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A GEOCHEMICAL GEOPHYSICAL AND TRENCHING  
REPORT ON THE

**WINDY 1-5 CLAIMS**

NTS 93J/13W

Lat. 54° 57'      Long. 123° 50' 49" 38"

Cariboo Mining Division

FILMED

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,597**

Owner (s): Richard Haslinger, A. Q. Halleran  
Operator: Placer Dome Inc.

S. Price

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## 1.0 INTRODUCTION

This report describes the trenching programme conducted by Placer Dome Inc. on the Windy property located on the Salmon River, 65 kms northeast of Fort St. James, B.C. During the period from September 15-20, 1987, five trenches were excavated, mapped and sampled to further explore the potential of the property for copper, gold and palladium mineralization. Also, during this period small biogeochemical and bulk soil sample surveys were performed. Geophysical and geochemical results from surveys done between September 1-6, 1987 will also be included in the report.

## 2.0 HISTORY

Little is known of the original prospecting activities in the area. Some old exploration pits have been noted on the property along Salmon River. Current interest in the property was started by Richard Haslinger of Fort St. James when he found small amounts of chalcopyrite with associated low gold and silver values on the north bank of Salmon River. In May, 1985, W. Pentland examined the property but rejected it with the suggestion that more prospecting be done.

Additional pits dug by R. Haslinger 200 meters north of the initial discovery, contained gold values of 3.51 g/t and palladium values of 0.50 g/t. Copper values were also higher in these pits.

In October, 1985, a small grid with 400 meter line intervals was sampled by Cassiar Mining Corporation (Brinco Mining Ltd.). The survey results indicated an area of anomalous gold and copper 800 meters northeast of the discovery pits. Pits dug in the area of the anomaly, by R. Haslinger, partially exposed a large but barren quartz vein. Gold has been repeatedly panned from overburden in these pits.

In June, 1986, the property was examined by R. Boyce. The conclusions reached were favourable resulting in the property being optioned by Placer in August 1986.

In September, 1986, an exploration programme was completed on the property by Placer. This programme involved the emplacement of a line grid, soil sampling, ground magnetometer, and VLF-EM surveys and mapping and sampling of outcrops and test pits. The result of this programme was the location of three geochemical anomalies: a broad elliptical Cu-Au-Pd anomaly in the southwest; a narrow elongate As-Au anomaly in the centre of the grid; and a broad Cu-As in the northern part of the grid. Recommendations from this programme included an Induced Polarization survey and the excavation of trenches across the anomalies.

In the period of September 1-6, 1987, 6.8 kms of reconnaissance IP was done on the southern and central anomalies as recommended. The results from the survey indicated a narrow, short north-south trending feature at the centre of the southwest Cu-Au-Pd anomaly and a longer, broader feature in the central As-Au anomaly also trending north-south.

Also at this time, an additional 2.5 kms of soil samples were collected at the north end of the grid to further delineate the Cu-As anomaly. Ten bulk soils were collected for size analysis. Previous results had indicated that the coarse nature of the gold was influencing the analyses.

### 3.0 LOCATION AND ACCESS

The Windy property is located 65 kms north-northeast of Fort St. James in central British Columbia. The Salmon River cuts the southern part of the claims; Salmon Lake is located 7 kms to the south and Windy Lake is on the northwest boundary of the claims.

Access to the property is via the Manson Creek and Germansen-Cripple Lake forestry service roads. From the Germansen-Cripple Lake road, about 20 kms from the turn-off from Manson Creek road, a 6 km CAT road leads to the property. This rough cut road is driveable in a 4-wheel drive vehicle and ends at Line 10+200N, on the north side of Salmon River.

Access may also be achieved by a 20 minute helicopter flight from either Fort St. James or Mackenzie, both of which are about 65 km from the property.

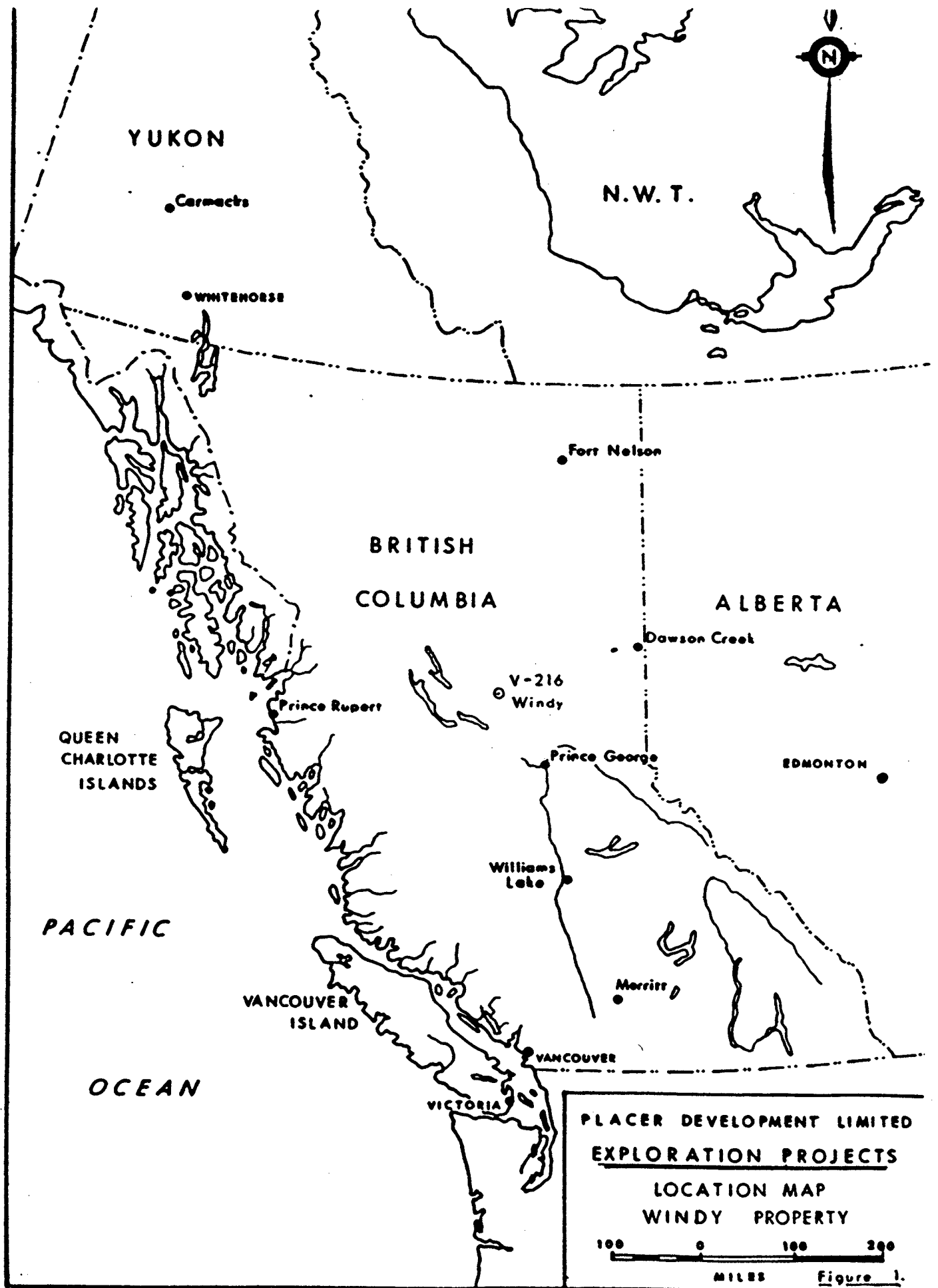
### 4.0 CLAIMS

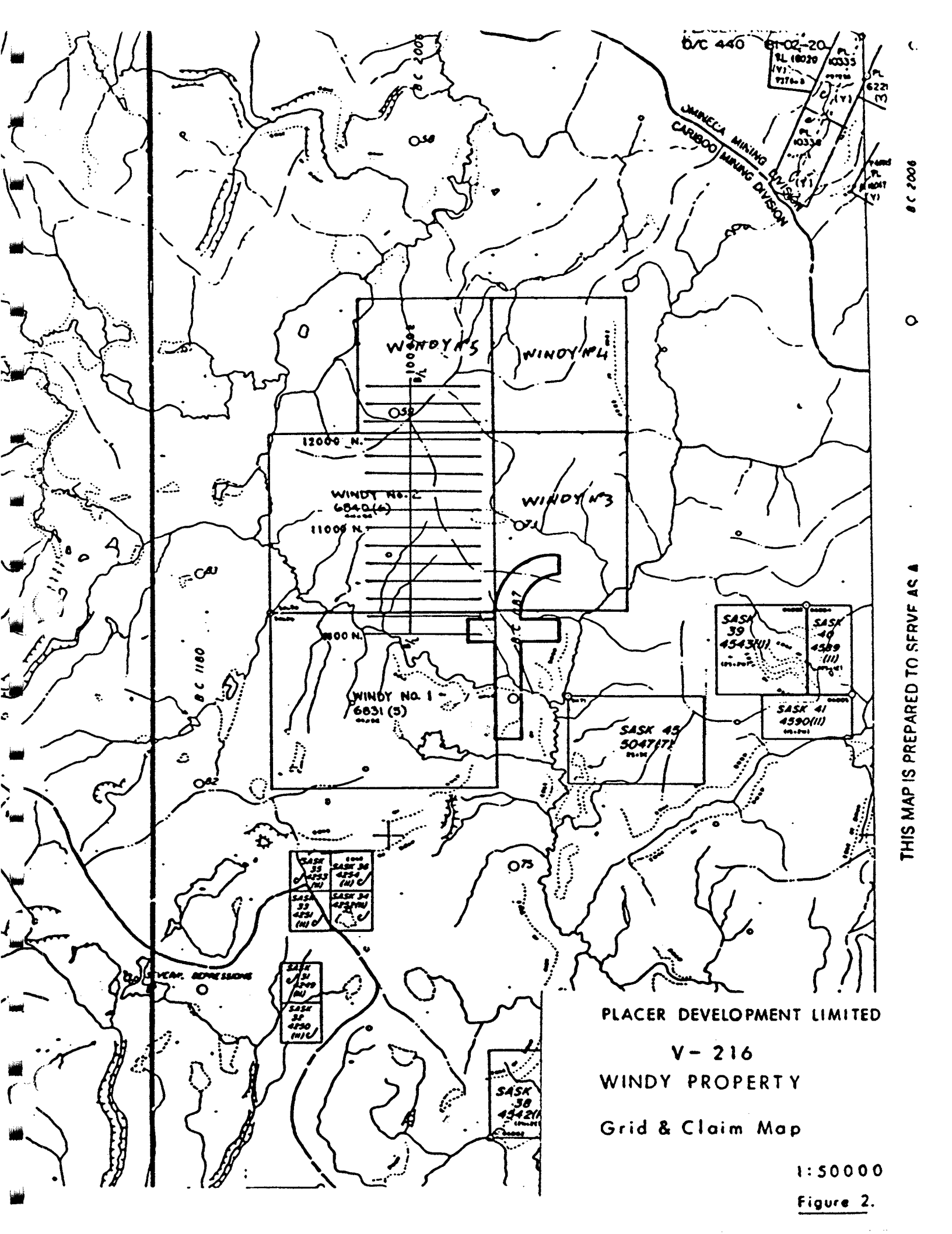
The Windy property consists of 5 claims totalling 70 units. Claims are as follows:

<u>Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Windy 1	20	6831	May 16, 1991
Windy 2	20	6840	June 3, 1991
Windy 3	12	7836	June 9, 1991
Windy 4	9	7837	June 9, 1991
Windy 5	9	7835	June 9, 1991

### 5.0 PHYSIOGRAPHY

The property is located on a topographic high with a moderate gradient in all directions from a maximum elevation of 1130 meters, to a low of 915 meters on the Salmon River at the southeast corner of this property.





THIS MAP IS PREPARED TO SERVE AS A

PLACER DEVELOPMENT LIMITED  
 V-216  
 WINDY PROPERTY  
 Grid & Claim Map

1:50000  
 Figure 2.

The Salmon River flows southward along the western property boundary before angling southeast across the Windy No. 1 claim. The ground south of Salmon River is generally flat with swampy areas.

The grid extends northward from the Salmon River to the topographic high in the north central part of the property. Forest cover on the grid consists of spruce, balsam, lodgepole pine mixed with patches of poplar, tag alder and willow with occasional open meadows.

Small outcrops are fairly common along the Salmon River. Away from the river, however, outcrop is rare. The direction of last glacial ice movement was towards 010 Az.

## 6.0 GEOLOGY

The property is located in a northwesterly extension of the Quesnel Trough of Takla Group rocks. The Takla Group consists mainly of andesitic and basaltic flows, tuffs and breccias, Upper Triassic and/or Lower Jurassic in age.

The Wolverine Complex lies 6 kms to the east. It consists of granites, gneisses and schists derived in part from Lower Cambrian Caribou Group rocks. Metamorphism and granitization is placed from post Lower Cambrian to Mesozoic in time.

### 6.1 Property Geology

Outcrop on the property is limited to exposures along Salmon River and to pits dug by R. Haslinger. All exposures appear to be dioritic with varying levels of alteration. Alteration is predominantly chlorite with epidote, carbonate and sericite. The diorite is varyingly sheared from no shearing to intense shearing often accompanied by sericitization. The general trend of the shearing appears to be 060 Az to 075 Az.

The geology of the trenches is consistent with the predominance of diorite on the property. Alteration in some places has produced a chlorite schist, with little indication of the original rock type.

### 6.2 Mineralization

In exposures in the the southwest anomaly zone of the property, pyrite is common as fine to medium grain disseminations in amount varying from trace to 5%. Chalcopyrite accompanied by malachite staining is also present as medium grained disseminations to blebs. Gold,



silver and palladium values from the pits in this area are variable but low. In one pit, chalcopyrite and pyrite occur as veinlets associated with a quartz-tourmaline vein.

Assays for the southwest zone have maximums of >1.00% Cu, 3.0 ppm Au and 1.25 ppm Pd. The average assays, however, are much lower with 0.36% Cu and 0.57 ppm Au.

In the central As-Au anomalous zone, pyrite is common with amounts from trace to 3%. Only trace chalcopyrite was found. Assays from the pits showed no concentration of precious metals. It is notable, however, that R. Haslinger has been able to repeatedly pan gold from the overburden in these pits.

In the northerly anomaly, pyrite again is common as very fine grained disseminations in amounts varying from trace to 3%. No chalcopyrite was observed.

## 7.0 TRENCHING PROGRAMME

A total of five trenches were excavated on the property, ranging in length from 40 meters to 110 meters. The locations of these trenches (see maps) were chosen based upon geochemical and Induced Polarization anomalies. All of the trenches trended east-west, perpendicular to the north-south trends of the anomalies.

The trenches were excavated using a TD-15 bulldozer (D5 equivalent) with an eight foot blade. The road to the property was also cut by this machine.

Some problems were encountered with the trenching due to the underpowered TD-15, the lack of ripper blades, and the decomposed, rubbly nature of the bedrock. As all the material on the sides of the trenches was well mixed by the TD-15 and the walls of the trenches were long and shallow, no profile mapping or sampling could be done. Exposure in the trenches was also poor, ranging from 20-40%, due to the unexpected depth of overburden.

All of the trenches were filled in at the end of the project in accordance with the Forest Act.

### 7.1 Trench Locations

The major target for the trenching was the central As-Au anomaly. Three trenches were chosen, to cut across both the geochemical anomaly and the Induced Polarization feature.

Secondary targets included the southwest Cu-Au-Pd anomaly with its associated sharp, narrow Induced

Polarization feature and the broader Cu-As anomaly at the north of the grid. One trench was excavated at each of these sites.

Trench locations are as follows:

<u>Trench</u>	<u>Line</u>	<u>From</u>	<u>To</u>	<u>Length</u>
T87-1	10+800N	10+103E	10+213E	110 m
T87-2	10+600N	10+126E	10+236E	110 m
T87-3	12+400N	9+914E	10+000E	86 m
T87-4	10+900N	10+096E	10+176E	80 m
T87-5	10+200N	9+652E	9+692E	40 m

## 7.2 Trench Geology

The trenches were mainly composed of variably altered diorite. Shear zones were apparent in trenches T87-1,2,3,4 and were accompanied by quartz veining in T87-4 and possibly T87-1.

### 7.2.1 T87-1

The trench was predominantly chloritized diorite with sheared zones occurring at 25-55 meters, 85-87 meters and at 108 meters to the end of the trench. The trend, where measurable, was towards 060 Az. Three kaolinitic zones about 0.3 meters wide extended for 6-12 meters east-west at 55-63. At 65 meters a 0.2 meter wide barren, milky white quartz vein trended towards 060 Az for 5 meters. This quartz vein may be related to the silicification noted at at 68-75 meters.

Pyrite was present throughout the length of the trench at 0.5%, but seemed to be concentrated in the shear zones at up to 2%.

### 7.2.2 T87-2

Predominantly chloritized diorite was present. One shear zone occurred between 30.5-35 meters just beside a 340 Az trending 0.2 m wide quartz vein at 30.5 meters. At 64.5-64.6 meters a small quartz veinlet trending 330 Az was accompanied by epidote and hematite as selvages and fracture coatings respectively.

Pyrite occurred as fine grained disseminations at up to 1.5%. Much of the pyrite seemed to have been oxidized to limonite which was present at up to 5%.

When panning material from the shear-zone between 30.5-35 meters, R. Haslinger found over 200 minute flakes gold from one panful of material. A 2 cm long quartz fragment was also found with visible gold present.

### 7.2.3 T87-3

Exposure was limited to 30 meters at either end of the trench. The west end, 0-28 meters was light grey silicified diorite, gradually becoming less silicified towards 28 meters. From here to 65 meters the trench was clay with limonite pockets 1 cm wide. The remainder of the trench consisted of sheared diorite to 74 meters and silicified diorite with 20% limonite pockets. Pyrite occurred throughout the trench from 1-3%.

### 7.2.4 T87-4

This trench was mainly chloritized diorite with chlorite schist appearing at four meters. A small quartz-tourmaline vein showed up in rubble at two meters. Two quartz veins occurred, one at 37.5 meters and one at 45 meters. The first was a 0.1 meter wide barren vein trending towards 050 Az. The second was a 0.3 meter wide vein trending 060 Az and dipping 60° SE. This vein was accompanied by 0.5 mm wide subpar-allel veinlets in a one metre wide zone of veining.

Pyrite was scarce with a maximum of 0.5% fine grained disseminations.

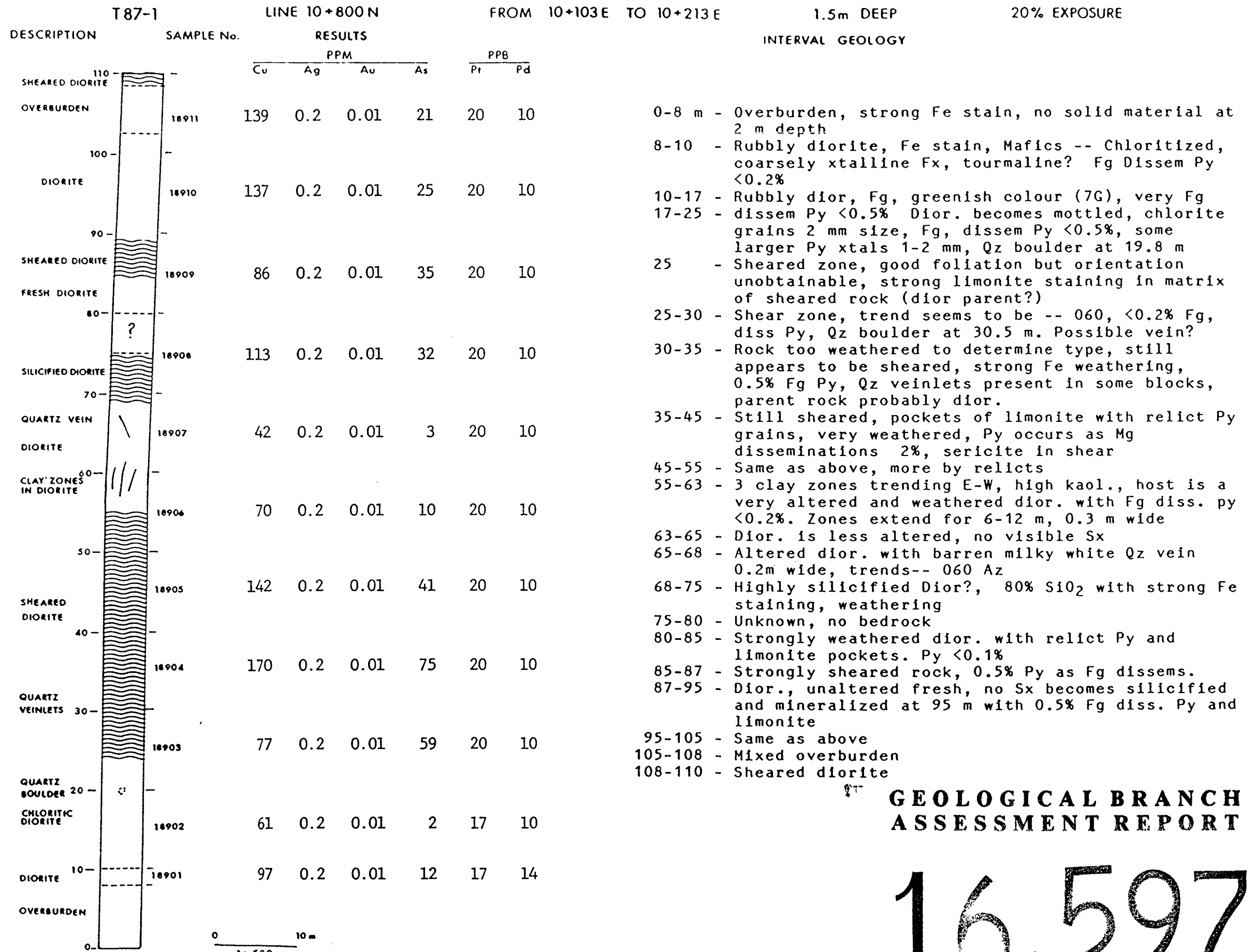
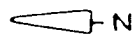
### 7.2.5 T87-5

The majority of this trench was sand with depths greater than three meters. Ten meters of exposure was present which was schistose chloritized diorite. Chalcopyrite was present as medium grained dissemination to blebs, locally up to 5%. Malachite and azurite was found accompanying chalcopyrite.

## 7.3 Trench Sampling

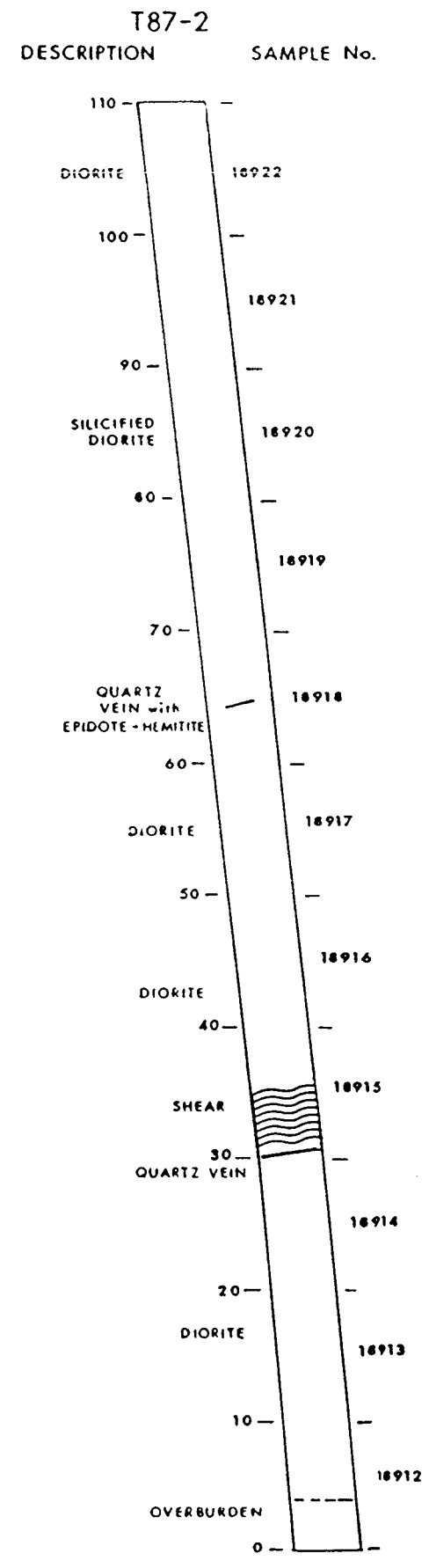
The trenches were chip sampled where possible and grab sampled elsewhere. Samples were taken along the trench length at 10 meter intervals. Where the sulphides increased, or quartz veining increased, the sample interval narrowed to 5 or 2 meters.

Over a sample interval, approximately 2.5 kg of rock was taken evenly over the length. This was placed in a numbered, doubled polythene bag and shipped to the Placer Dome Research Centre for assay. A total of forty samples were taken from the five trenches.



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Fig. 2



LINE 10+600N

RESULTS				PPB	
Cu	Ag	Au	As	Pt	Pd
123	0.2	0.01	2	20	10
116	0.2	0.01	8	20	10
87	0.2	0.01	2	20	10
103	0.2	0.01	12	20	10
86	0.2	0.01	11	20	10
116	0.2	0.01	9	20	14
115	0.2	0.01	29	20	10
310	1.0	0.11	67	20	10
82	0.2	0.08	40	20	10
57	0.2	0.01	15	20	10
60	0.2	0.01	22	20	10

0 10m  
1:500

FROM 10+126 E TO 10+236 E

1-2m DEEP

40% EXPOSURE

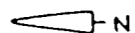
INTERVAL GEOLOGY

0-4 Overburden  
 4-5 Medium green, Fg dior? High chlorite content. Py as Fg diss. 1%. May be alteration (Chlorite)  
 5-22 Chlorite altered diorite, above int. is probably same, chlorite as spots 1 mm. Py as Fg diss. 0.5%  
 Minor Qz veinlets at 10 m. Strong limonite staining  
 22-25 Diorite becomes finer grained  
 25-27 Diorite is extremely weathered, with limonite blebbs 5%, prob. replacing Py.  
 27-30.5 Highly silicified diorite, 1% Fg Py, extremely weathered. Qz vein at 30.5 m trending 340 Az, 0.2 m wide. Minor malachite and chalcopryrite  
 30.5-35 Very sheared and contorted rock, extremely weathered. P87W-T2-5 Prob. diorite but hard to tell  
 35-41 Less sheared but extremely weathered dior., Py is all -- limonite  
 41-50 No relict intrusive texture, chlorite with Qz, limonite pockets. Regains texture of spotted chlorite in Qz, less weathered, Fg, Diss Py <0.5%  
 50-53 Becomes almost pure chlorite, but still has relict texture. Sx -- limonite for most part, locally 0.2% Py  
 53-64.5 Small Qz veinlet 1 cm with epidote? and hematite altered rock surrounding, Hm as fracture coatings 1%. Trends -- 330  
 64.5-64.6 Altered diorite, weathered 1.5% Py as Fg dissems  
 64.6-75 Altered diorite, much darker (Higher Fe?)  
 75-90 Becomes lighter, greyish brown and more weathered, silicified with only minor chloririte. No Sx  
 90-94 Returns to darker alt. diorite with minor Py 0.1%. Continues to end

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Fig. 4



T87-3

LINE 12 + 400 N

FROM 9+914 E TO 10+000 E

1.5 - 2.5 m DEEP

25% EXPOSURE

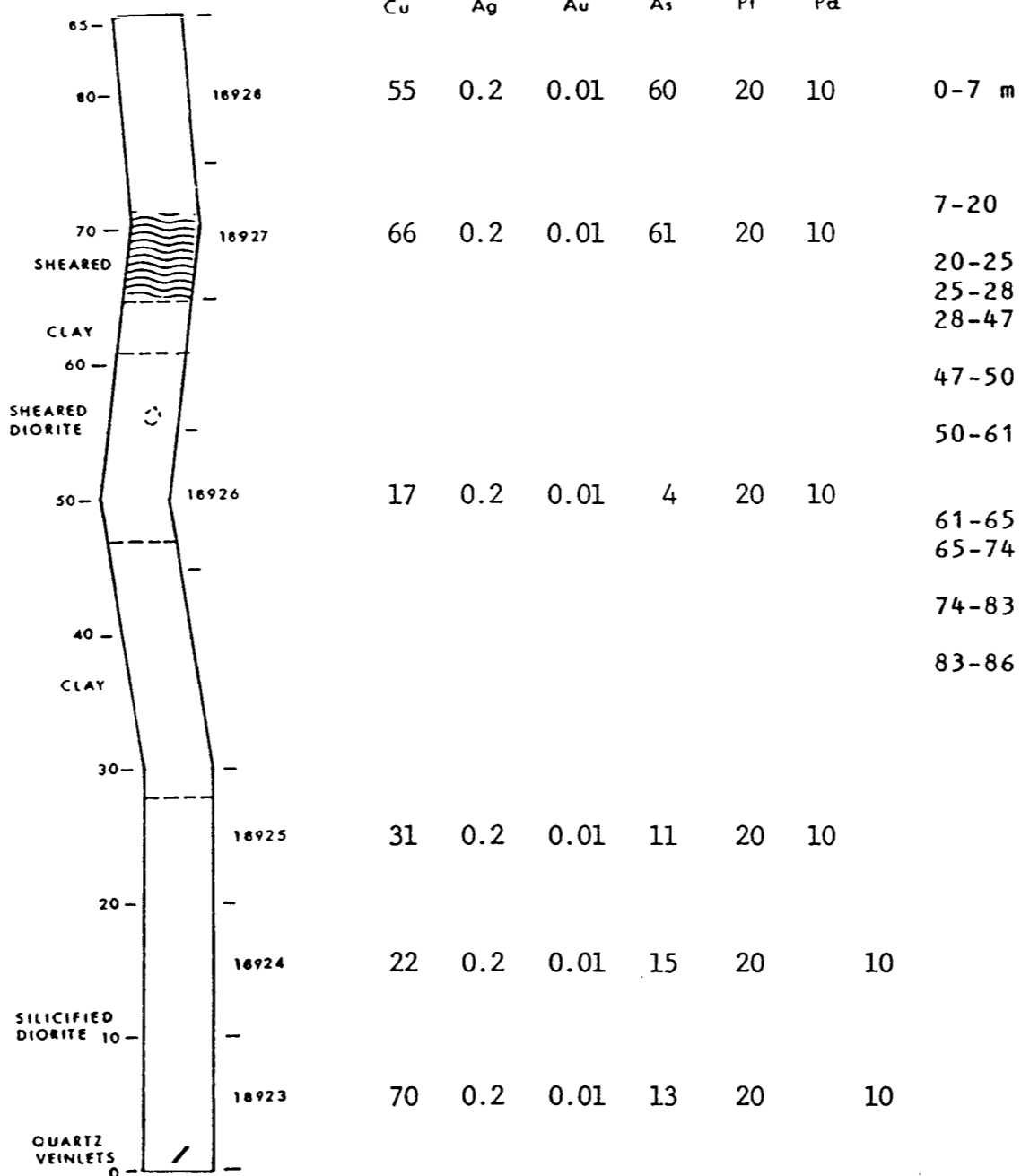
DESCRIPTION

SAMPLE No.

RESULTS  
PPM

PPB

INTERVAL GEOLOGY



Cu Ag Au As Pt Pd

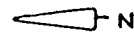
RESULTS PPM	PPB	INTERVAL GEOLOGY				
Cu	Ag	Au	As	Pt	Pd	
55	0.2	0.01	60	20	10	0-7 m
66	0.2	0.01	61	20	10	7-20
17	0.2	0.01	4	20	10	20-25 25-28 28-47 47-50 50-61
31	0.2	0.01	11	20	10	61-65 65-74
22	0.2	0.01	15	20	10	74-83
70	0.2	0.01	13	20	10	83-86

Highly silicified Fg rock. White to Lt. grey, no mafics. Py as very Fg dissem. 1%. Moderate limonite staining. Minor Qz veinlet at 2 m (1 cm) trends 130. Possibly diorite parent?  
 Becomes darker and greener, still Fg and mainly Qz  
 More intense limonite weathering. Py up to 3%  
 Less intense weathering, 1% Py  
 Rock is completely clay altered. Py is weathered to limonite pockets. Trench floor is all clay.  
 Highly weathered, silicified diorite? Py as Mg dissem. 3%  
 Rock is decomposed almost to soil! Strong Fe staining. Some sheared diorite appears at 56 m - boulder.  
 All clay  
 Sheared and weathered diorite, pockets of limonite from alt Py. No remaining Py.  
 Unsheared, silicified with extreme Fe stain on fractures. Limonite pockets 20%.  
 Green, chloritized diorite? Trace Py, no Fe staining.

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Fig. 5



T87-4

LINE 10+900N

FROM 10+096E TO 10+176E

1.5m DEEP

35% EXPOSURE

DESCRIPTION	SAMPLE No.	RESULTS PPM				PFB	
		Cu	Ag	Au	As	Pt	Pd
80 - DIORITE	18935	94	0.2	1.43	7	20	10
70 - DIORITE	18934	70	0.2	0.01	8	20	10
60 - CHLORITIC DIORITE	18933	107	0.2	0.01	17	18	14
50 - CLAY DIORITE	18932	41	0.2	0.01	7	20	10
40 - QUARTZ VEIN	18931	59	0.2	0.01	8	20	10
40 - QUARTZ VEIN	18930	74	0.6	0.01	235	20	10
30 - QUARTZ VEINLET	18929	50	0.2	0.01	7	20	10
30 - SILICIFIED DIORITE							
20 - DIORITE WITH PY.							
20 - DIORITE							
10 - CHLORITE SCHIST							
0 - QUARTZ VEIN							

0 10m  
1:500

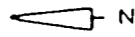
INTERVAL GEOLOGY

0-24.7 - Mainly clay overburden with multilithic boulders (chert, diorite)  
 2 m - Qz vein material banded with black zones (Tourmaline)  
 4 m - Chlorite schist, Dk green. (may be boulder)  
 15 m - Extremely altered diorite, mainly chlorite with limonite pockets prob. boulder but indicative of surrounding bedrock.  
 20 m - Altered dior. with Mg dissem. Py 0.5%.  
 24.7-27.5 - Diorite from bedrock, chloritized with only trace Py - little Fe weathering  
 27.5-48 - Diorite is silicified, white-tan colour  
 33 m - Boulder with 2 cm wide, milky white Qz vein. Extreme limonite staining barren  
 37.5 m - Possible Qz vein 0.1 m trending -- 050, barren, very rubbly  
 45 m - 0.3 m Qz vein trends -- 060. Seems to dip 60° SE accompanied by 0.5 mm subparallel veinlets, zone of veining is 1 m wide. Seems barren.  
 48-52 - Highly clay altered and decomposed diorite  
 52-63.5 - Chloritized diorite, fine grained with little limonite  
 63.5-80 - Diorite is less altered, mafics are chloritized, Fg diss. Py 0.5%, white-green colour.  
 75 m - Becomes more chloritized

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Fig. 6



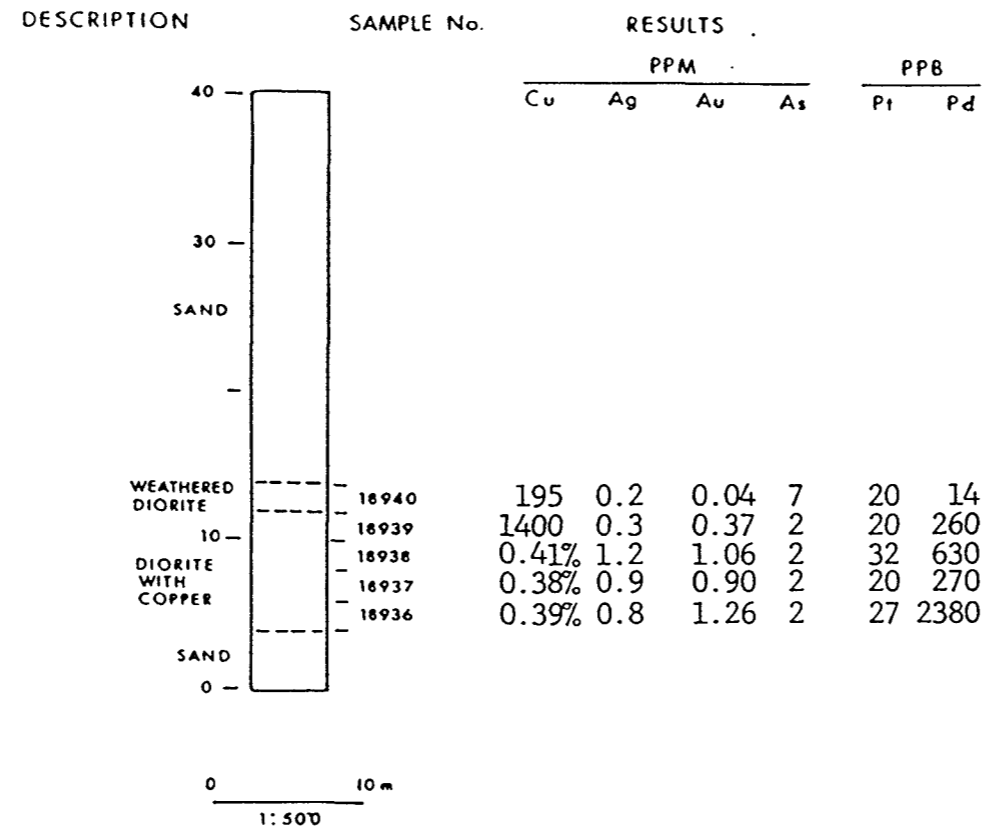
T87-5

LINE 10+200 N

FROM 9+652 E TO 9+692 E

2-3.5m DEEP

25% EXPOSURE



INTERVAL GEOLOGY

- 0-4 m - Sand. Depth >3 m
- 4-12 - Chloritized Dior.? Schistose, malachite and azurite staining Chalcopyrite is concentrated in bands, not in Qz veinlets. Consistent over interval, 5% Cp locally as Mg diss. and blebbs.
- 12-14 - Weathered Dior. brown & rubbly-gravelly. May be sheared.
- 14-20 - Sand. Depth >3 m

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Fig. 7



#### 7.4 Results

The locations and identifications of the samples are shown next to the trenches in Figures 3-7. Full listings of assay data are provided in Appendix 1.

The majority of the results are not anomalous in any of the metals analyzed for. However, trench T87-5 showed anomalous Au, Pd, and Cu. The average results over the 10 meters of bedrock exposed were 0.84 g/ton Au, 594 ppb Pd, and 0.17% Cu with maximum values of 1.43 g/ton Au, 2380 ppb Pd and 0.41% Cu.

#### 8.0 GEOCHEMICAL SAMPLING

*Soil samples were taken with augers from the "B" horizon at about 80 cm depth.*

During the period of work, geochemical soil sampling and bulk soil sampling were performed. The bulk soil samples were taken to determine whether detection difficulties with gold in soil samples was due to the gold being very coarse, and therefore, being screened away above -80#. Fourteen samples consisting of 5-7 kg of soil were taken. Three bulk soil samples were sent to the Saskatchewan Research Council for size fraction analyses, and eleven were sent to the Placer Laboratory in Vancouver.

The additional 2.5 kms of soil sampling was done to determine whether the northern Cu-As geochemical anomaly closed towards the north.

#### 8.1 Results

The additional lines of soil samples shows a continuation northwards of the northern Cu-As geochemical anomaly with no indication of closure. The bulk soil analyses show that although gold is concentrated in the coarse fraction in places, anomalous amounts are present below 80 mesh in these sites as well.

Soil sample results and bulk soil results are present in tabular form in Appendices 2 and 3 respectively. Updated geochemical contour maps are in the map pockets at the end of the report.

#### 9.0 GEOPHYSICS

A report for the geophysics performed on the property during the period of September 1-6, 1987 is present in Appendix 4.

## 10. DISCUSSION

Of the three geochemical anomalies present, the southern Cu-Au-Pd shows the highest assay results. Although the geophysical signature of this anomaly is small, this may be due to a large depth of overburden. The elevated values of Cu and Au may possibly be indicating a potential porphyry deposits.

The central Au-As anomaly had relatively low assay results from all three trenches. The geophysical signature is large and the geochemical signature is narrow. The trenches in this anomaly shown shearing of varying levels which may be the source of the gold found here.

The northerly Cu-As was shown to extend towards the north but no possible source has been found yet.

The problem with erratic Au values in the geochemical samples is not due to the coarseness of Au but is more likely due to the nature of overburden, from tills to fluvial sands.

## 11.0 CONCLUSIONS AND RECOMMENDATIONS

Three anomalous zones are present and the property. Gold has been related to two of the anomalies. There is a potential that a relatively large area of mineralized rock containing Au may exist as a possible porphyry deposit in the southwest and lesser amounts may occur as shear zones in the diorite towards the centre of the property.

A two phase exploration program is proposed for 1988.

PHASE I - a) Camp Construction  
b) Line Cutting - 20 kms  
c) I.P Survey - 20 kms  
d) 2.6 kms Soil Sampling, EM and MAG. Surveys  
e) Diamond Drilling - 1000 m NQWL

PHASE II - a) Diamond Drilling - 1500 m NQWL

The Phase II programme would be dependent on the results from Phase I.

### Phase I

1. Construction 7 person camp - \$ 15,000.

The proposed programme makes a camp mandatory. The new

access road will reduce the construction and servicing costs.

2. Line Cutting - 20 kms contracted \$ 7,500.

Approximately 15 kms of line cutting is based on additional I.P. in the areas of known mineralization. The remaining 5 kms would be done on the Cu-As soil anomaly located at the north end of the present grid.

3. I.P Survey - 20 kms contracted - \$ 12,000.

4. Soil Sampling, VLF-EM and Magnetometer - \$ 2,000.

Required on 2.6 kms at north end of grid to further delineate the Cu-As anomaly. Requires two persons for two days. Approximately 70 soil samples.

5. Diamond Drilling - 1000 meters NQWL - \$128,000.

- a) Road and Site Preparation - \$ 7,500.
- b) Drilling @ \$90./meter - \$90,000.
- c) Geologist and Core Splitter - \$12,000.
- d) Assaying - 300 samples @ \$20. - \$ 6,000.
- e) Vehicle Rental - 1 month - \$ 2,000.
- f) Camp Operation - 6 weeks - \$10,500.

6. Report Preparation \$ 7,000.

7. Miscellaneous - \$ 10,000.

Planning, overall supervision, air fares, motels etc.

Total - \$169,500.

Contingencies @ 15% - \$ 24,675.

Phase I Grand Total - \$194,925.

Phase II - 1500 Meters additional diamond drilling

- a) Road and Site Preparation - \$ 5,000.
- b) Drilling @ \$80./meter - \$120,000.
- c) Geologist and Core Splitter - \$ 12,000.
- d) Assaying - 500 samples @ \$20. - \$ 10,000.
- e) Vehicle Rental - 1 month - \$ 2,000.
- f) Camp Operation - 1 month - \$ 5,000.

\$154,000.

Contingencies @ 10% 15,400.

Phase II Grand Total 169,400.

Total Phase I and II \$364,325.

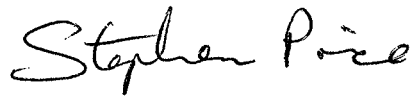
## REFERENCES

1. A Geological, Geophysical and Geochemical Report on the Windy 1-5 Claims;  
Placer Development Limited  
by W. Pendland, R.W. Cannon, P. Eng, and I. Thomson, April 1987
2. Results of an Examination on the Windy Property, B.C.  
Cassiar Mining Corporation  
by R.S. Hewton, P. Eng, 2985
3. Map 1206 A  
Geology-McLeod Lake, B.C. 1:250,000  
Geological Survey of Canada, 1968
4. Topographic Map  
Salmon Lake, B.C. 1:50,000  
93J/13  
Dept. of Energy, Mines and Resources, 1979

## STATEMENT OF QUALIFICATIONS

Stephen Price, of the City of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia where I received a B.Sc in Geology in May, 1987.
2. I supervised the trenching work done on the property.

A handwritten signature in cursive script that reads "Stephen Price".

Stephen Price

**APPENDIX 1**  
**SOIL GEOCHEMISTRY RESULTS**

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.

	UNITS	WT. G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	0.5	C HCL04/HN03	4HRS	1-1000	ATOMIC ABSORPTION
CU	PPM	0.5	C HCL04/HN03	4HRS	2-4000	ATOMIC ABSORPTION
ZN	PPM	0.5	C HCL04/HN03	4HRS	2-3000	ATOMIC ABSORPTION
PB	PPM	0.5	C HCL04/HN03	4HRS	2-3000	A.A. BACKGROUND COR.
CD	PPM	0.5	C HCL04/HN03	4HRS	0.2-200	A.A. BACKGROUND COR.
NI	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
CO	PPM	0.5	C HCL04/HN03	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	0.5	C HCL04/HN03	4HRS	0.2-20	A.A. BACKGROUND COR
AU	PPM	10.0	AQUA REGIA	3HRS	0.02-4.00	A.A. SOLVENT EXTRACT.
U	PPM	0.25	DIL HN03	2HRS	1.0-1000	FLOURIMETRY SOLV. EX.
V	PPM	0.5	C HF/HCL04/HN03/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	0.5	C HCL04/H3P04	2HRS	2-1000	DC PLASMA.
F	PPM	0.25	NA2CO3/KN03 FUSION	30MIN	40-4000	SPECIFIC ION ELECTRODE
AS	PPM	0.5	C HCL04/HN03	4HRS	2-1000	A.A. BACKGROUND COR.
SB	PPM	0.5	C HCL/HN03	2HRS	2-1000	A.A. BACKGROUND COR.
BI	PPM	0.5	C HCL04/HN03	4HRS	2-2000	A.A. BACKGROUND COR.
MN	PPM	0.5	C HCL04/HN03	4HRS	2-3000	ATOMIC ABSORPTION
FE	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	0.25	DIL HN03/HCL	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/HCL04/HN03/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	0.5	C HF/HCL04/HN03/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HCL04/HN03/HCL	6HRS	10-2000	ATOMIC ABSORPTION
MG	%	0.5	C HF/HCL04/HN03/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

AUTOREPORT

GRID	SAMPLE	PROJECT	CU	AG	AU	AS
	128+CCON	72215	28			
	128+CCON	72215	66			
	128+CCON	72215	54			
	128+CCON	72215	2			
	128+CCON	72215	98			
	128+CCON	72215	55			
	128+CCON	72215	10			
test	STD	72215	120			
	128+CCON	72215	50			
	128+CCON	72215	77			
	128+CCON	72215	30			
	128+CCON	72215	28			
	128+CCON	72215	49			
	128+CCON	72215	62			
	128+CCON	72215	63			
	128+CCON	72215	1			
	128+CCON	72215	84			
	128+CCON	72215	97			
	128+CCON	72215	99			
	128+CCON	72215	78			
	128+CCON	72215	67			
test	STD	72215	36			
	127+CCON	72215	33			
	127+CCON	72215	53			
	127+CCON	72215	80			
	127+CCON	72215	71			
	127+CCON	72215	10			
	127+CCON	72215	9			
	127+CCON	72215	75			
	127+CCON	72215	67			
	127+CCON	72215	33			
	127+CCON	72215	33			
	127+CCON	72215	160			
	127+CCON	72215	161			
	127+CCON	72215	44			
	127+CCON	72215	26			
	127+CCON	72215	77			
	127+CCON	72215	11			
	127+CCON	72215	72			
	127+CCON	72215	62			
	127+CCON	72215	67			
	127+CCON	72215	67			
	127+CCON	72215	38			
	127+CCON	72215	36			
	127+CCON	72215	25			
	127+CCON	72215	74			
	125+CCON	72215	35			
	125+CCON	72215	96			



GRID	SAMPLE	PROJECT	CU	AG	AU	AS
	125+CON 100+80E	7215	246	<.6	<.01	71
	125+CON 101+20E	7215	45	<.2	<.01	5
	125+CON 101+60E	7215	165	<.2	<.01	3
	125+CON 102+60E	7215	85	<.6	<.01	3
	125+CON 102+40E	7215	145	<.2	<.01	2
	125+CON 102+80E	7215	255	<.4	<.01	4
	125+CON 103+20E	7215	150	<.2	<.01	4
	125+CON 103+60E	7215	885	<.2	<.01	3
	125+CON 104+60E	7215	35	<.2	<.01	3
test	STD P	7215	126	1.6		5
test	STD AU1	7215			0.48	
test	STD AU1	7215			0.42	

END OF LISTING - 72 RECORDS PRINTED  
 GCLIST RUN AT: 13:27:40

AUTOREPORT

12/27

**APPENDIX 2**  
**BULK SOIL ANALYSES**

PLACER DOME INC.  
METALLURGICAL RESEARCH ASSAYS  
WINDY - V216 - SCREENS

SUBMITTED BY: L. O'Connell  
DATE SUBMITTED: 1987-09-14  
DATE REPORTED: 1986-09-16

Page 1 of 2

cc: W. Pentland

Sample Description		Lab #	ppm Au	ppm Ag	Wt
114+00N 98+40E	+10#	1	0.01		334.0
	-10+35	2	0.01		175.5
	-35+80	3	0.01		67.8
	-80#	4	0.05		455.4
108+00N 102+00E	+10#	5	0.02		409.0
	-10+35	6	0.04		222.1
	-35+80	7	0.01		57.1
	-80#	8	0.05		317.1
108+38N 101+62E	+10#	9	0.08		1637.7
	-10+35	10	93.6		340.8
	-35+80	11	31.9		73.2
	-80#	12	6.43		367.0
108+00N 101+60E	+10#	13	0.02		555.0
	-10+35	14	0.14		333.1
	-35+80	15	0.04		112.1
	-80#	16	0.23		368.8
108+00N 101+20E	+10#	17	<0.01		464.0
	-10+35	18	0.01		310.2
	-35+80	19	0.01		106.2
	-80#	20	0.02		466.7
104+00N 97+60E	+10#	21	0.01		284.4
	-10+35	22	<0.01		407.8
	-35+80	23	0.01		106.5
	-80#	24	0.02		695.6
104+00N 96+80E	+10#	25	0.01		433.0
	-10+35	26	0.01		287.3
	-35+80	27	0.01		124.1
	-80#	28	0.06		627.2

LDO:ojt  
1987-09-16

PLACER DOME INC.  
 METALLURGICAL RESEARCH ASSAYS  
 WINDY - V216 - SCREENS

SUBMITTED BY: L. O'Connell  
 DATE SUBMITTED: 1987-09-14  
 DATE REPORTED: 1986-09-16

Page 2 of 2

cc: W. Pentland

Sample Description			Lab #	ppm Au	ppm Ag	Wt
101+00N	97+20E	+10#	29	0.15		337.0
		-10+35	30	0.18		418.6
		-35+80	31	0.08		76.8
		-80#	32	0.20		445.6
104+00N	97+20E	+10#	33	0.02		633.0
		-10+35	34	0.04		429.1
		-35+80	35	0.02		51.3
		-80#	36	0.06		246.6
114+00N	96+80E	+10#	37	0.02		485.2
		-10+35	38	0.02		377.1
		-35+80	39	0.02		70.4
		-80#	40	0.02		476.3
114+00N	97+60E	+10#	41	0.02		410.0
		-10+35	42	0.03		223.4
		-35+80	43	0.02		66.3
		-80#	44	0.02		485.3

LDO:ojt  
 1987-09-16

REPORT  
 =====

M106 CLARK PLACER OCT.16/87 (3) [ AU HEAVY MINERALS ]

1 SAMPLE WEIGHT IN KG

2 %GRANULES IN +10 MESH (<4MM)

3 %PEBBLES IN +10 MESH (4-64MM)

4 %COBBLES IN +10 MESH (65-256MM)

5 +10 MESH WEIGHT IN KG

6 -10 MESH WEIGHT IN KG (TABLE FEED)

7 MATRIX %SAND ESTIMATE

8 MATRIX %SILT ESTIMATE

9 MATRIX %CLAY ESTIMATE

	S.WT	%GRAN	%PER	%COB	+10	-10	%SAND	%SILT	%CLAY
100E	5.95	80	20		1.75	4.20	50	35	15
150E	7.75	85	14		3.70	4.05	70	20	10
190E	6.55	87	12		2.05	4.50	50	35	15

REPORT

=====

M106 CLARK PLACER OCT.16/87 (3) [ AU HEAVY MINERALS ]

1 OVERBURDEN CLASSIFICATION TILL(T), GRAVEL(G), SAND(S), SILT(ST), CLAY(C)

2 HEAVY MINERALS MAGNETICS IN GRAMS

3 HEAVY MINERALS NONMAGNETICS IN GRAMS

4 HEAVY MINERALS TOTAL IN GRAMS (MAG+NONMAG)

5 TABLE CONCENTRATE LIGHT FRACTION IN GRAMS (TABLE CONCENTRATE LESS HM)

6 TABLE CONCENTRATE IN GRAMS

7 VISIBLE GOLD GRAIN COUNT

8

9

	CLASS	MAG	NONMAG	H.M.	T.LITE	T.CONC	V.G.
100E	T	3.96	0.93	4.89	41.34	46.23	5
150E	T	2.60	5.89	8.49	122.92	131.41	2
190E	T	3.34	2.18	5.52	43.16	48.68	4

REPORT

=====

87/10/16

M107 CLARK PLACER OCT.16/87 (3) [ REG.DIG. ]

1 AU HNO3/HCL AAEA MIBK [ ON -150 MESH FRACTION ]  
2 AU HNO3/HCL AAEA MIBK [ MICROGRAMS IN HEAVY MINERALS ]  
3 AS HNO3/HCL AA HYDRIDE [ MICROGRAMS IN HEAVY MINERALS ]

4  
5  
6  
7  
8  
9

AU PPB      AU      AS

100E	6.9	6.1	44.4
150E	13.	2.8	2400.
190E	11.	2.7	260.

REPORT

=====

M106 CLARK PLACER OCT.16/87 (3) [ AU GRAIN COUNTS ] (5) 100E

- 1 GOLD GRAIN WIDTH IN MICRONS
- 2 GOLD GRAIN LENGTH IN MICRONS
- 3 GOLD GRAIN DESCRIPTION
- 4 GOLD GRAIN WIDTH IN MICRONS
- 5 GOLD GRAIN LENGTH IN MICRONS
- 6 GOLD GRAIN DESCRIPTION
- 7 GOLD GRAIN WIDTH IN MICRONS
- 8 GOLD GRAIN LENGTH IN MICRONS
- 9 GOLD GRAIN DESCRIPTION

W	L	D
20	60	I
20	60	I
40	80	I
60	100	A
80	100	D



REPORT  
=====

M106 CLARK PLACER OCT.16/87 (3) [ AU GRAIN COUNTS ] (2) 150E

- 1 GOLD GRAIN WIDTH IN MICRONS
- 2 GOLD GRAIN LENGTH IN MICRONS
- 3 GOLD GRAIN DESCRIPTION
- 4 GOLD GRAIN WIDTH IN MICRONS
- 5 GOLD GRAIN LENGTH IN MICRONS
- 6 GOLD GRAIN DESCRIPTION
- 7 GOLD GRAIN WIDTH IN MICRONS
- 8 GOLD GRAIN LENGTH IN MICRONS
- 9 GOLD GRAIN DESCRIPTION

	W	L	D
	40	80	D
	40	80	D

APPENDIX 3  
TRENCH ROCK SAMPLE ASSAYS

PLACER DOME INC (VANCOUVER LABORATORY)

GEOCHEMICAL DATA LISTING: VZ16 WINDY

DATE: 87:10:2

PDL Lab data file: P7223

AREA: WINDY  
 MAPSHEET NO: 93J/13  
 VENTURE: V216  
 GEOLOGIST: W PENTLAND  
 LAB PROJECT NO: 7223

PLEASE DISTRIBUTE RESULTS TO: WP LR LC MG RH LAB \*\* LAB \*\*

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.

AUTOVALU

	UNITS	WT. G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	0.5	C HCL04/HNO3	4HRS	1-1000	ATOMIC ABSORPTION
CU	PPM	0.5	C HCL04/HNO3	4HRS	2-4000	ATOMIC ABSORPTION
ZN	PPM	0.5	C HCL04/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
PB	PPM	0.5	C HCL04/HNO3	4HRS	2-3000	A.A. BACKGROUND COR.
CD	PPM	0.5	C HCL04/HNO3	4HRS	0.2-200	A.A. BACKGROUND COR.
NI	PPM	0.5	C HCL04/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
CO	PPM	0.5	C HCL04/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	0.5	C HCL04/HNO3	4HRS	0.2-20	A.A. BACKGROUND COR.
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	0.5	C HF/HCL04/HNO3/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	0.5	C HCL04/H3PO4	2HRS	2-1000	DC PLASMA.
F	PPM	0.25	NA2CO3/KNO3 FUSION	30MIN	40-4000	SPECIFIC ION ELECTODE
AS	PPM	0.5	C HCL04/HNO3	4HRS	2-1000	A.A. BACKGROUND COR.
SB	PPM	0.5	C HCL/HNO3	2HRS	2-1000	A.A. BACKGROUND COR.
BI	PPM	0.5	C HCL04/HNO3	4HRS	2-2000	A.A. BACKGROUND COR.
MN	PPM	0.5	C HCL04/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
FE	%	0.5	C HF/HCL04/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	0.25	DIL HNO3/HCL	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/HCL04/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
K	%	0.5	C HF/HCL04/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
CA	%	0.5	C HF/HCL04/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HCL04/HNO3/HCL	6HRS	10-2000	ATOMIC ABSORPTION
MG	%	0.5	C HF/HCL04/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

GRID	SAMPLE	PROJECT	CU	AG	AU	AS	PT	PD	
93J/13		18917	7219	116	<0.2	<0.01	9	<20	14
93J/13		18918	7219	86	<0.2	0.07	11	<20	<10
93J/13		18919	7219	103	<0.2	<0.01	12	<20	<10
93J/13		18920	7219	87	<0.2	<0.01	<2	<20	<10
93J/13		18921	7219	116	<0.2	<0.01	8	<20	<10
93J/13		18922	7219	123	<0.2	<0.01	<2	<20	<10
93J/13		18923	7219	70	<0.2	<0.01	13	<20	<10
93J/13		18924	7219	22	<0.2	<0.01	15	<20	<10
93J/13		18925	7219	31	<0.2	<0.01	11	<20	<10
test	STD P	7219	118	1.2			61		
93J/13		18926	7219	17	<0.2	<0.01	4	<20	<10
93J/13		18927	7219	66	<0.2	<0.01	61	<20	<10
93J/13		18928	7219	55	<0.2	<0.01	60	<20	<10
93J/13		18929	7219	50	<0.2	<0.01	7	<20	<10
93J/13		18930	7219	74	0.6	<0.01	235	<20	<10
93J/13		18931	7219	59	<0.2	<0.01	8	<20	<10
93J/13		18932	7219	41	<0.2	<0.01	7	<20	<10
93J/13		18933	7219	107	<0.2	<0.01	17	18	14
93J/13		18934	7219	70	<0.2	<0.01	8	<20	<10
93J/13		18934*	7219	71	<0.2		7		
93J/13		18935	7219	94	<0.2	1.43	7	<20	<10
93J/13		18936	7219	0.39%	0.8	1.26	<2	27	2380
93J/13		18937	7219	0.38%	0.9	0.90	2	<20	270
93J/13		18938	7219	0.41%	1.2	1.06	<2	32	630
93J/13		18939	7219	1400	0.3	0.37	<2	<20	260
93J/13		18940	7219	195	<0.2	0.04	7	<20	14
93J/13		18940*	7219	190	<0.2		5		
test	STD CU	7219	0.42%						

END OF LISTING - 28 RECORDS PRINTED  
 GCLIST RUN AT: 14:36:39

AUTOVALU

## PLACER GEOCHEM ASSAY SYSTEM: DATA FROM V216 WINDY

DATE

GRID	SAMPLE	PROJECT	CU	AG	AU	AS	PT	PD
93J/13		18901 7223	97	<0.2	<0.01	12	17	14
93J/13		18902 7223	61	<0.2	<0.01	<2	17	<10
93J/13		18903 7223	77	<0.2	<0.01	59	<20	<10
93J/13		18904 7223	170	<0.2	<0.01	75	<20	<10
93J/13		18905 7223	142	<0.2	<0.01	41	<20	<10
93J/13		18906 7223	70	<0.2	<0.01	10	<20	<10
93J/13		18907 7223	42	<0.2	<0.01	3	<20	<10
93J/13		18908 7223	113	<0.2	0.01	32	<20	<10
93J/13		18909 7223	86	<0.2	<0.01	35	<20	<10
test	STD P	7223	120	1.3		60		
93J/13		18910 7223	137	<0.2	<0.01	25	<20	<10
93J/13		18911 7223	139	0.2	<0.01	21	<20	<10
93J/13		18912 7223	60	<0.2	<0.01	22	<20	<10
93J/13		18913 7223	57	<0.2	<0.01	15	<20	<10
93J/13		18914 7223	82	0.2	0.08	40	<20	<10
93J/13		18915 7223	310	1.0	0.11	67	<20	<10
93J/13		18916 7223	115	<0.2	<0.01	29	<20	<10
93J/13		18916* 7223	118	<0.2		27		

END OF LISTING - 18 RECORDS PRINTED  
 GCLIST RUN AT: 14:26:37

AUTOVALU

COPY

**APPENDIX 4**  
**GEOPHYSICAL REPORT**

file: GP Windy Claims (Proj 216)  
Oct. 28, 1987

MEMORANDUM

TO: File  
FROM: P. Kowalczyk  
RE: Windy Claims Geophysics, Mag, VLF & IP, September 87

A program of geophysical work comprising IP, magnetics, and VLF was completed on the Windy Claim Group in early September. The work comprised reconnaissance IP on 200 meter line spacing over 8 lines covering the known showings and VLF and magnetics on two new lines on the northern end of the already existing grid. The rest of the grid has been surveyed with VLF and magnetics already. The new data and the old data have been merged and replotted at 1:5000 as one data set.

The work was done between September 1 to September 8. The crew stayed in Fort St. James and flew to the property by helicopter each day.

IP

A lightweight battery powered digital IP system, the BRGM IP+ , was used for this work. A Wenner array with  $a=40$  meters was chosen to provide reasonable depth penetration and speed of coverage. With the overburden conditions observed, it is felt that the survey did penetrate through the overburden and that the chargeability values seen provide a measure of the distribution of sulfides in the survey area. Some instrument problems were encountered with current leakage from the power pack causing bad readings during the first three days of the survey. This problem was identified in the field, and all suspect readings were taken again. The bad readings were discarded. The results are plotted both as contour maps of resistivity and chargeability, and as a stacked profile map with the interpretation of the IP sources sketched on.

Three anomalous areas have been identified with the IP survey. The stronger two correspond to known showings, while the third appears quite weak, and subsidiary to the main anomaly located.

One located at 9680E on Line 10200N corresponds to a known showing. This is a double peaked anomaly, characteristic of a narrow source zone between the peaks. It is interpreted to be a narrow, ribbon shaped zone, steeply dipping and not wider than 40 meters (i.e. one dipole in the Wenner array used). The chargeability observed is consistent with the amount of sulphides seen in the trenching, 5% to 10% overall. The anomaly is not seen on line 10000N to the south or line 10400N to the north. This suggests it is a relatively short zone in outcrop, although it could have a plunge and a considerable depth extent along any such plunge.

The other well defined anomaly is centered on Line 10600N at 10160E, on Line 10800N at 10160E and on line 11000N at 10120E. This anomaly corresponds to a geochemical anomaly characterized by arsenic and scattered gold values in soils. The anomaly is double peaked in the center, but has a halo of elevated chargeabilities. This suggests a zone of disseminated sulphides with a narrow (less than 40 meters

wide) zone of increased sulphides with some silicification at the center. Such a response is typical of a silicified shear zone. The zone is open at the north end of the IP survey and is consistent from line to line. Parallel to it, and much reduced in amplitude of response is a small chargeability anomaly on Line 10600N at 9900E and Line 10800N at 9880E.

The main anomaly located would probably be best tested by trenching with a bulldozer across the anomalous zone on line 10800N from 10040E to 10240E. If this is impractical an attempt should be made to at least trench across the center of the anomaly where the main NS trending source zone is inferred at 10160E. The anomaly on line 10200N at 9680E is consistent with the showing already exposed, and any further work here should be done on the geological merit of the showing, not to investigate the IP response. The small anomaly on Line 10600N at 9900E and on Line 10800N at 9880E is probably not worth testing unless the larger anomaly to the east of it proves to be of economic interest.

#### VLF

VLF EM readings were collected along 2 lines, Lines 12600N and 12800N. This extended the old grid northward. The Seattle transmitter station was used. There is no obvious correspondence between the VLF anomaly traces and the IP anomalies. The VLF anomalies are not thought to be of economic interest, although they probably indicate the regional directions of faulting. The data is presented as two maps, a stacked profile map of the inphase and quadrature, and a contoured map of the fraser filter result. The instrument used was a Geonics EM-16, and readings were taken every 20 meters.

#### MAGNETICS

Magnetic surveying was done on two lines, Lines 12600N and 12800N. This extended the old grid northwards. Readings were taken every 10 meters. The data was not tied to the old grid entirely properly, in that the levelling correction applied is not that used for the original data. However, the base station was put on the upper helipad, and the value of the reading at this location in the old data was used as the corrected value for the base station. This was not an area of high magnetic gradients, and the data is felt to be accurate to about  $\pm 20$  gammas. The data has been contoured. As the line spacing is 200 meters, and the station spacing along the line is 10 meters, the contouring is very spotty, and it is difficult to see trends. To accent these, and to reduce the spottiness, the data has been upward continued 50 meters and then a first vertical derivative calculated. This contour map is also presented. This approximates an airborne 1st vertical derivative map. Magnetic bodies lie under areas of higher values, and the zero contour marks the edges of the magnetic units.

The IP anomaly on Line 10200N at 9680E appears to lie on the east edge of a linear feature trending about 020 true. This is probably a rock unit. The other, larger IP anomaly on lines 10600N, 10800N and 11000N appear to lie in a magnetic low. This could be an intrusive stock, or an altered area, although this is a very optimistic interpretation of the magnetic data.

Peter Kowalczyk  
*Peter Kowalczyk*

encl: 1:5000 IP chargeability, contoured  
1:5000 IP resistivity, contoured



1:5000 IP stacked profiles, with interpretation  
1:5000 IP posted values  
1:5000 VLF stacked profiles  
1:5000 VLF fraser filtered data  
1:5000 VLF posted inphase & quadrature  
1:5000 Magnetics, posted  
1:5000 Magnetics, contoured  
1:5000 magnetics, upwards continued 50m, 1st vert. der.

**APPENDIX 5**  
**COST STATEMENT**

## STATEMENT OF EXPENDITURES

The following expenditures were incurred for a geological, geophysical and geochemical exploration programme on the Windy 1, 2, and 5 mineral claims located northeast of Fort St. James, B.C. during September, 1987. The expenditures are to be applied to the Windy 1-5 mineral claims.

1. Labour* (Salaries and Benefits)	\$ 9,925.00
2. Motel and Meals	2,000.00
3. Transportation	
a) 7 airfares-Vancouver to Prince George	2,022.00
b) Vehicle Rental:	
i) mini-van - 8 days	500.00
ii) 4x4 pick-up - 6 days	510.00
c) Helicopter - 12.1 hours	6,370.00
4. Geological Supplies	500.00
5. Assay Charges**	1,128.00
6. TD-15 Bulldozer 86.9 hours @ \$68/hour	5,912.00
7. Report Preparation	5,000.00
8. Freight - Equipment and Samples	<u>1,016.00</u>
	<b>\$34,883.00</b>

### \* Labour (Salaries and Benefits)

W. Pentland-Geologist	- 5 days @ \$300/day
R. MacRae-Geologist	- 6 days @ \$300/day
S. Price-Geologist	- 14 days @ \$150/day
R. Cannon-Geophysicist	- 4 days @ \$275/day
P. Kowalczyk-Geophysicist	- 4 days @ \$275/day
M. Smith-Geophysicist	- 8 days @ \$150/day
R. Haslinger-Labourer	- 9 days @ \$125/day

### \*\* Assay Charges

#### A. Soil Samples -

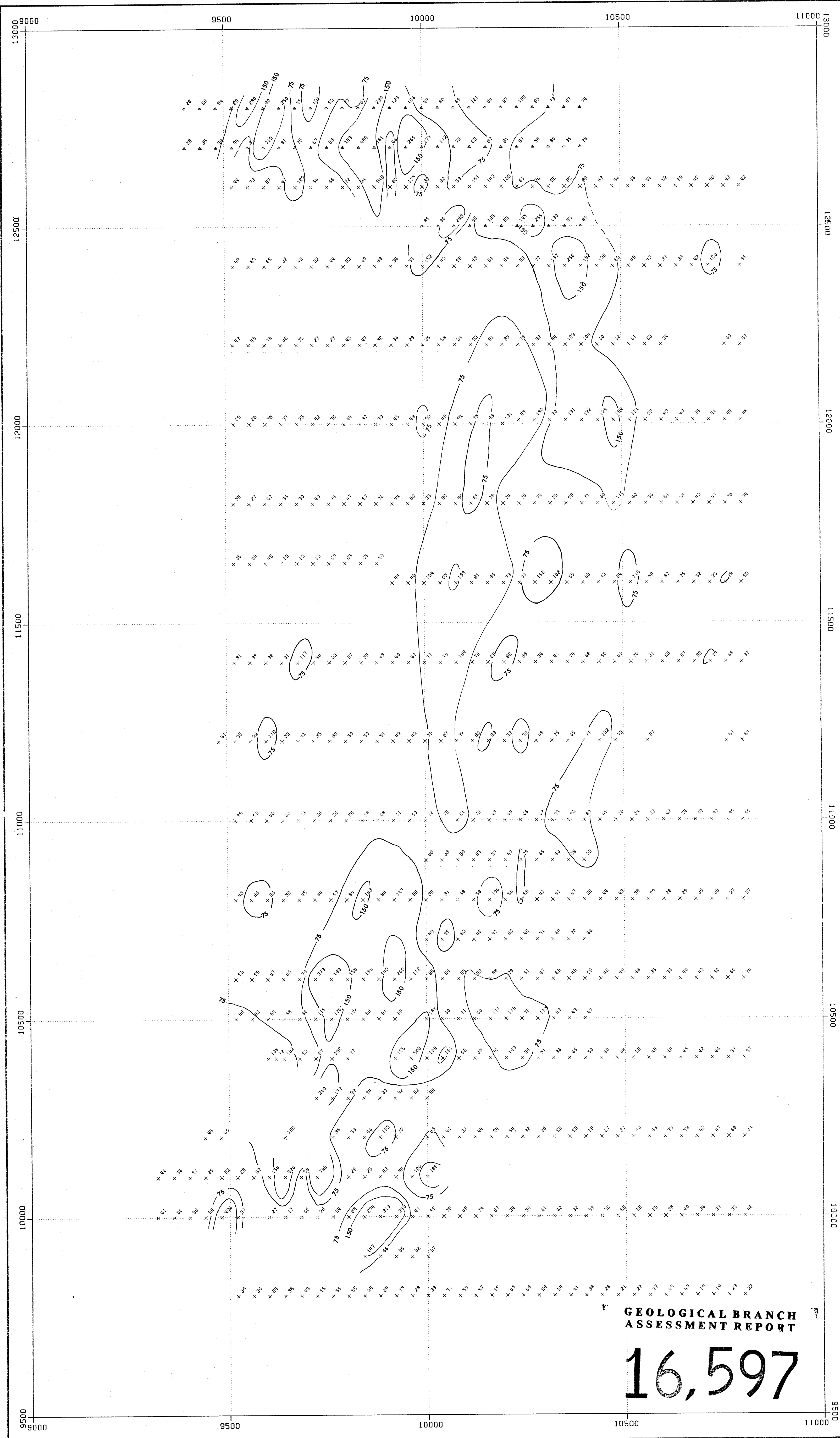
Preparation	- \$ 0.75
Digestion	- 2.00
Copper	- 0.90
Arsenic	- 0.90
Silver	- 0.90
Gold	- 5.00
	<u>\$10.45</u>

63 Soils = \$658.35

#### B. Rock Samples -

Preparation	- \$ 3.00
Digestion	- 2.00
Copper	- 0.90
Arsenic	- 0.90
Silver	- 0.90
Gold	- 5.00
	<u>\$12.70</u>

37 Rocks = \$469.90

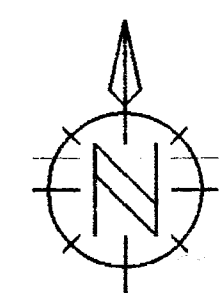


**LEGEND**

CONTOUR INTERVAL - 75 and 150 PPM Cu

DATA PLOTTED ON THIS MAP:  
 FIELD FILE  
 X POINTS: CU EXPLVY-216.GEOCHEM  
 A POINTS: CU EXPLVY-216.GEOCHEM87

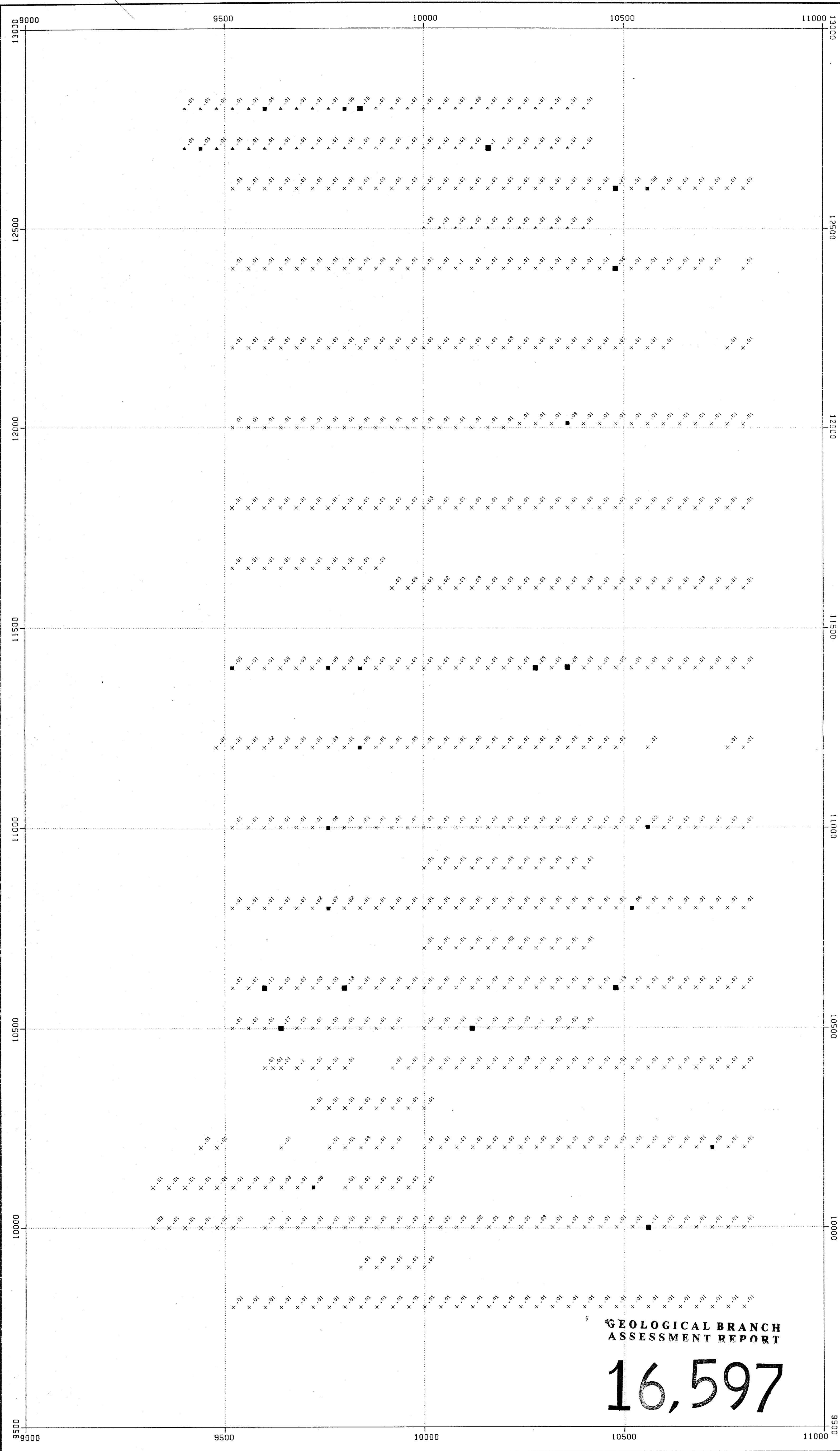
DIRECTION OF NORTH AT CENTRE OF MAP



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DRAWN RC		PLACER DOME INC.	
DATE 87/10/06		WINDY PROJECT	
SCALE 1:5000		COPPER IN SOILS	
FIGURE 9	NO.	PLATE	



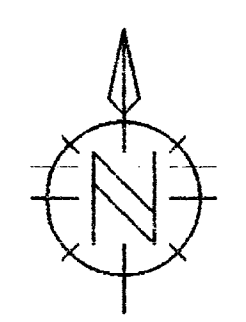
**LEGEND**

- .05-.09 PPM Au
- .10+ PPM Au

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
x POINTS:	AU	EXPL*V-216.GEOCHEM
▲ POINTS:	AU	EXPL*V-216.GEOCHEM87

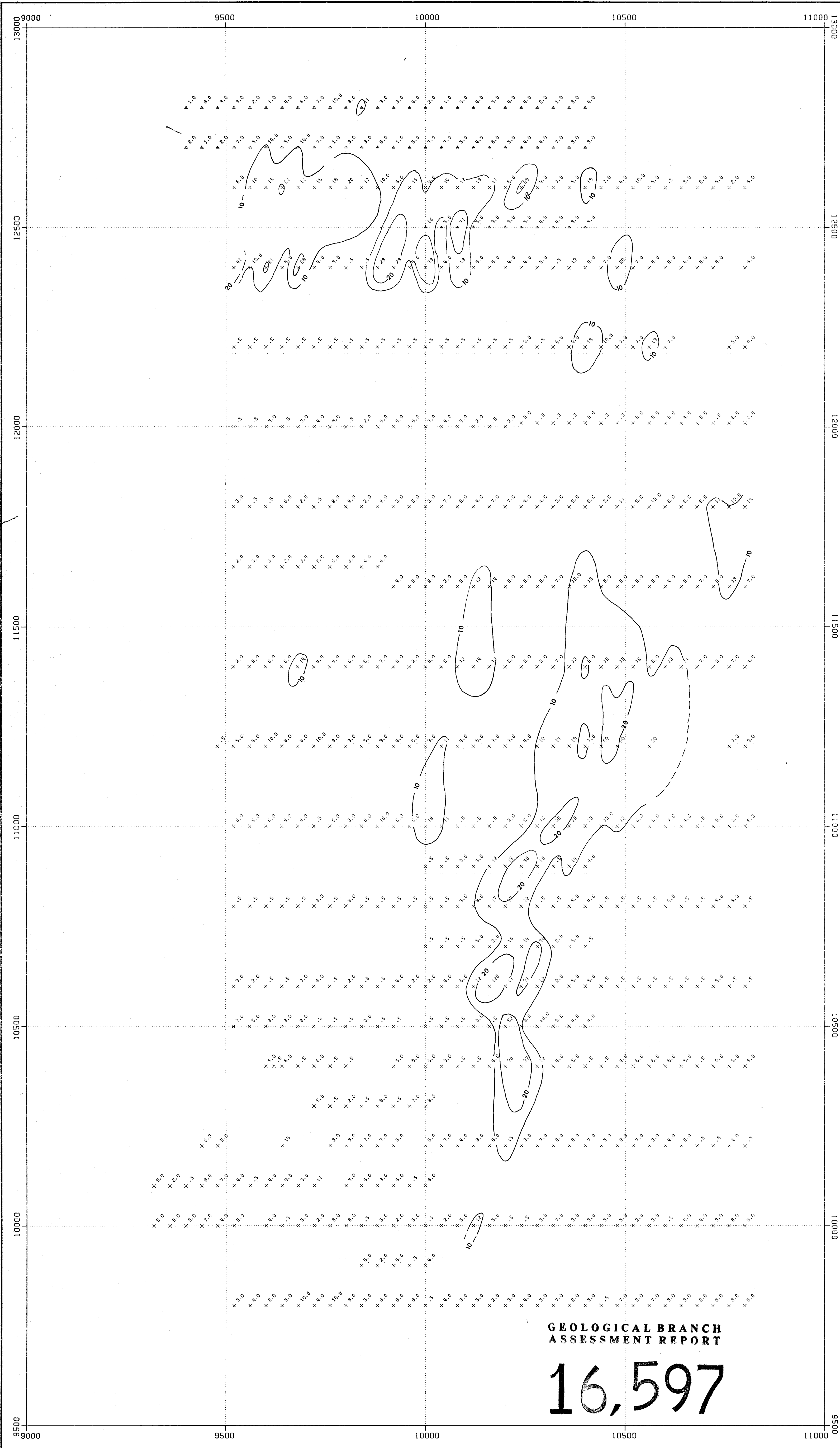
DIRECTION OF NORTH AT CENTRE OF MAP



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ASSESSMENT REPORT**

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DRAWN RC		PLACER DOME INC.	
DATE 87/10/06		WINDY PROJECT	
SCALE 1:5000		GOLD IN SOILS	
FIGURE 11	NO.	PLATE	



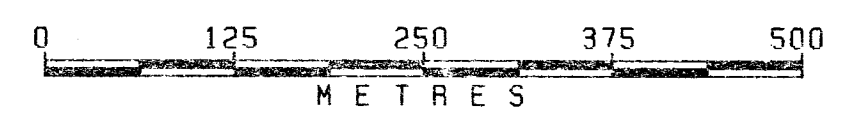
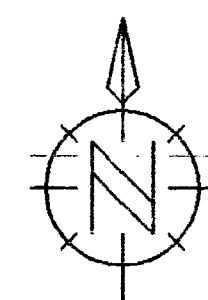
**LEGEND**

CONTOUR INTERVAL - 10 and 20 PPM As

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
x	POINTS: AS	EXPL*V-216.GEOCHEM
▲	POINTS: AS	EXPL*V-216.GEOCHEM87

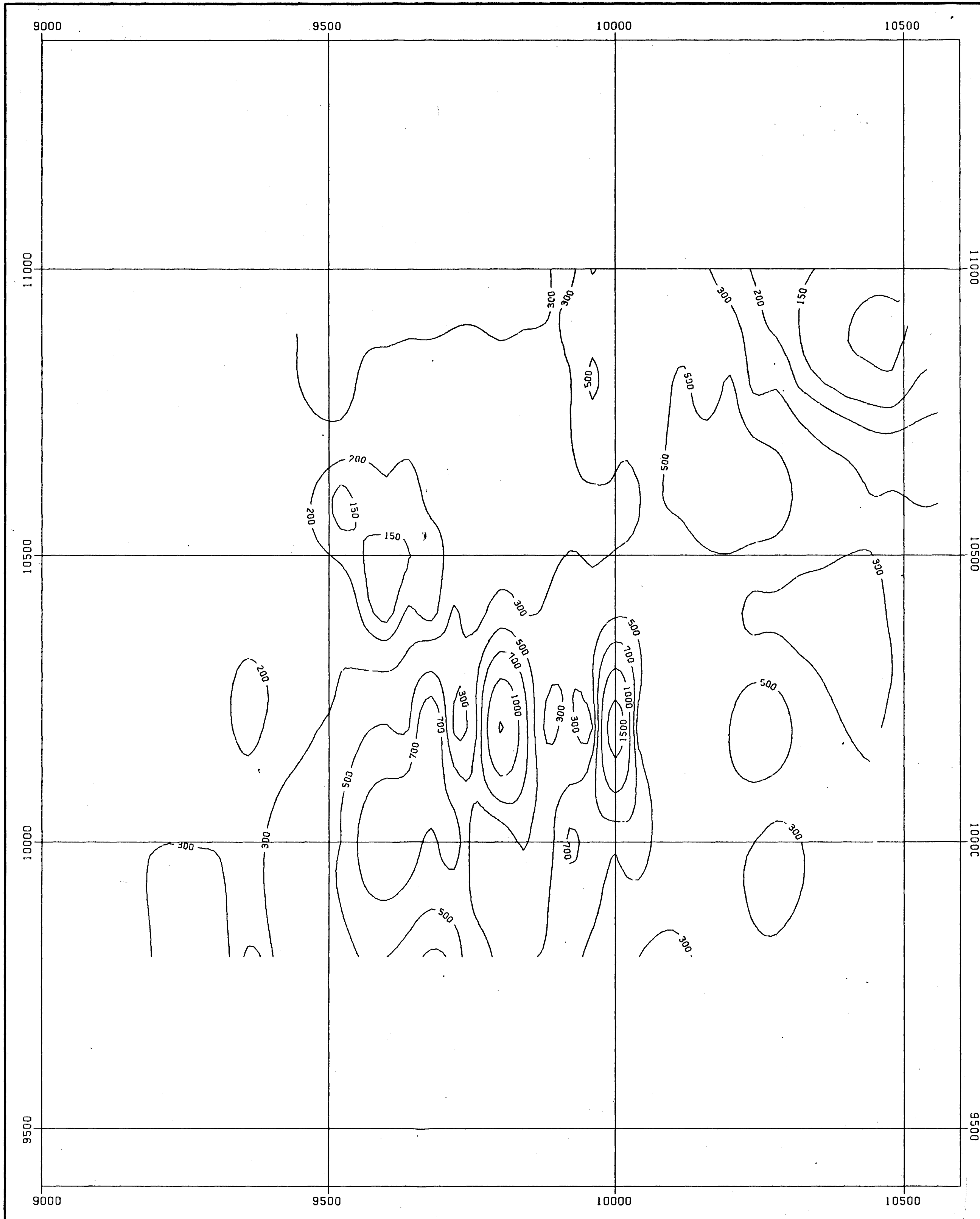
DIRECTION OF NORTH AT CENTRE OF MAP



**GEOLOGICAL BRANCH  
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DRAWN RC		PLACER DOME INC.	
DATE 87/10/06		WINDY PROJECT	
SCALE 1:5000		ARSENIC IN SOILS	
FIGURE 10	NO.	PLATE	



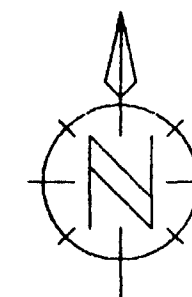
V-216 WINDY PROPERTY  
 IP RESISTIVITY (WENNER ARRAY)  
 IP+ RECONNAISSANCE SYSTEM USED  
 WENNER ARRAY PROFILING A=40M.  
 RESISTIVITY PLOTTED IN OHM-M.

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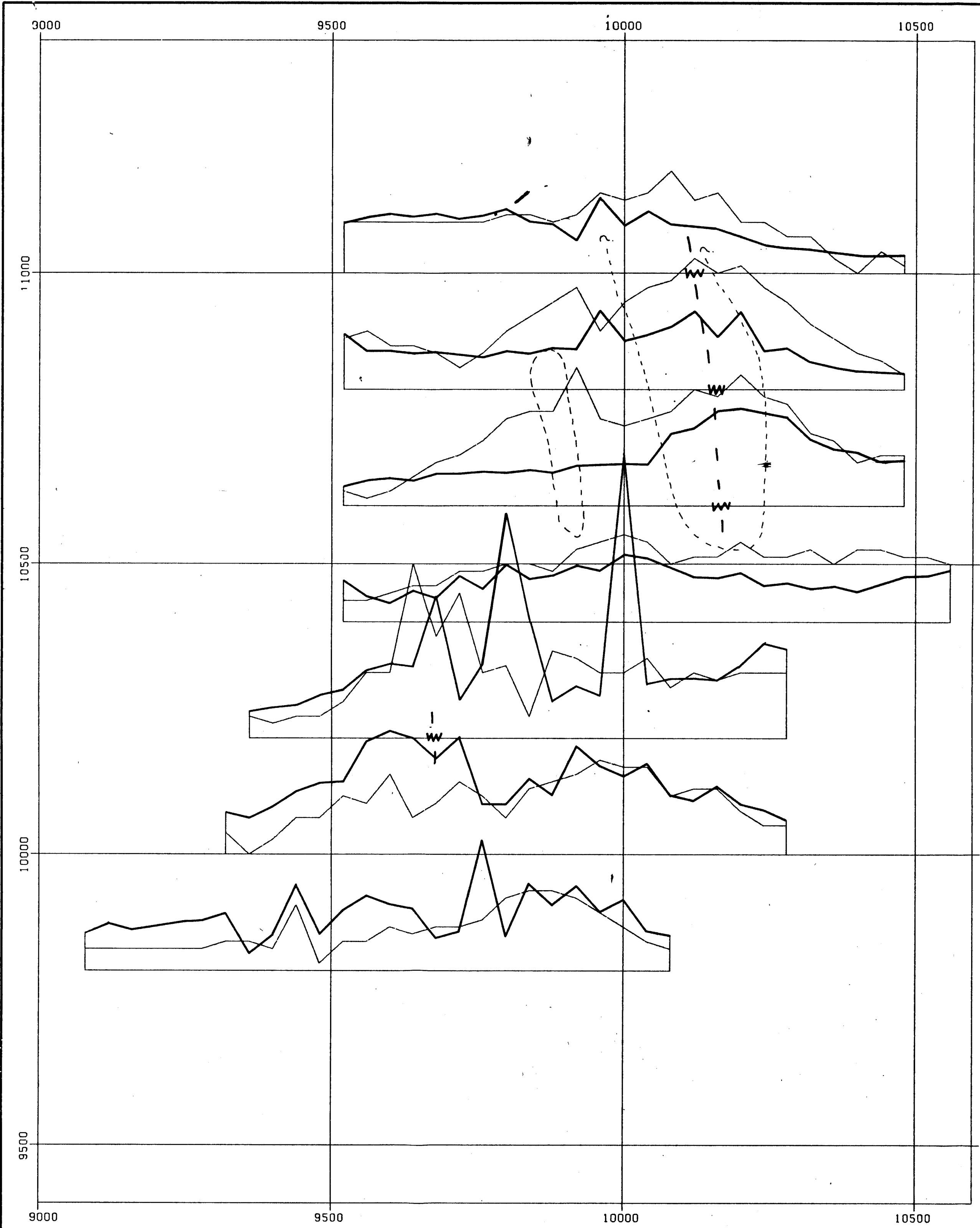
**16,597**

DATA PLOTTED ON THIS MAP:

FIELD FILE  
 CONTOURS: RHO GRID RHO







<b>PLACER DOME INC.</b>	
DRAWN PLK	V-216 WINDY PROPERTY
DATE 87:10:30	IP RESISTIVITY (WENNER ARRAY)
SCALE 1:5000	
FIGURE 15.	NO. PLATE



V-216 WINDY PROPERTY  
IP PROFILES (WENNER ARRAY)

IP+ RECONNAISSANCE SYSTEM USED  
WENNER ARRAY PROFILING A=40M.  
RESISTIVITY PLOTTED IN OHM-M.  
CHARGEABILITY PLOTTED IN MSEC.

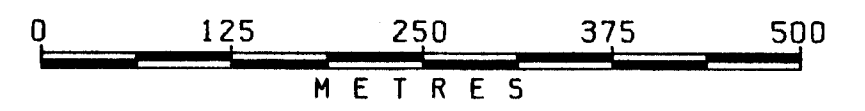
-  STEEPLY DIPPING DIKE LIKE  
IP RESPONSE < 40 M. WIDE
-  DISSEMINATED IP RESPONSE  
SULPHIDE APROX. 1 TO 2
-  RESISTIVITY
-  CHARGEABILITY

DATA PLOTTED ON THIS MAP:

	FIELD	FILE
PROFILES:	RHU	IP RHO
SCALE:	200	UNITS / CM
BASE LEVEL:	0.0	
PROFILES:	MSEC	IP MSEC
SCALE:	4.0	UNITS / CM
BASE LEVEL:	0.0	

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DRAWN		PLK	PLACER DOME INC.
DATE		87:10:30	V-216 WINDY PROPERTY
SCALE		1:5000	IP PROFILES (WENNER ARRAY)
FIGURE		14.	NO. PLATE



V-216 WINDY PROPERTY  
IP POSTED DATA (WENNER ARRAY)

IP+ RECONNAISSANCE SYSTEM USED  
WENNER ARRAY PROFILING A=40M.  
RESISTIVITY PLOTTED IN OHM-M.  
CHARGEABILITY PLOTTED IN MSEC.

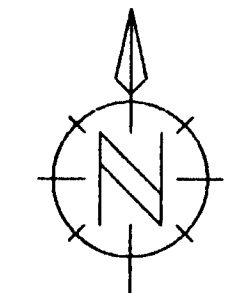
RESISTIVITY ABOVE DATA POINT  
CHARGEABILITY BELOW DATA POINT

**GEOLOGICAL BRANCH  
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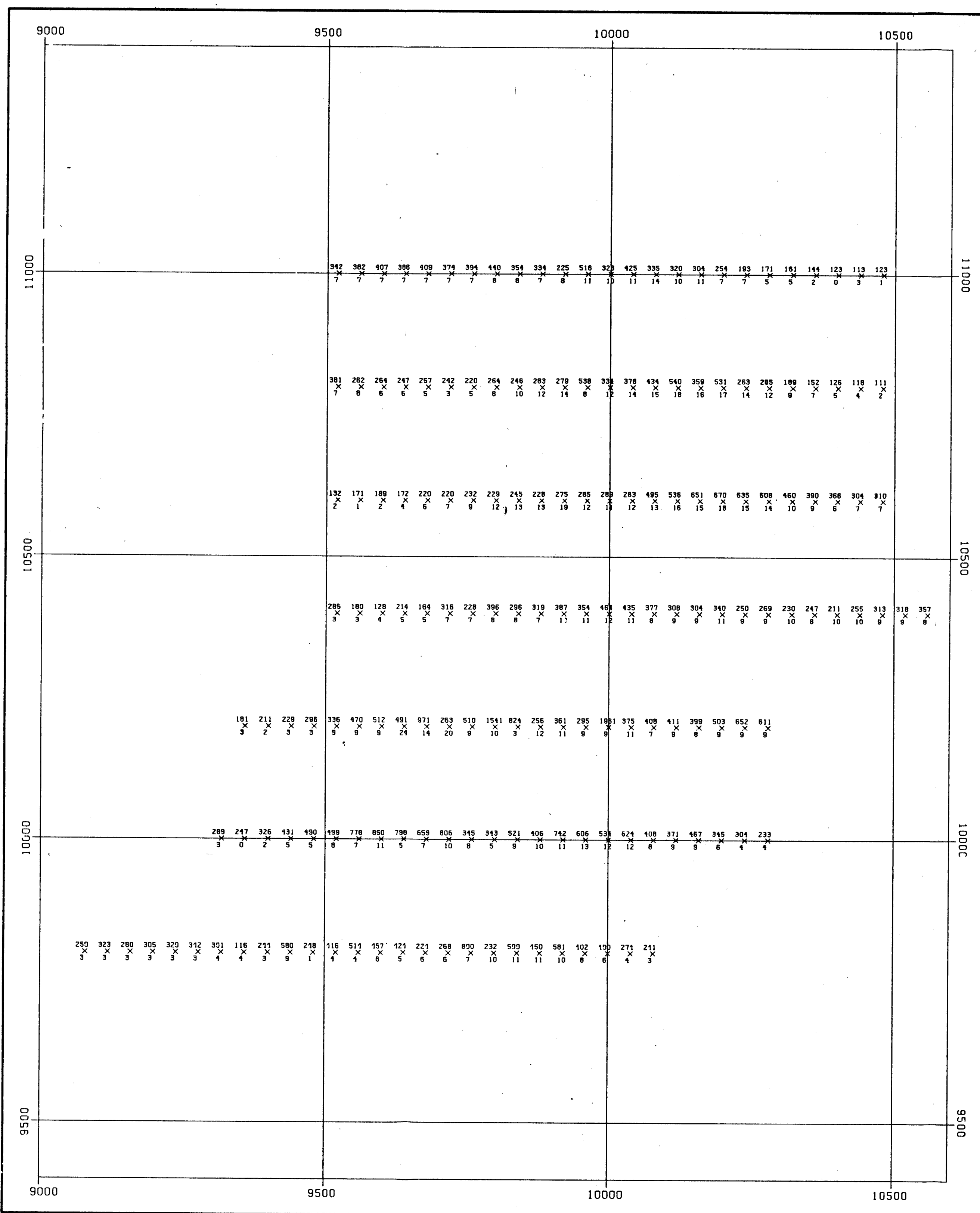
**16,597**

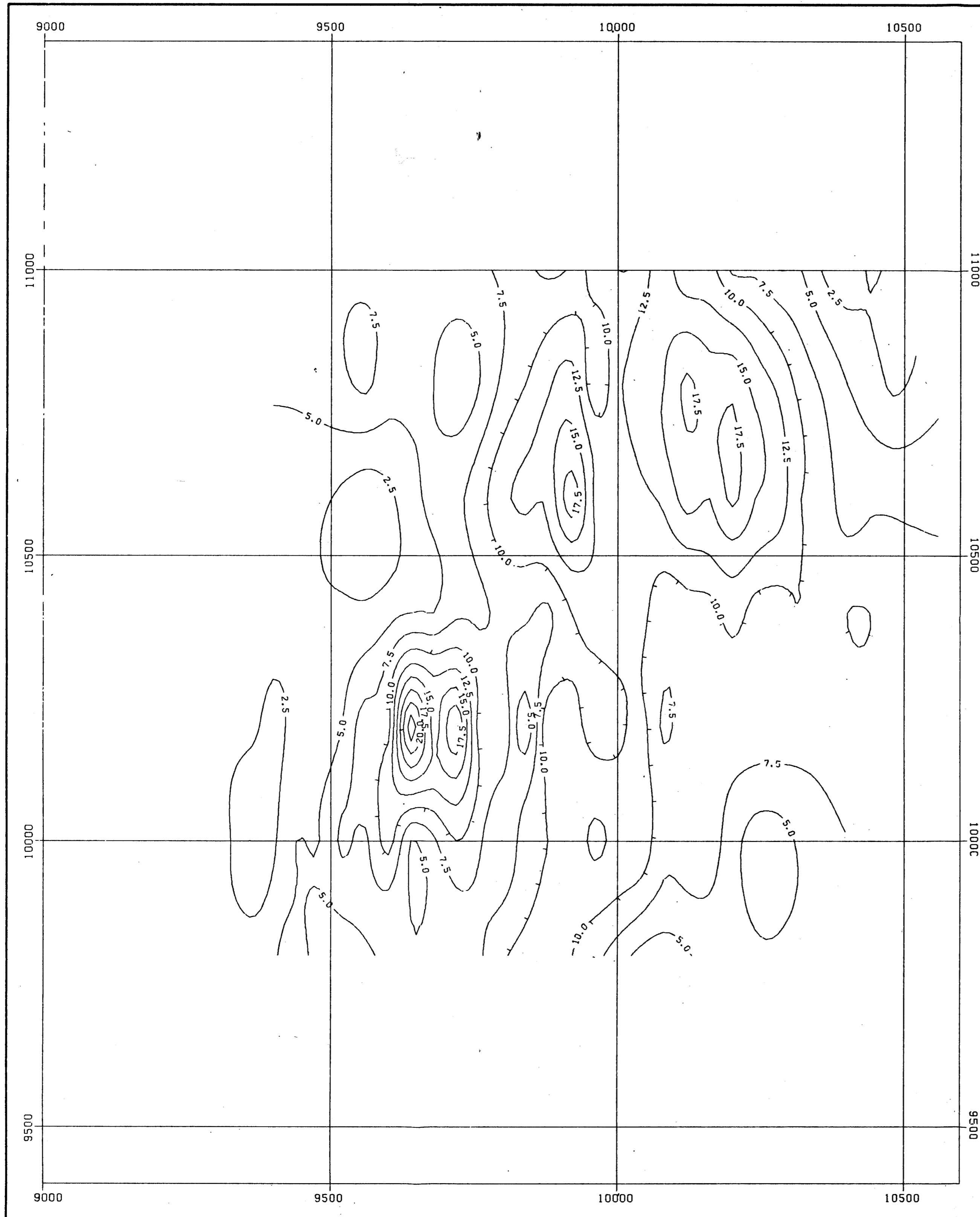
DATA PLOTTED ON THIS MAP:

FIELD FILE  
X POINTS: RHO IP S



DRAWN		PLK	PLACER DOME INC.	
DATE		87:10:30	V-216 WINDY PROPERTY	
SCALE		1:5000	IP POSTED DATA (WENNER ARRAY)	
FIGURE		13.	NO.	PLATE

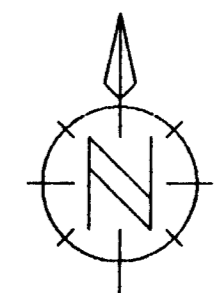




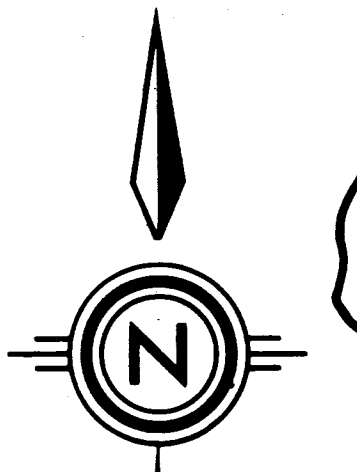
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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DATA PLOTTED ON THIS MAP:  
 DIRECTORY: /PLACER1 IE/EXPL/WINDY/GP  
 FIELD FILE  
 CONTOURS: MSEC GRID MSEC



PLACER DOME INC.	
WINDY PROPERTY CONTOURED IP (CHARGEABILITY)	
DRAWN PLK	
DATE 87:11:19	
SCALE 1:5000	
FIGURE 12.	NO. _____ PLATE _____

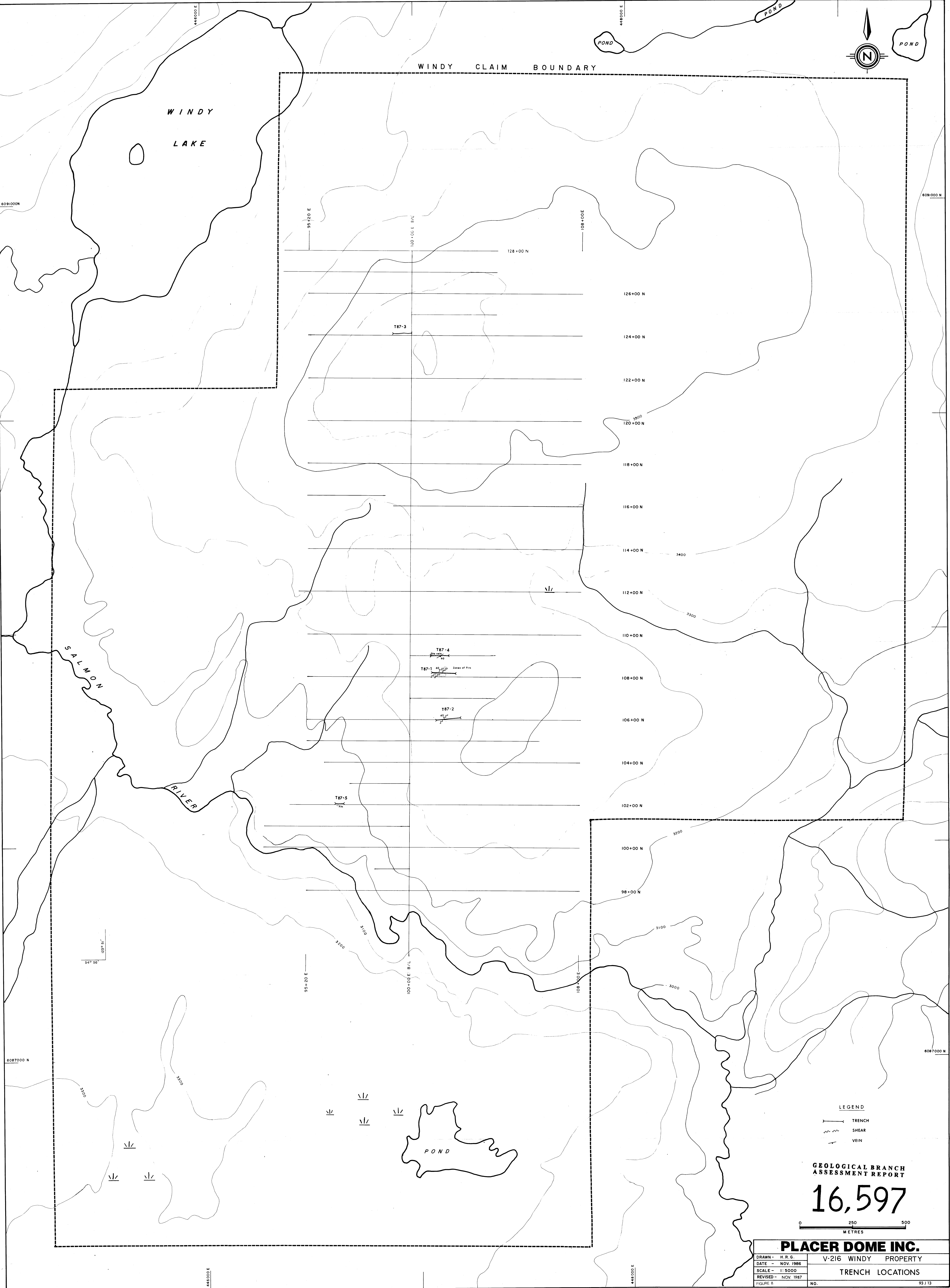


WINDY CLAIM BOUNDARY

WINDY LAKE

SALMON RIVER

POND

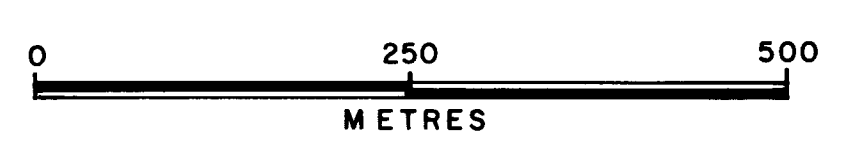


LEGEND

- TRENCH
- SHEAR
- VEIN

GEOLOGICAL BRANCH ASSESSMENT REPORT

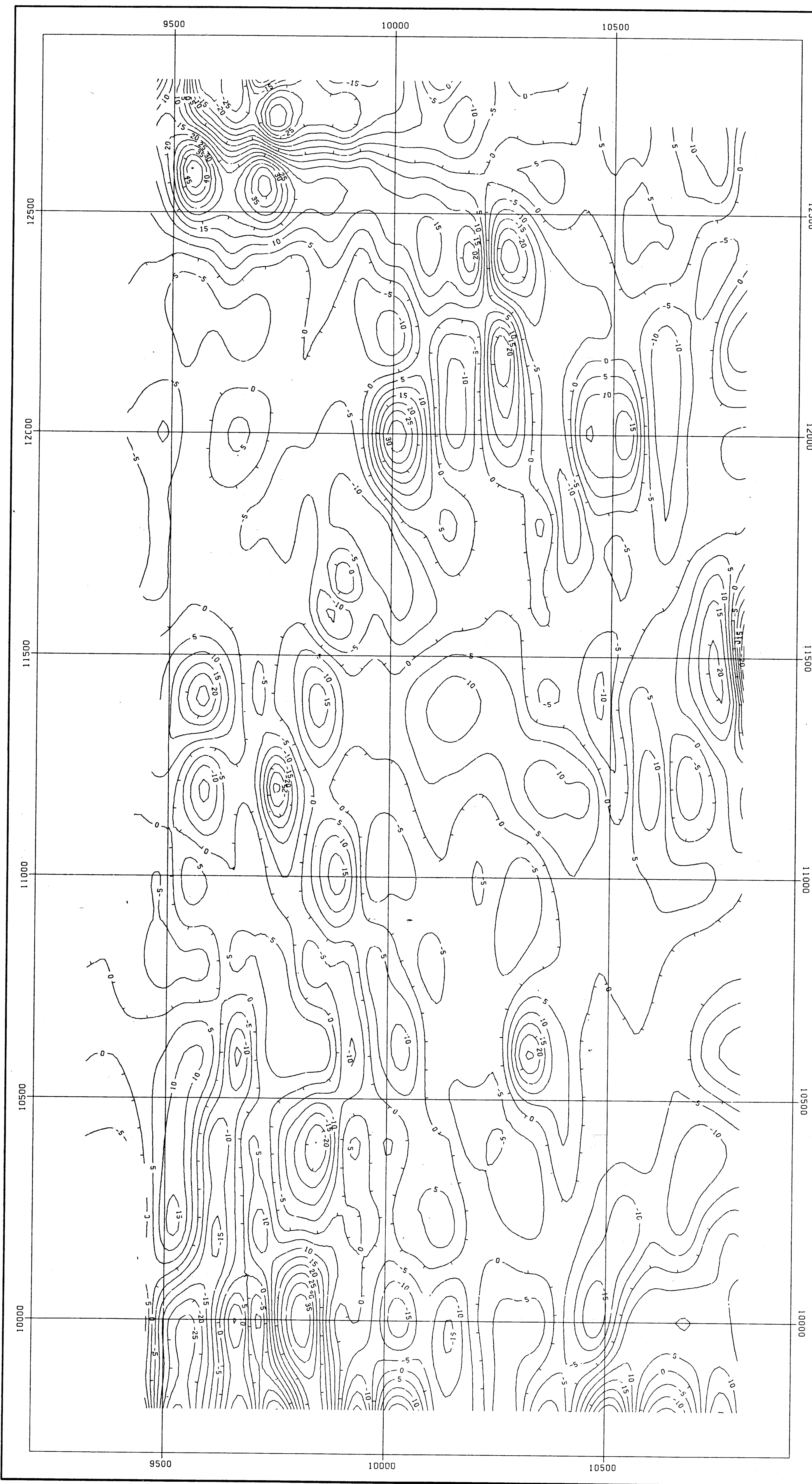
16,597



PLACER DOME INC.

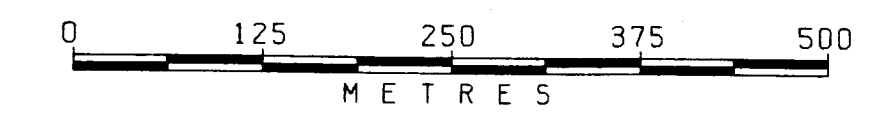
DRAWN - H.R.G.	V-216 WINDY PROPERTY
DATE - NOV. 1986	
SCALE - 1:5000	TRENCH LOCATIONS
REVISED - NOV. 1987	
FIGURE 8	NO. 93/13

V-216 WINDY PROPERTY MAGNETICS  
TRANSFORMED UP 50M 1ST VERTICAL  
UPWARD CONTINUED 50 METERS  
1ST VERTICAL DERIVATIVE COMPUTED

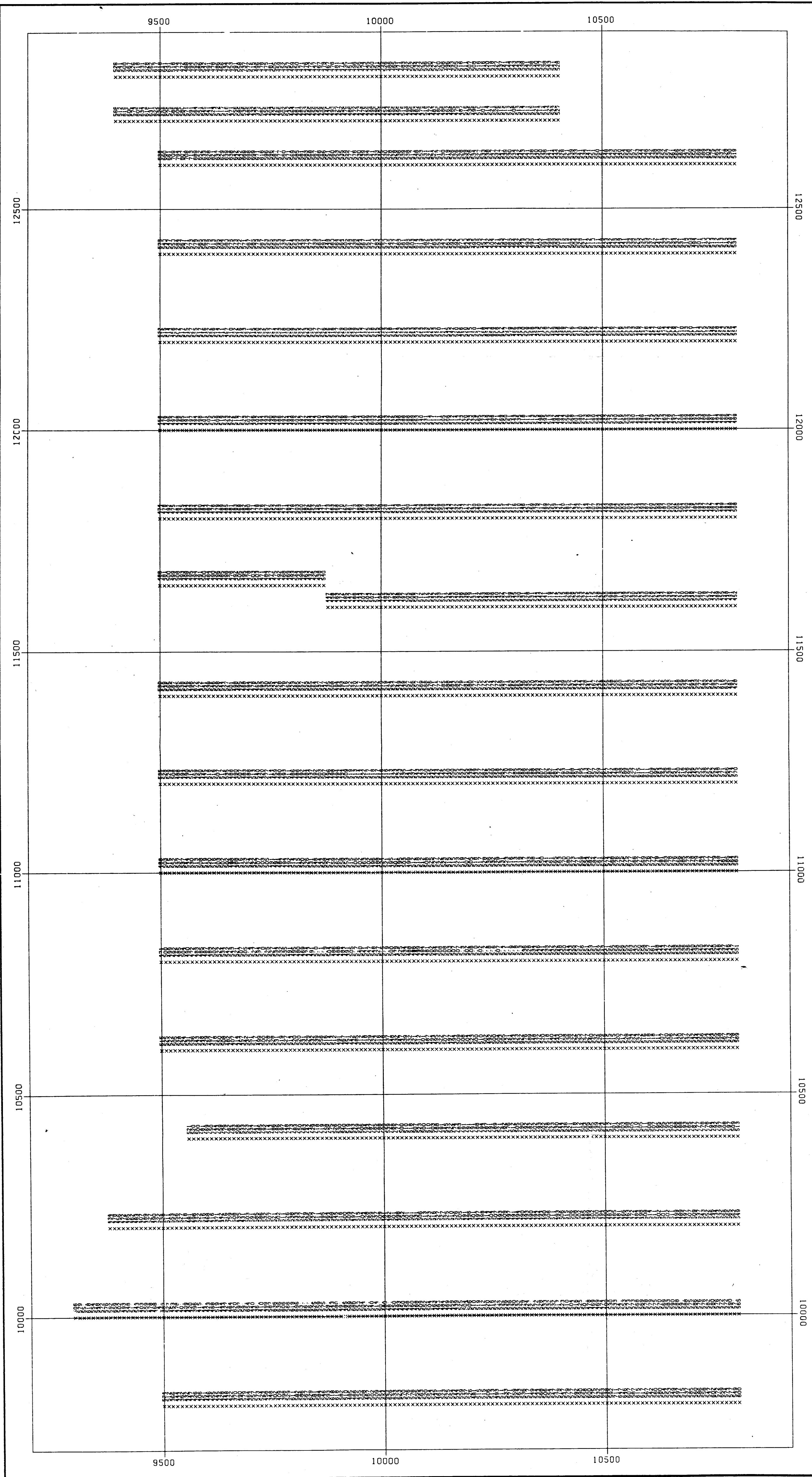


DATA PLOTTED ON THIS MAP:  
FIELD FILE  
CONTOURS: MAG GRID MAGUP  
**GEOLOGICAL BRANCH  
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DRAWN PLK		V-216 WINDY PROPERTY MAGNETICS	
DATE 87:09:10		TRANSFORMED UP 50M 1ST VERTICAL	
SCALE 1:5000			
FIGURE 18	NO.	PLATE	



V-216 WINDY PROPERTY  
TOTAL FIELD MAGNETICS (POSTED)

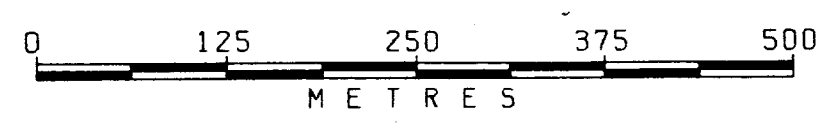
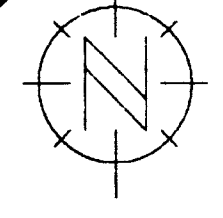
1986 AND 1987 DATA ARE BOTH ON  
THIS PLAN.

INSTRUMENT USED: G856 MEMORY  
MAGNETOMETERS. BASE STATION  
CORRECTED. 58000 NANOTESLA  
HAS BEEN SUBTRACTED FROM THE  
RAW DATA BEFORE POSTING.

DATA PLOTTED ON THIS MAP:  
DIRECTORY: /PLACER1 IE/EXPL/WINDY/GP

FIELD FILE  
X PUNIS: MAG MAG S ALL  
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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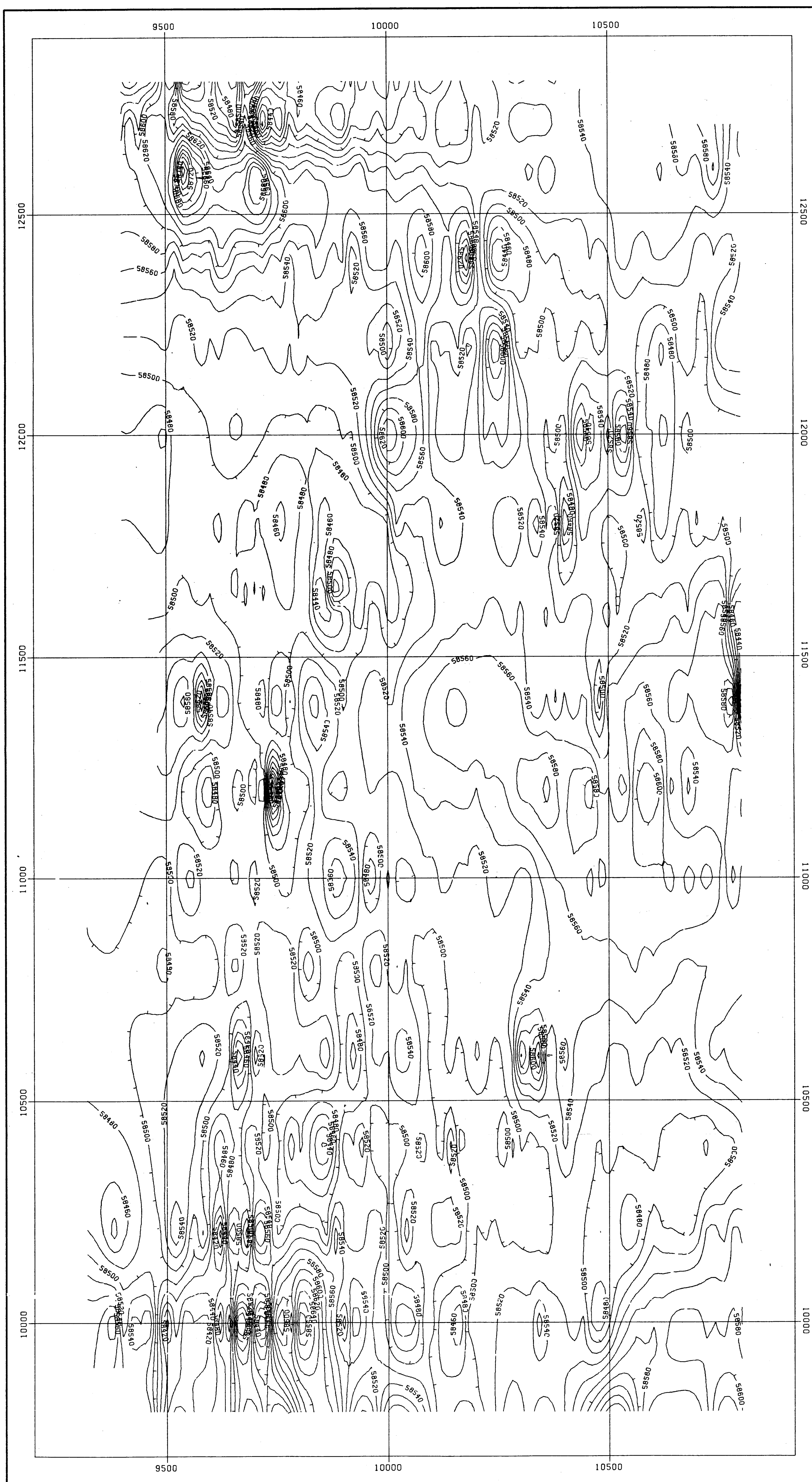
DRAWN PLK		PLACER DOME INC.	
DATE 87:11:20		V-216 WINDY PROPERTY	
SCALE 1:5000		TOTAL FIELD MAGNETICS (POSTED)	
FIGURE 17	NO.	PLATE	

V-216 WINDY PROPERTY  
TOTAL FIELD MAGNETICS

1986 AND 1987 DATA HAVE BEEN  
MERGED TO PRODUCE THIS PLOT

INSTRUMENTS USED: GEOMETRICS  
G856 MEMORY MAGNETOMETERS

THE DATA IS BASE STATION  
CONTROLLED, WITH READINGS  
10 M APART ON LINES 200 M APART



DATA PLOTTED ON THIS MAP:  
FIELD FILE  
CONTOURS: MAG GRID MAG

**GEOLOGICAL BRANCH  
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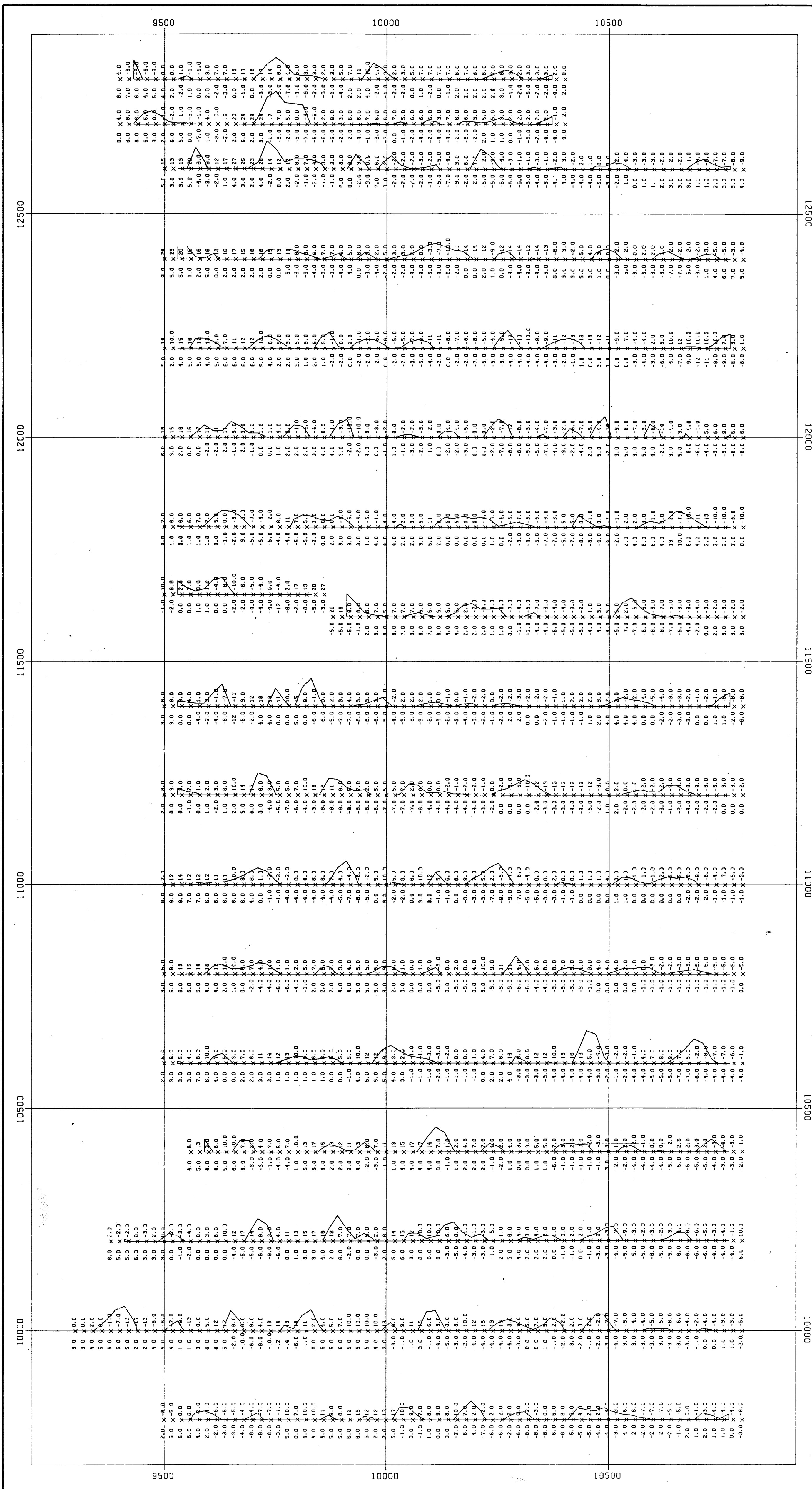
DRAWN PLK		PLACER DOME INC.	
DATE 87:09:10		V-216 WINDY PROPERTY	
SCALE 1:5000		TOTAL FIELD MAGNETICS	
FIGURE 16.	NO.		PLATE

V-216 WINDY PROPERTY  
VLF (FRASER FILTER PROFILED)

1986 AND 1987 DATA ARE BOTH ON THIS PLAN.

INSTRUMENT USED: GEONICS EM16  
STATION USED: SEATTLE WASH.

POSTIVE FRASER FILTER VALUES HAVE BEEN PROFILED. DATA POSTED ABOVE THE LINE IS DIP ANGLE. THAT BELOW IS QUADRATURE



DATA PLOTTED ON THIS MAP:  
DIRECTORY: /PLACER1 IE/EXPL/WINDY/GP

FIELD FILE  
PROFILES: IP VLF S ALL  
SCALE: 20.0 UNITS / CM  
BASE LEVEL: 0.0  
FRASER FILTER APPLIED  
X POINTS: IP VLF S ALL

**GEOLOGICAL BRANCH  
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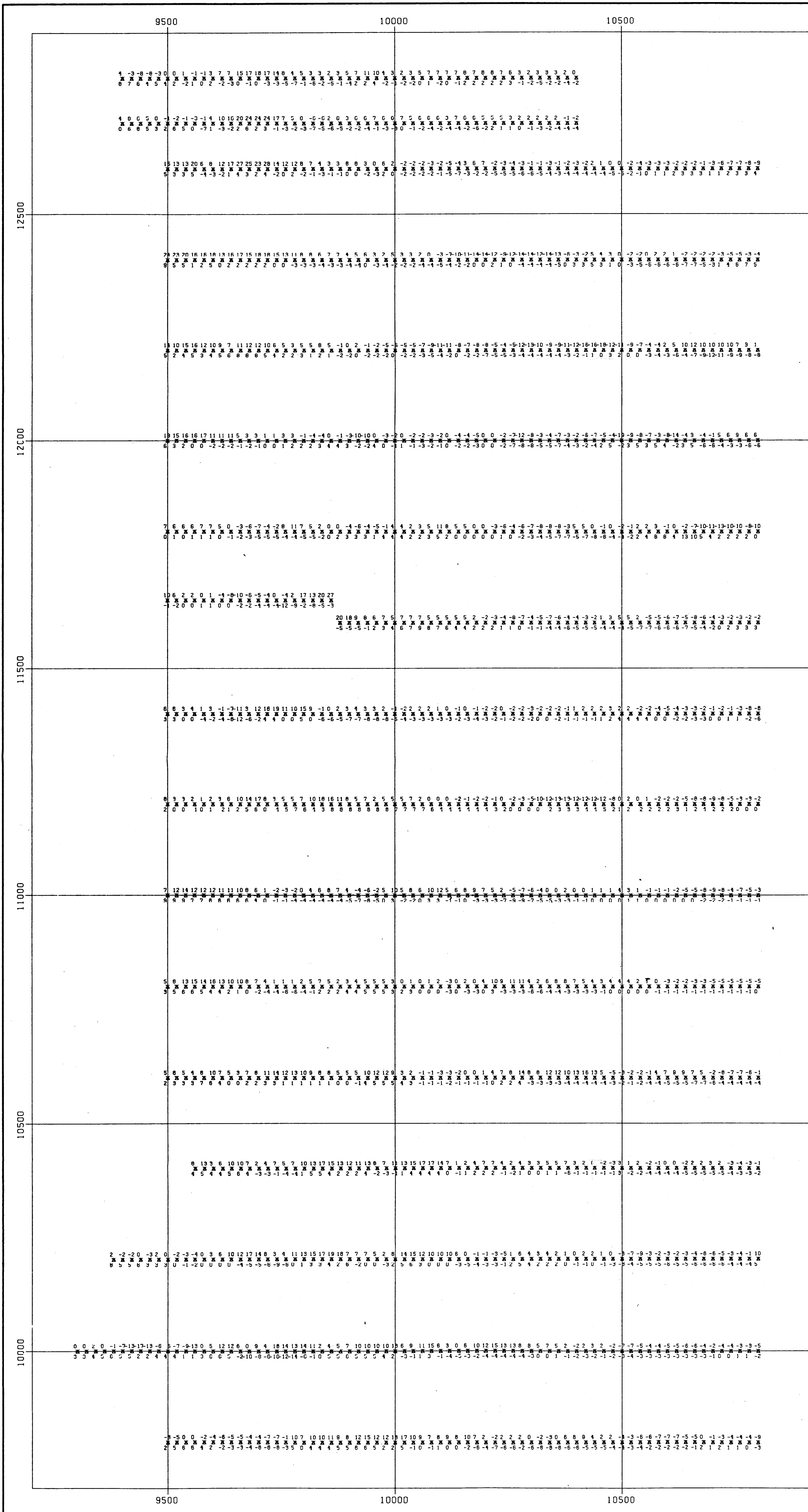
DRAWN		PLK		V-216 WINDY PROPERTY	
DATE		87:11:20		VLF (FRASEP FILTER PROFILED)	
SCALE		1:5000			
FIGURE	21	NO.		PLATE	

V-216 WINDY PROPERTY  
VLF (SEATTLE) POSTED VALUES

1986 1987 DATA ARE BOTH ON  
THIS PLAN.

INSTRUMENT USED: GEONICS EM16

INPHASE IS POSTED ABOVE THE LINE  
QUADRATURE BELOW THE LINE



DATA PLOTTED ON THIS MAP:

FIELD FILE  
X PUNIS: 1P VLF S ALL  
A PUNIS: QUAD VLF S ALL

**GEOLOGICAL BRANCH  
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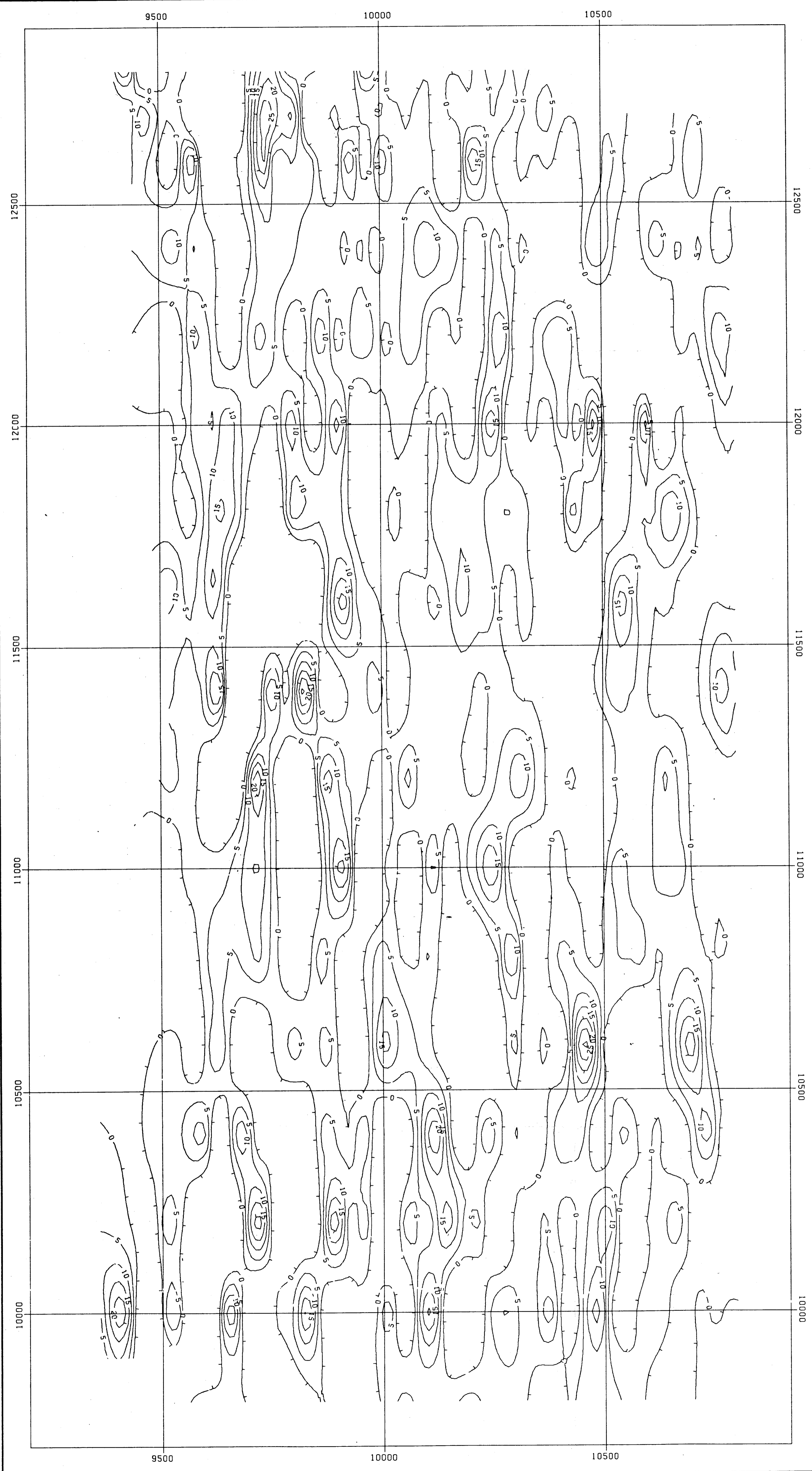
0 125 250 375 500  
METRES

DRAWN		PLK	PLACER DOME INC.
DATE		87:10:30	V-216 WINDY PROPERTY
SCALE		1:5000	VLF (SEATTLE) POSTED VALUES
FIGURE	20	NO.	PLATE



V-216 WINDY PROPERTY  
VLF FRASER FILTER (SEATTLE)

1986 AND 1987 DATA HAVE BEEN  
MFRGFD TO PRODUCE THIS PLOT  
ONLY POSITIVE FRASER FILTER  
VALUES ARE CONTOURED  
TRANSMITTER: NLK (SEATTLE)  
RECEIVER: GONICS FM-16



DATA PLOTTED ON THIS MAP:

FIELD FILE  
CONTOURS: FT GRID FT

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

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DRAWN		PLK	PLACER DOME INC.
DATE		87:09:10	V-216 WINDY PROPERTY
SCALE		1:5000	VLF FRASER FILTER (SEATTLE)
FIGURE	19	NO.	PLATE