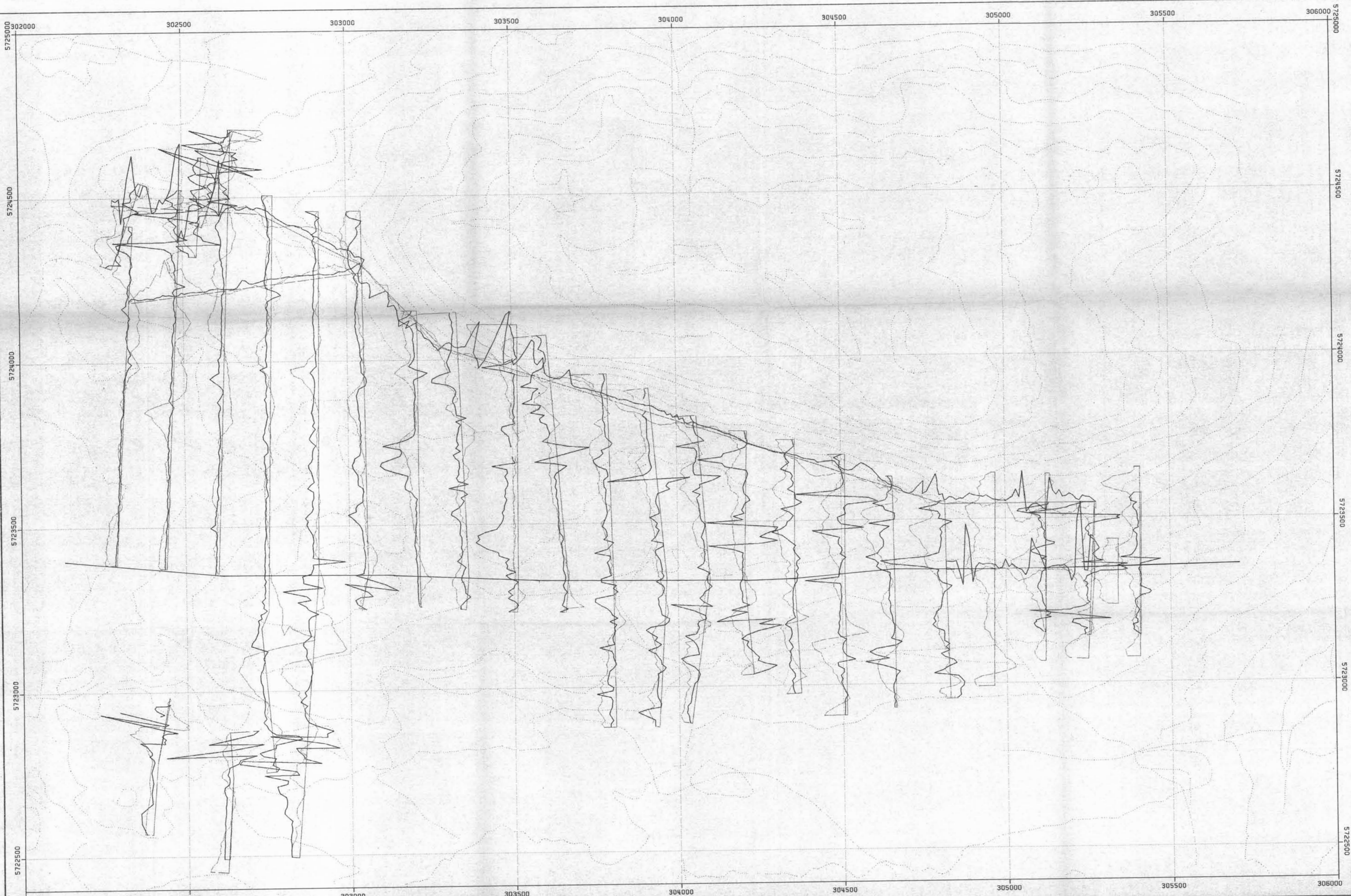


FIGURE 10.

DRAWN AP		NOBLE CLAIM SOIL GEOCHEM (AG)	
DATE 04/03/22			
SCALE 1:5000			
		NO.	

NOBLE CLAIMS GROUND GEOPHYSICS

MAGNETICS:  
DATA CUTOFFS - 7000, 10000



DATA PLOTTED ON THIS MAP:

FIELD	FILE
PROFILES: MAG	EXPL*V-188.NOBLE/MAG-UTH
SCALE:	500 UNITS / CM
BASE LEVEL:	8000
PROFILES: IP	EXPL*V-188.NOBLE/IP-UTH
SCALE:	20.0 UNITS / CM
BASE LEVEL:	0.0
LINES:	EXPL*V-188B.TOPOG

DIRECTION OF NORTH AT CENTRE OF MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,080

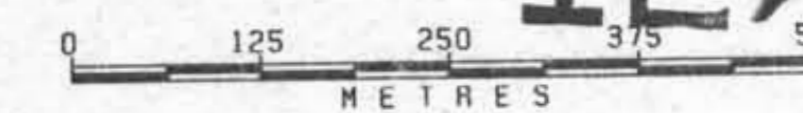


FIGURE 11.

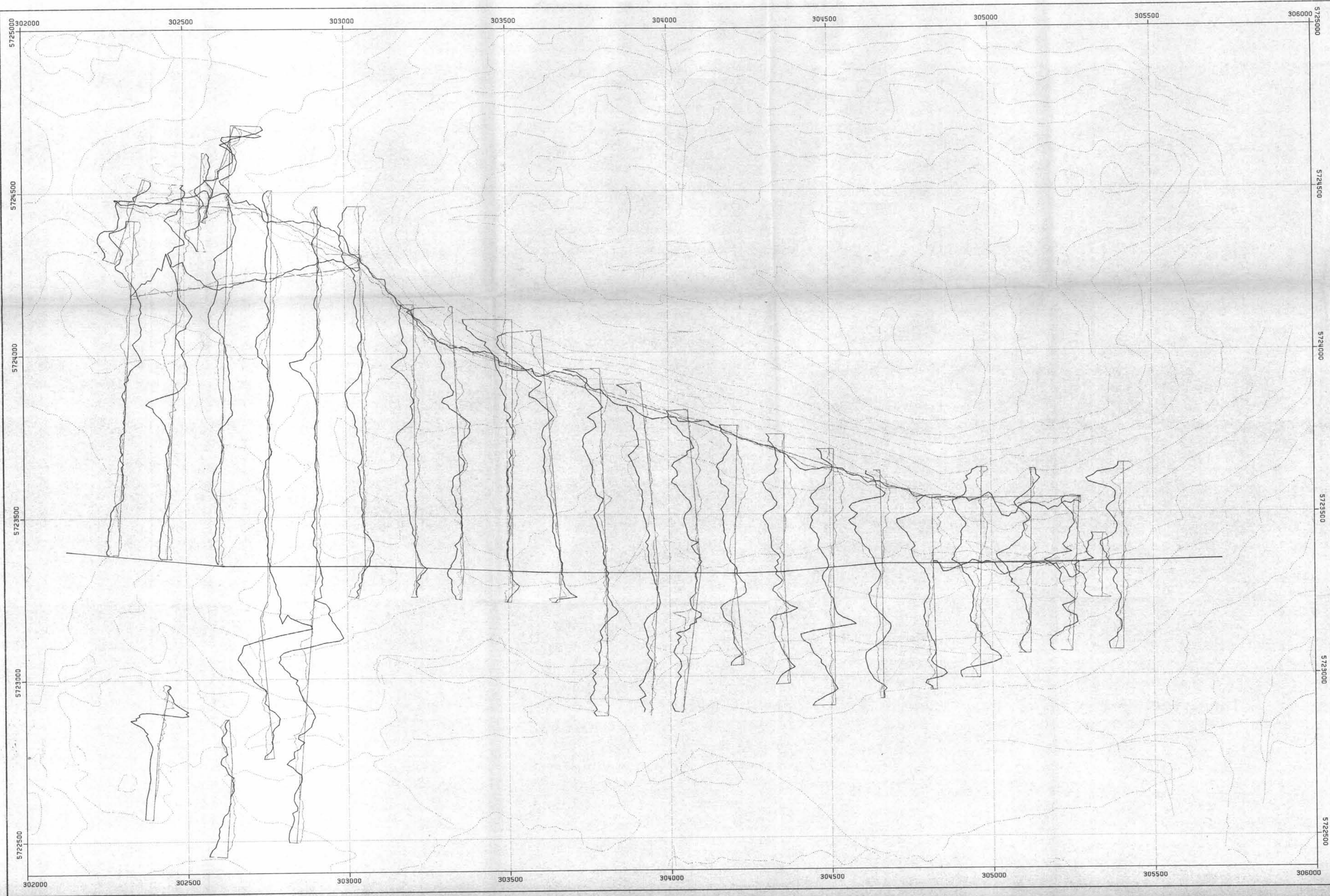
PLACER DEVELOPMENT LIMITED

DRAWN	JMT	NOBLE CLAIMS	GROUND GEOPHYSICS
DATE	84/03/29		
SCALE	1:5000		

No.



NOBLE CLAIMS GROUND GEOPHYSICS  
 VLF IN PHASE  
 QUADRATURE



DATA PLOTTED ON THIS MAP:  
 FIELD FILE  
 PROFILES: 1P EXPL\V-188.NOBLE\1P-UTM  
 SCALE: 20.0 UNITS / CM  
 BASE LEVEL: 0.0  
 PROFILES: QUAD EXPL\V-188.NOBLE\00-UTM  
 SCALE: 20.0 UNITS / CM  
 BASE LEVEL: 0.0  
 LINES: EXPL\V-188B.TPOG

DIRECTION OF NORTH AT CENTRE OF MAP

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

12,080

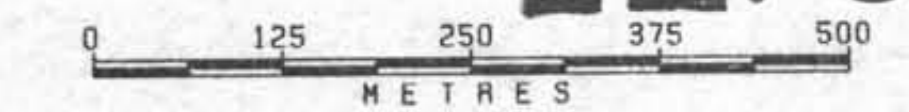
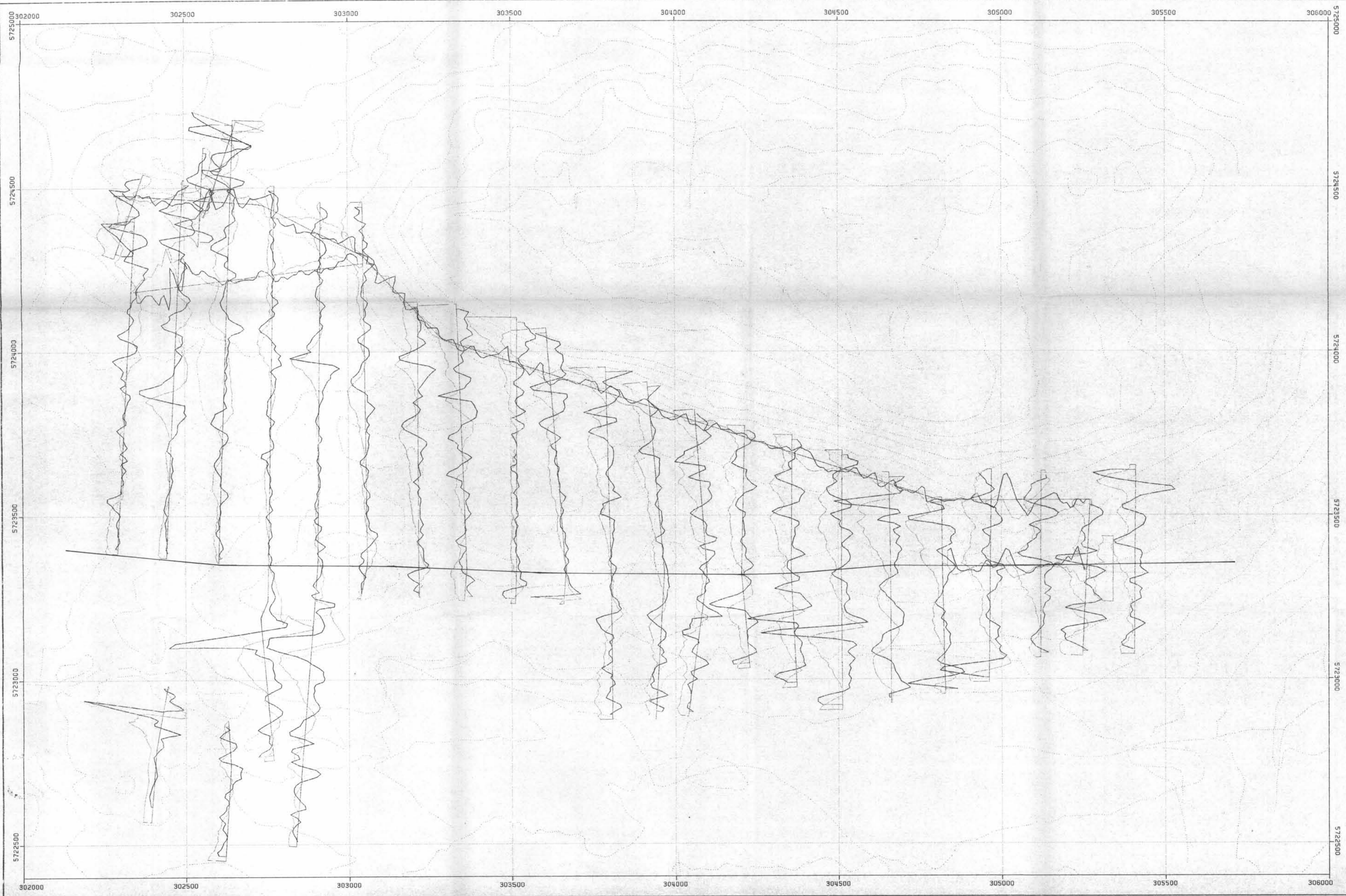


FIGURE 12.

PLACER DEVELOPMENT LIMITED	
DRAWN: BG	NOBLE CLAIMS: GROUND GEOPHYSICS
DATE: 84/03/29	
SCALE: 1:5000	
	NO.



DATA PLOTTED ON THIS MAP:

FIELD	FILE
PROFILES: FF	EXPL*V-188.NOBLE/FF-UTM
SCALE:	20.0 UNITS / CM
BASE LEVEL:	0.0
PROFILES: IP	EXPL*V-188.NOBLE/IP-UTM
SCALE:	20.0 UNITS / CM
BASE LEVEL:	0.0
LINES:	EXPL*V-188B.10POG

DIRECTION OF NORTH AT CENTRE OF MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,080

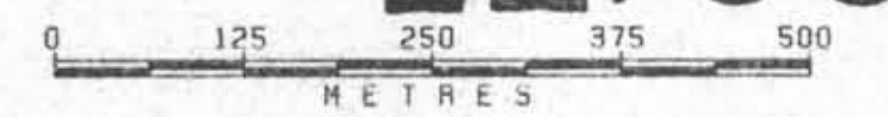


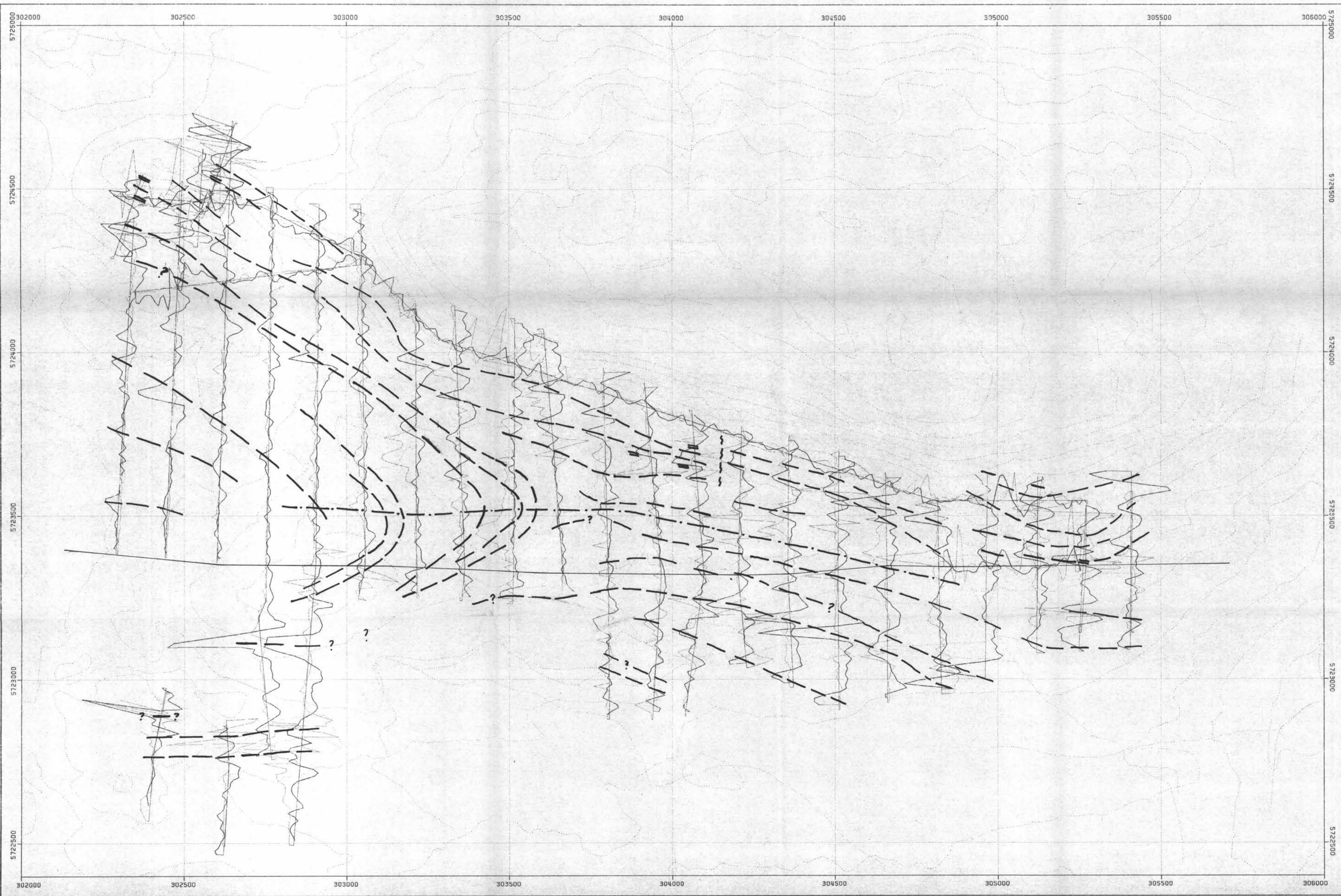
FIGURE 13

PLACER DEVELOPMENT LIMITED

DRAWN	JMT	NOBLE CLAIMS	GROUND GEOPHYSICS
DATE	84/03/30		
SCALE	1:5000		
		NO.	

NOBLE CLAIMS GROUND GEOPHYSICS

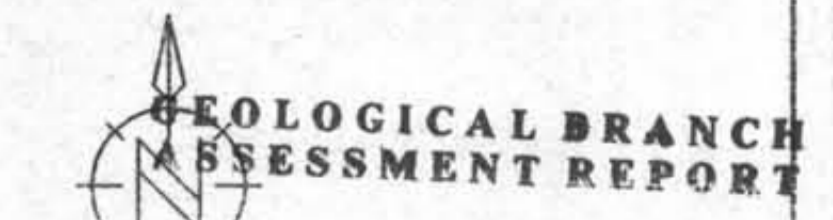
"FRASER FILTER" DATA   
 MAGNETIC DATA   
 SHOWINGS   
 CONDUCTORS 



DATA PLOTTED ON THIS MAP:

PROFILES:	FIELD	FILE
FF	EXPL#V-188.NOBLE/FF-UTM	
MAG	EXPL#V-188.NOBLE/MAG-UTM	
SCALE:	20.0 UNITS / CM	
BASE LEVEL:	0.0	
SCALE:	500 UNITS / CM	
BASE LEVEL:	8100	
LINES:	EXPL#V-188B.TPOG	

DIRECTION OF NORTH AT CENTRE OF MAP



**12,080**

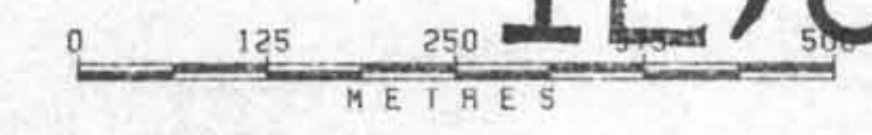
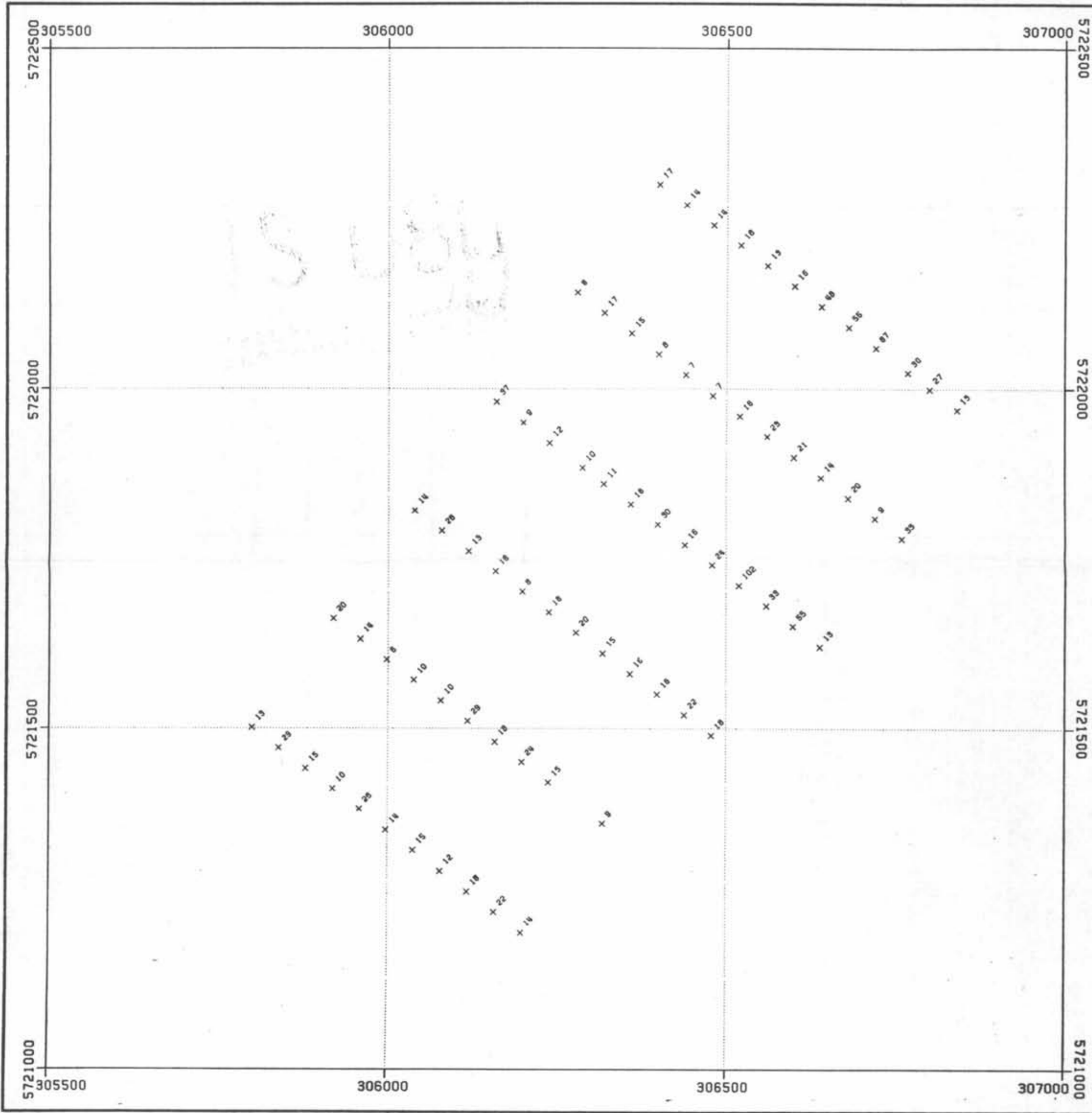


FIGURE 14.

DRAWN JMT		NOBLE CLAIMS GROUND GEOPHYSICS	
DATE 84/03/30		INTERPRETED CONDUCTORS	
SCALE 1:5000		No.	



DATA PLOTTED ON THIS MAP:  
 x POINTS: FIELD FILE  
 CU EXPL=MHP-MCC3.

DIRECTION OF NORTH AT CENTRE OF MAP

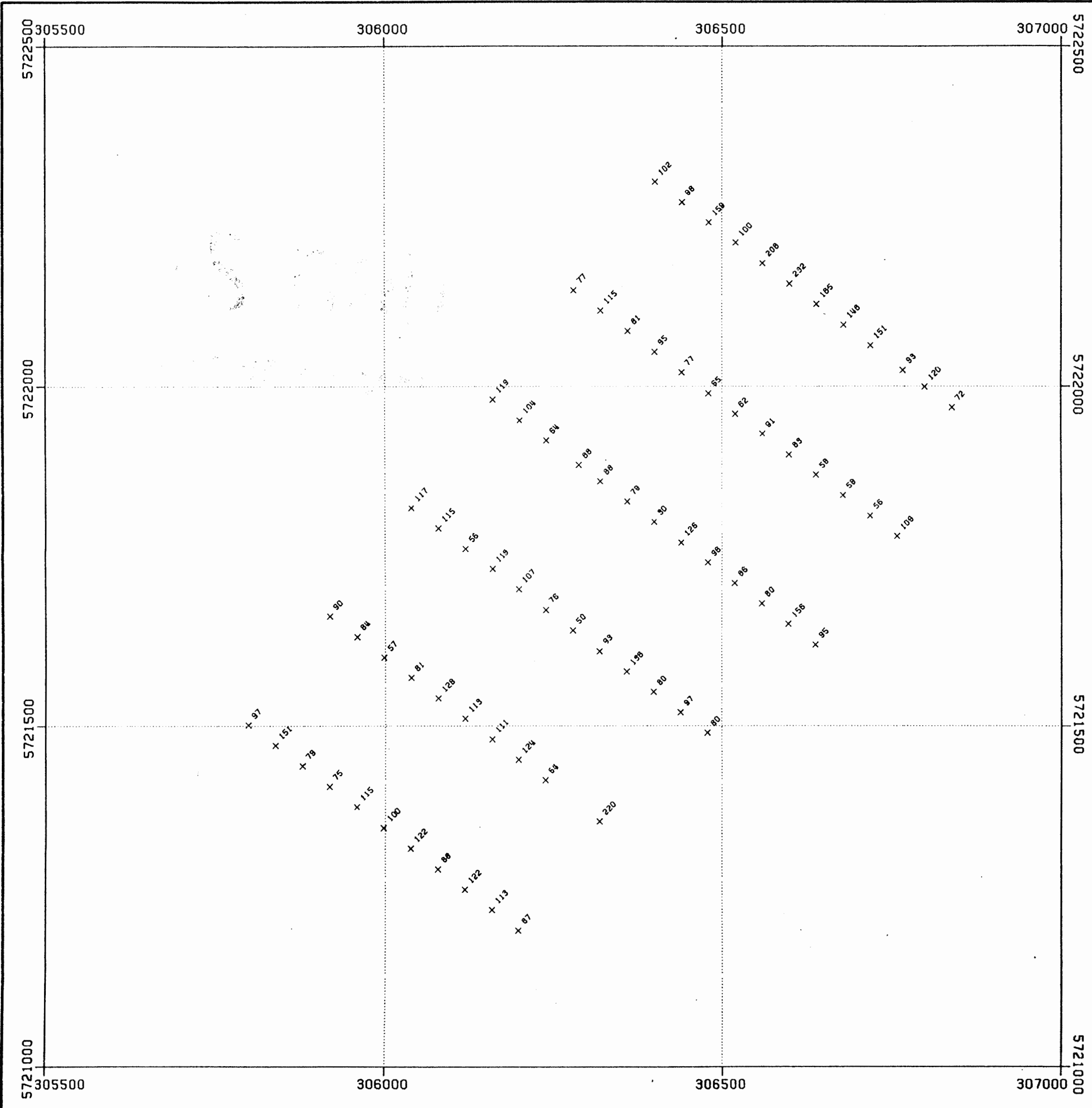


12,080



FIGURE 16.

DRAWN		PLK	PLACER DEVELOPMENT LIMITED NOBLE CLAIMS MCCORVIE GRID CU Cu - ppm
DATE		83/09/06	
SCALE		1:5000	
NO.			



DATA PLOTTED ON THIS MAP:  
 × POINTS: FIELD FILE  
 ZN EXPL×RHP-MCC3.

DIRECTION OF NORTH AT CENTRE OF MAP



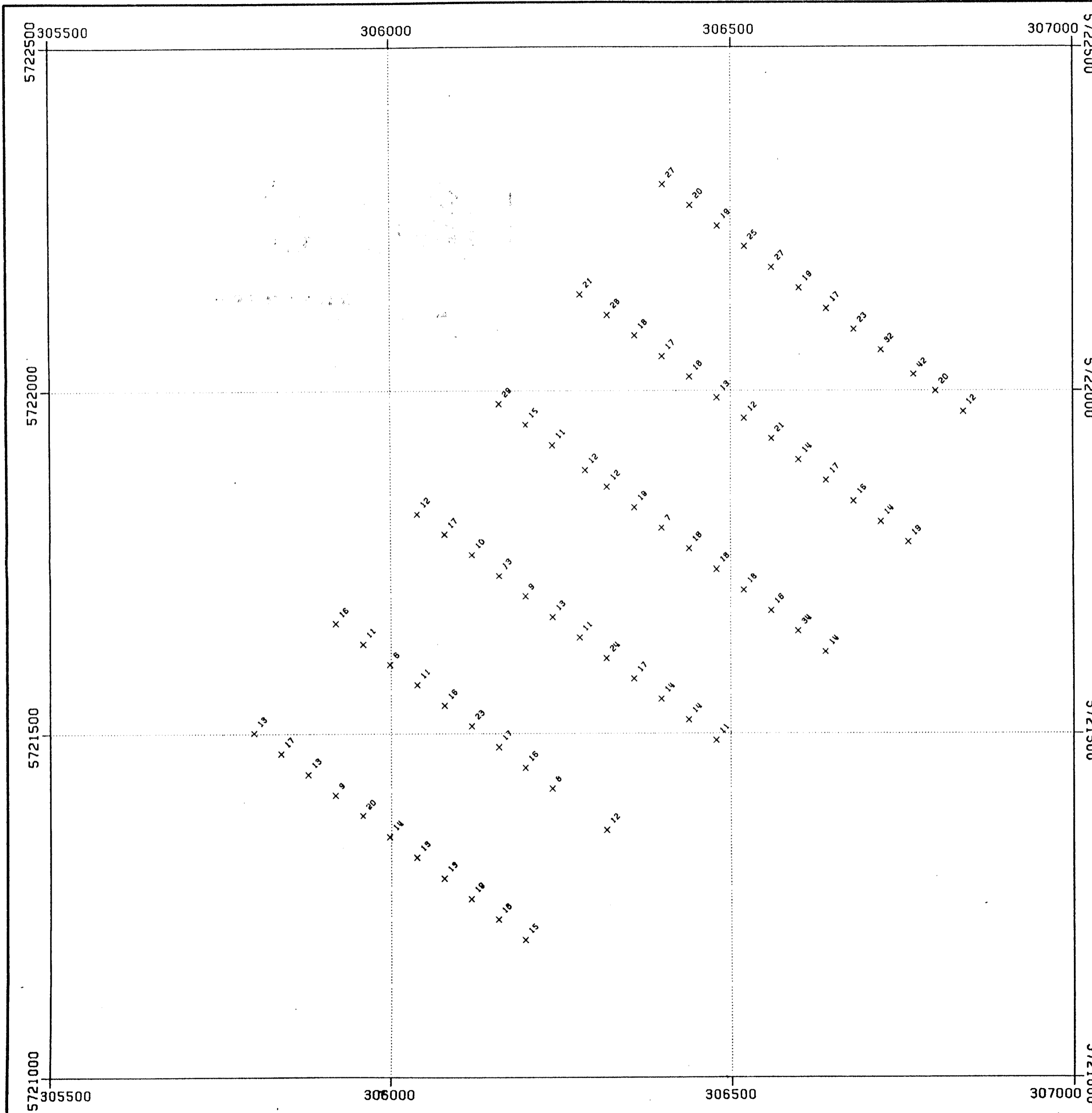
GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

12,080



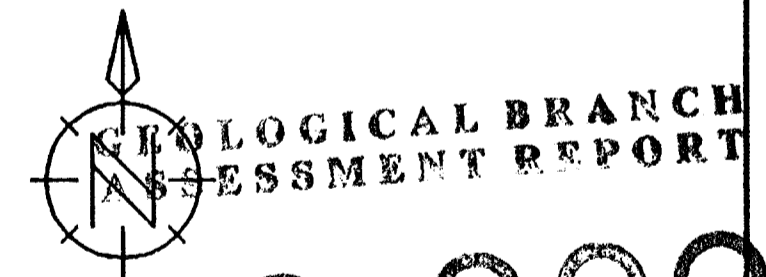
FIGURE 17.

DRAWN PLK		NOBLE CLAIMS MCCORVIE GRID ZN
DATE 83/09/06		
SCALE 1:5000		
		Zn - ppm
		NO.



DATA PLOTTED ON THIS MAP:  
 x POINTS: FIELD FILE  
 PB EXPLRHP-MCC3.

DIRECTION OF NORTH AT CENTRE OF MAP



12,080

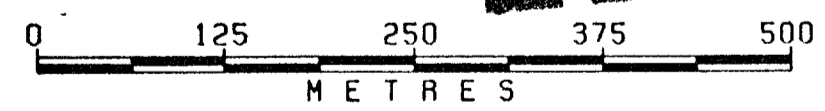
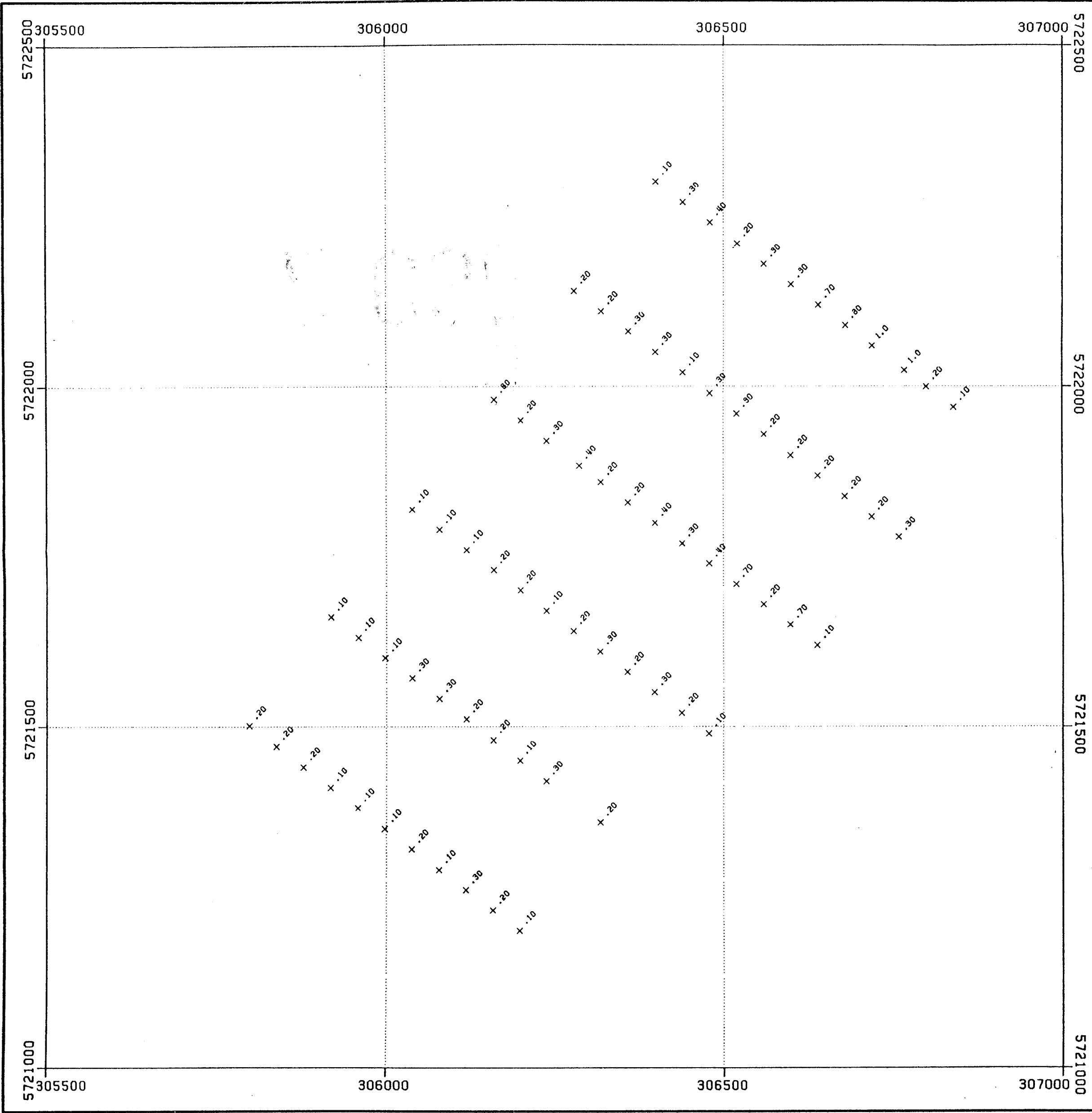


FIGURE 18.

DRAWN PLK		NOBLE CLAIMS MCCORVIE GRID PB
DATE 83/09/06		
SCALE 1:5000		
		Pb - ppm
		No.

PLACER DEVELOPMENT LIMITED



DATA PLOTTED ON THIS MAP:

FIELD FILE  
 x POINTS: AG EXPLRHP-MCC3.

DIRECTION OF NORTH AT CENTRE OF MAP



GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

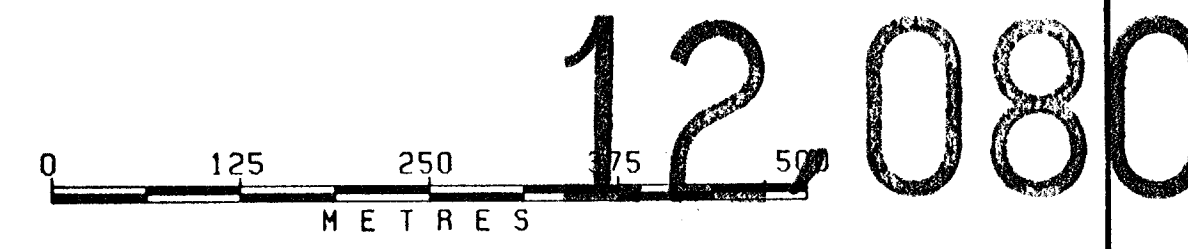
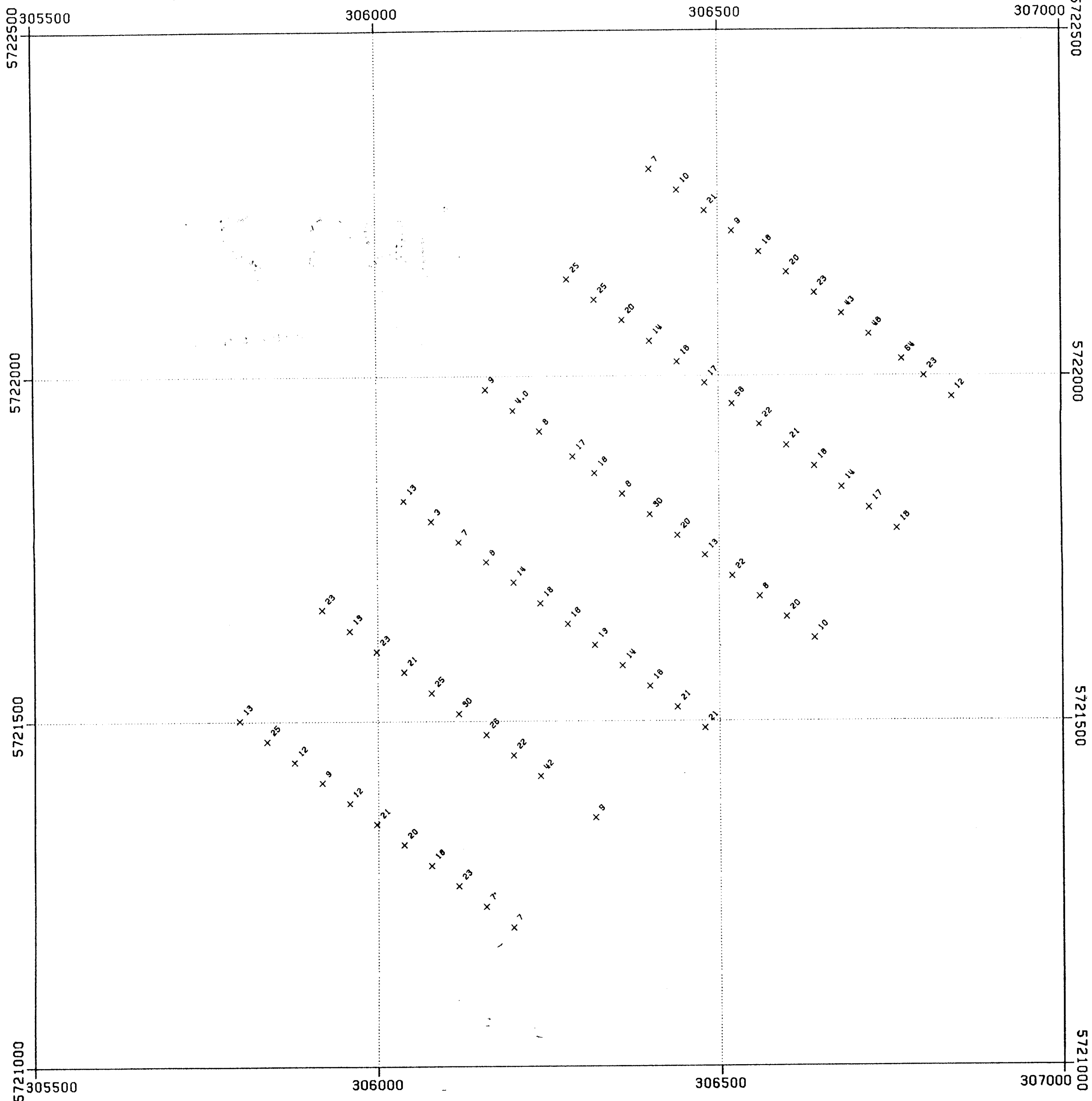


FIGURE 19.

DRAWN PLK		NOBLE CLAIMS MCCORVIE GRID AG
DATE 83/09/06		
SCALE 1:5000		
		Ag - ppm
		NO.



DATA PLOTTED ON THIS MAP:  
 × POINTS: FIELD FILE  
 HG EXPL×RHP-MCC3.

DIRECTION OF NORTH AT CENTRE OF MAP



GEOLOGICAL BRANC  
 ASSESSMENT REPOR

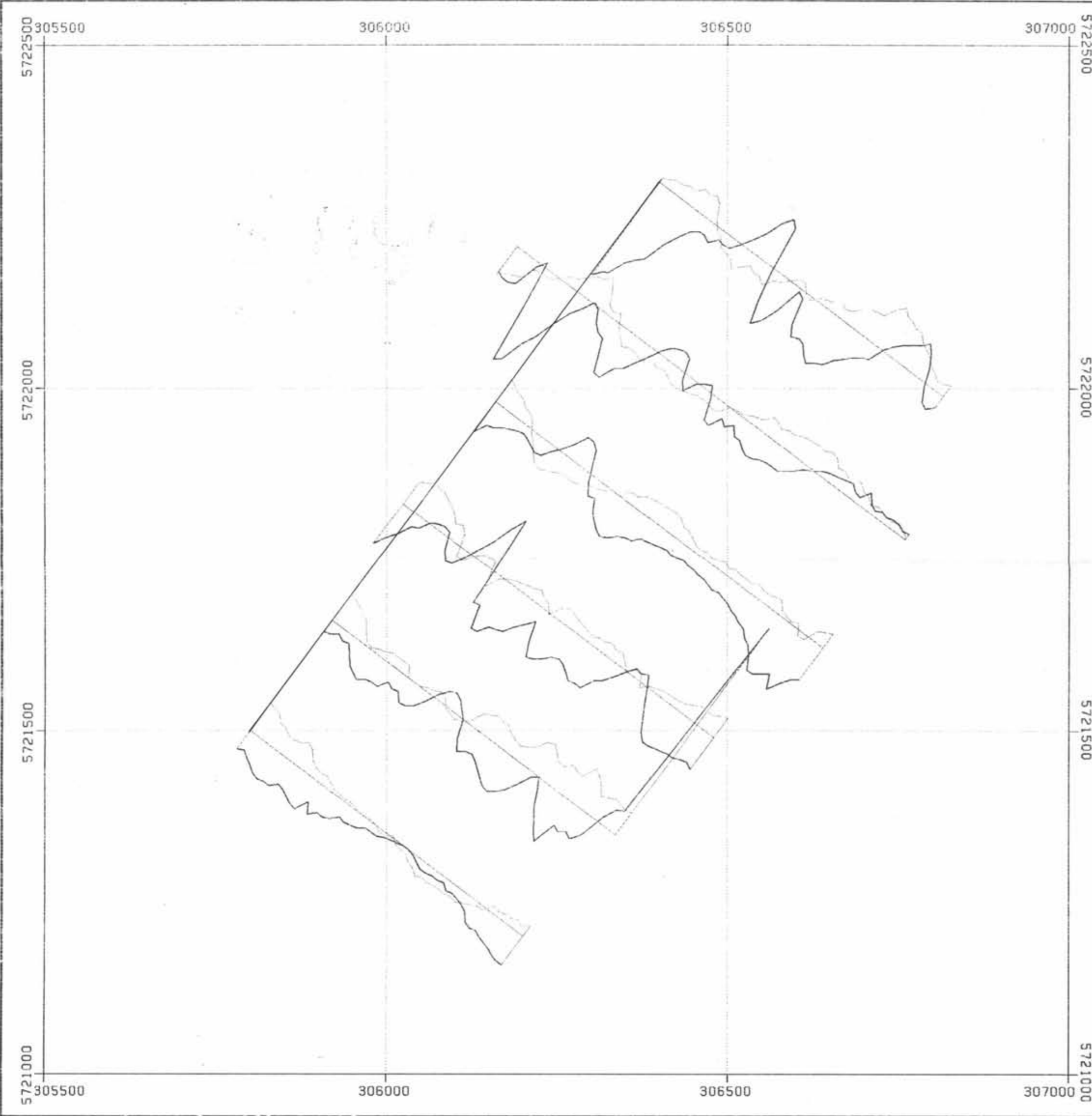
12,080



FIGURE 20.

DRAWN PLK		NOBLE CLAIMS MCCORVIE GRID HG
DATE 83/09/06		
SCALE 1:5000		
		Hg - ppb
		No.





MCORVIE GRID GROUND GEOPHYSICS

NOTE: IN PHASE - BOLD —

STATION: SEATTLE (NLK)

READINGS TAKEN FACING SE

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
PROFILES:	IP	EXPL*V-188.MCORVIE/IP-UTM
	SCALE:	20.0 UNITS / CM
	BASE LEVEL:	0.0
PROFILES:	QUAD	EXPL*V-188.MCORVIE/QD-UTM
	SCALE:	20.0 UNITS / CM
	BASE LEVEL:	0.0

DIRECTION OF NORTH AT CENTRE OF MAP

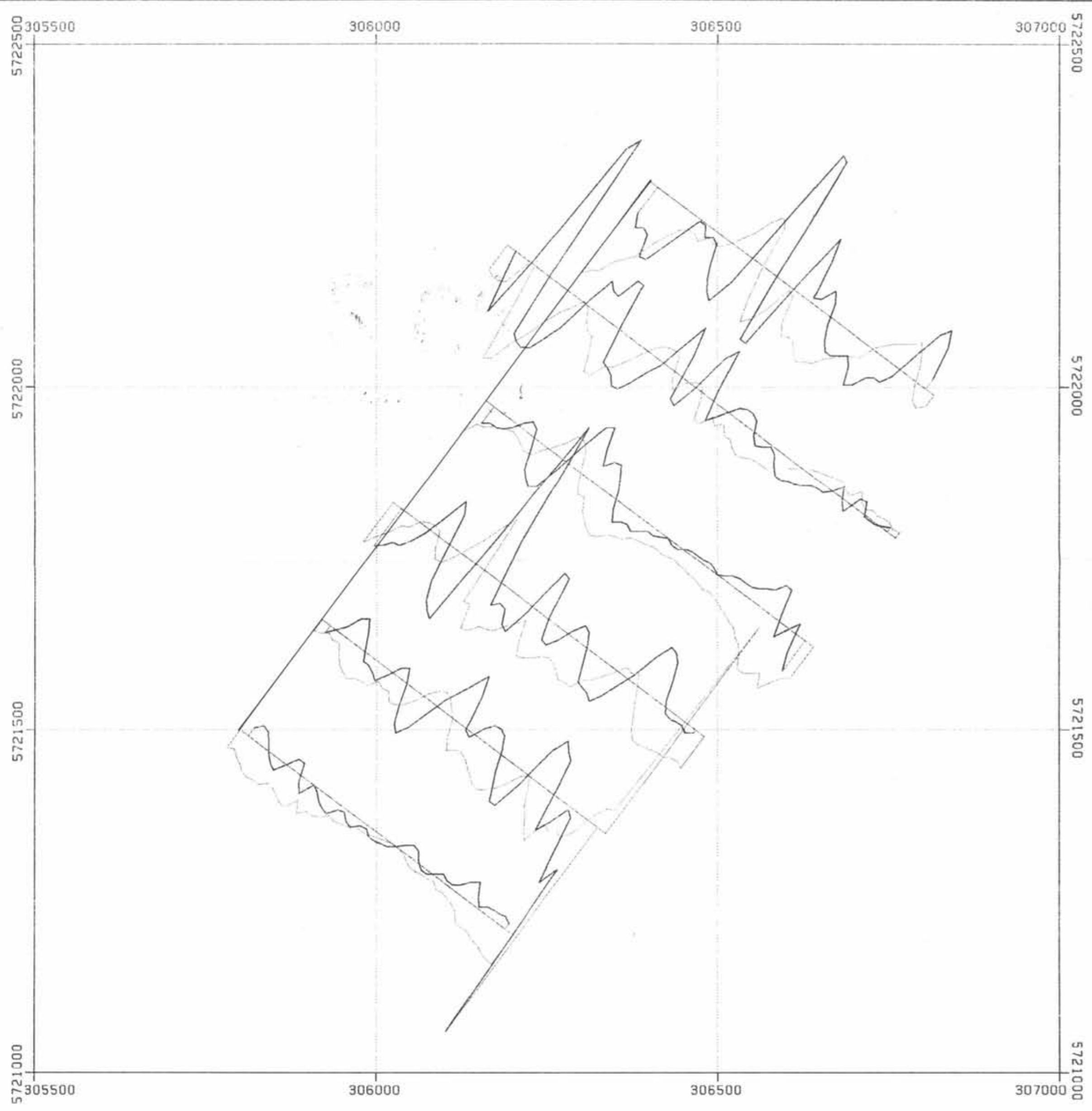
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

# 12,080



FIGURE 21

PLACER DEVELOPMENT LIMITED	
DRAWN JMT	MCORVIE GRID GROUND GEOPHYSICS
DATE 84/04/02	
SCALE 1:5000	
	NO.



MCORVIE GRID GROUND GEOPHYSICS

"FRASER FILTER" - BOLD —  
 IN PHASE - FINE —

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
PROFILES:	IP	EXPLWV-188.MCORVIE/IP-UTM
SCALE:		20.0 UNITS / CM
BASE LEVEL:		0.0
PROFILES:	FF	EXPLWV-188.MCORVIE/FF-UTM
SCALE:		20.0 UNITS / CM
BASE LEVEL:		0.0

DIRECTION OF NORTH AT CENTRE OF MAP



**12,080**

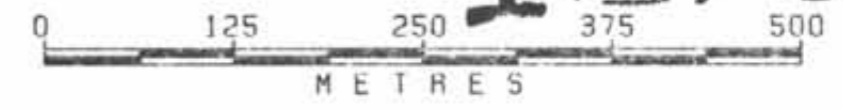
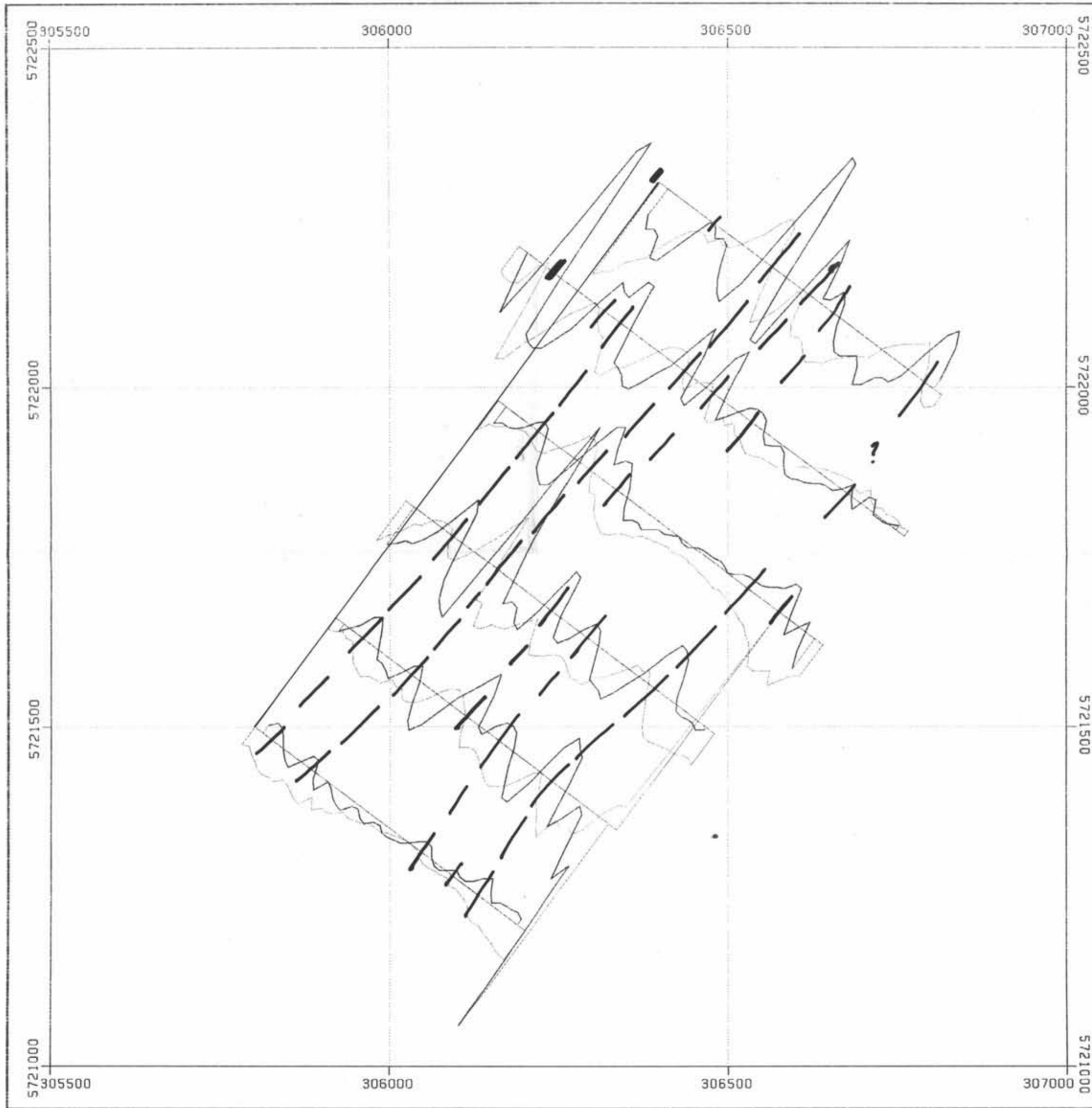


FIGURE 22.

DRAWN JMT		MCORVIE GRID GROUND GEOPHYSICS	
DATE 84/04/02			
SCALE 1:5000			
		NO.	



MCORVIE GRID GROUND GEOPHYSICS

"FRASER FILTER" - BOLD ———  
 IN PHASE - FINE - - - - -

INTERPRETATION  
 CONDUCTOR AXES ———

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
PROFILES: IP		EXPLWV-188.MCORVIE/IP-UTM
SCALE:		20.0 UNITS / CM
BASE LEVEL:		0.0
PROFILES: FF		EXPLWV-188.MCORVIE/FF-UTM
SCALE:		20.0 UNITS / CM
BASE LEVEL:		0.0

DIRECTION OF NORTH AT CENTRE OF MAP

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**12,080**



FIGURE 23

DRAWN		JMT		MCORVIE GRID		GROUND GEOPHYSICS	
DATE		84/04/02					
SCALE		1:5000					
				NO.			