

87-195-16002

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,000~~00~~2

REPORT ON

THE 1986 FIELD PROGRAM
FOR THE MUSTANG MINERAL CLAIM GROUP:

MUSTANG 1, 2 AND 3 (4671, 4672, 4673)

YUZKLI AND MUSTANG CREEKS AREA
CARIBOO MINING DIVISION, BRITISH COLUMBIA
N.T.S. MAP AREA 93H/4W

LATITUDE 53 DEGREES ^{11.5}~~12~~ MINUTES
LONGITUDE 121 DEGREES 46 MINUTES

Prepared for:
Owner: *G. Reidmann*

Operator: CANDORADO MINES LTD.
302 - 543 Granville Street
Vancouver, B.C.
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PRINCE GEORGE

87-195-16002



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)

GEOPHYSICAL; GEOCHEMICAL

TOTAL COST

\$74425.63

AUTHOR(S): Wayne Ash
Kenneth Embree

SIGNATURE: *Wayne Ash*
Kenn Embree

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED

March 19, 1987

YEAR OF WORK 1986

PROPERTY NAME(S)

COSALITE

COMMODITIES PRESENT

Pb

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

93H-32

MINING DIVISION

Cariboo

NTS

93 H/4W

LATITUDE

53°11.5'

LONGITUDE

121°46'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property (Examples: TAX 14, FIRE 2 (12 units), PHOENIX (Lot 1706), Mineral Lease M 123, Mining or Certified Mining Lease ML 12 (claims involved)):

MUSTANG 1 (8 units), MUSTANG 2 (12 units), MUSTANG 3 (10 units)

OWNER(S)

(1) GERHARD REIDMANN

(2)

MAILING ADDRESS

302-543 Granville St. Vancouver BC
V6C 1X8

OPERATOR(S) (that is, Company paying for the work)

(1) Candorado Mines Ltd.

(2)

MAILING ADDRESS

302-543 Granville St.
Vancouver, BC.
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SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Four sequences (Devonian-Mississippian phyllite; Mississippian-Permian quartzite; Mississippian-Permian quartzite; and Permian diorite, basalt gabbro and serpentinite) were folded and thrust in the Post-Permian age and later metamorphosed. Several phases of faulting provided channels for ~~resulted in~~ gold-quartz veins generally, low ~~in~~ sulphides, with quantities of

REFERENCES TO PREVIOUS WORK

12383

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground			
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	<u>MAGG</u> 60.0 km	Mustang 1,2,3	1,2600.00
Electromagnetic	<u>EMGR</u> 14.1 km HLEM	Mustang 1,2,3	8460.00
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil	<u>SOIL</u> 134; Cu, Pb, Zn, Ag, As	Mustang 1,2,3	3375.00
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)	<u>LINE</u> 83.0 km	Mustang 1,2,3	33000.00
Road, local access (kilometres)	<u>ROAD</u> 2.0 km	Mustang 1,2,3	16990.63
Trench (metres)			
Underground (metres)			
Balance - nil			TOTAL COST 874425.63

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)	CANDORADO MINES LTD.			
Value credited to PAC account			44,425.63	
Value debited to PAC account				
Accepted GO Date Jun 22/87	Rept. No. 87-195-1600Z			
				Costs are too high! for results show about 2x avg average.
				Information Class (3)

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SUMMARY

In November and December of 1986, Minore Mine Management Ltd. undertook a field exploration program of the Mustang Mineral Claim Group. During this period, a survey grid system, consisting of 83 km of base and grid line, was devised and installed. The baselines were installed at 1 km intervals, while the grid lines were installed at 200 m centres off the baselines. These lines were well flagged and marked with ribbon at 25 m stations, where samples or geophysical readings could be taken.

When the survey lines were in, soil sampling and geophysical testing was conducted. Some 134 soil samples were collected for geochemical analysis. A VLF-EM survey was conducted, but only 14.1 km of line were surveyed. Bad weather conditions, including deep snow and freezing temperatures, put an early end to the soil sampling and VLF-EM survey programs. An extensive magnetic survey was performed, but was called off just short of completion, due to weather and the approaching Christmas holiday.

The soil sampling and magnetic survey failed to locate any strongly anomalous zones. There were some high readings, but these were still too low for major concern. On the other hand, the VLF-EM survey discovered some highly anomalous areas. An examination of these anomalies indicated that, in some cases, they could be correlated from grid line to grid line, along the known strike of local geological features.

With the completion of the 1986 field program, several questions remained unanswered. In order to complete the work on the property, it is recommended that more exploration work be conducted in the summer of 1987. This proposal is in two phases. In Phase 1 it is proposed that the VLF-EM survey be continued and that it be accompanied by reconnaissance geological mapping. In Phase 2, it is proposed that trenching and sampling be conducted in the areas deemed interesting by Phase 1. The total cost of the proposals is estimated at \$44,550.00.

INTRODUCTION

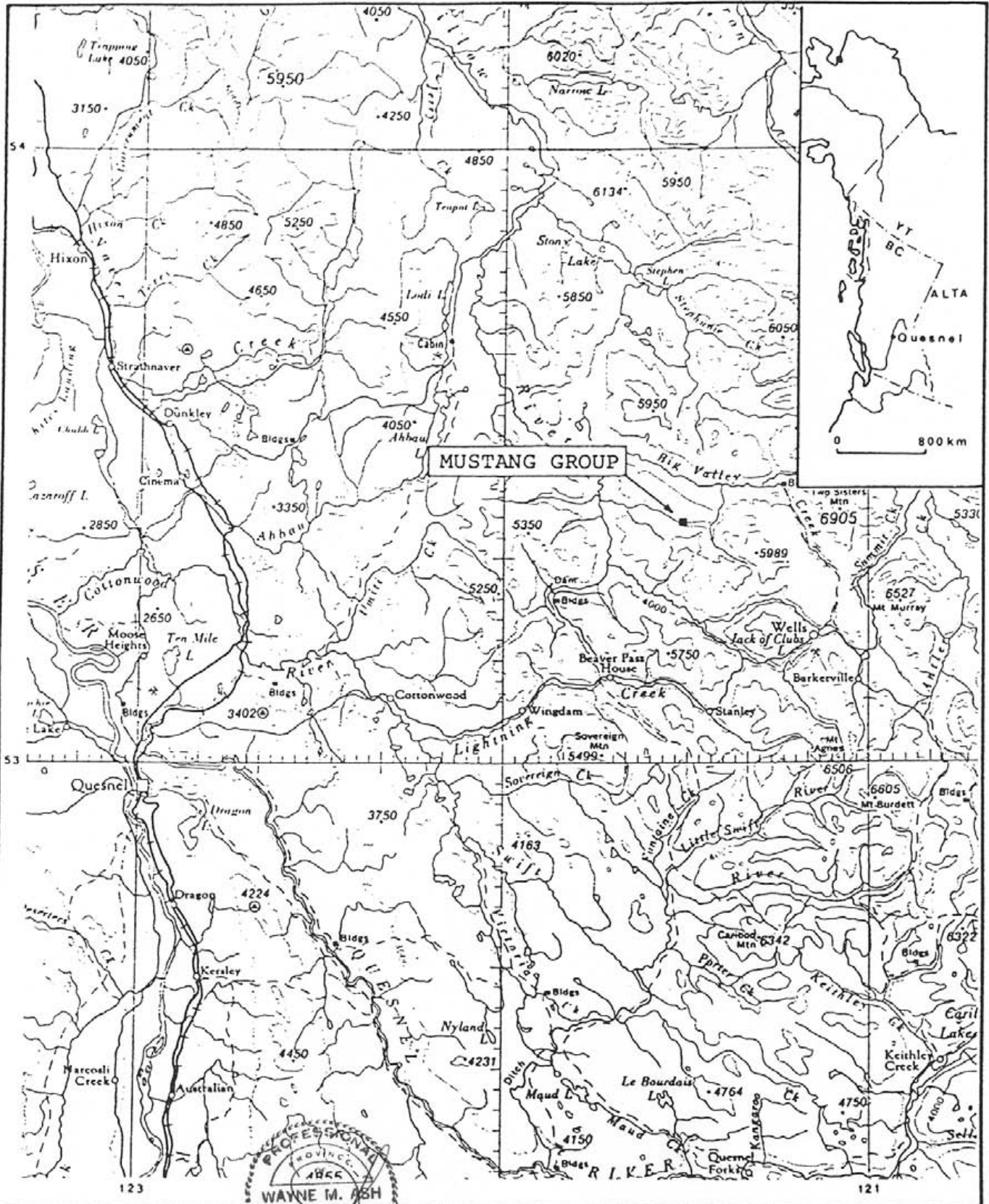
This report was prepared at the request of the Directors of Candorado Mines Ltd., of 302 - 543 Granville Street, Vancouver, B.C. This request concerns assessment work carried out by Minore Mine Management Ltd. on the Mustang Mineral Claim Group.

The Mustang Claims are located northwest of Wells, B.C. and consist of three large claims totalling approximately 1,300 hectares of land area. During the fall of 1986, soil and geophysical surveys were conducted on these claims, the results of which are the subject of this report. The majority of the work was carried out after a layer of snow had fallen and therefore limited soil sampling and no geological reconnaissance mapping was undertaken.

Due to adverse weather conditions the soil sampling and VLF surveys were curtailed and only the grid survey and magnetometer survey were completed. A recommendation for additional work totalling an expenditure of \$44,550.00 is proposed.

LOCATION AND ACCESS

The claims are situated 16 kilometers northwest of Wells, British Columbia (Figure 1), just south of Big Valley River, at approximately 53 degrees 12' latitude and 121 degrees 46' longitude. The National Topographic System map sheet for the area is 93H/4. The property is accessed on the east side by road near the confluence of Mustang and Sugar Creeks, 1½ kilometers east of the property. Two roads can be used to reach this point, the better of these being the Beaver Pass route which branches northwest off Highway 26, the Quesnel-Barkerville Highway. The turn off is situated about 25 kilometers west of Wells. The access road, for the most part, is a gravelled logging road in very good condition which extends 40 kilometers north and east to a point where Sugar Creek joins Big Valley Creek. From this point a 4x4 bush road, which was roughed out many years ago and completed in 1983, follows Sugar and Mustang Creek to Yuzkli Lake in the north central part of the property.



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Scale 1:500,000

0 10 km

FIGURE 1

CANDORADO MINES LTD.

MUSTANG GROUP

LOCATION MAP

There are several meadows in the valley of Yuzkli and Mustang Creeks where helicopters may land. Further, a float plane could land on Yuzkli Lake. An abandoned mining road also reaches Mustang Creek via Wells and Hardscrabble Creek. This route is about 15 kilometers long, but is presently not passable due to washouts.

PHYSIOGRAPHY AND CLIMATE

In general, the topography of the area is mountainous and the relief on the property ranges from 1,200 m to 1,625 m. Two major mountain ridges trending east-west pass through the property. The access road to the property is between the two ridges, the Mustang Creek Valley, on the central claim. Valley walls on the property slope steeply and in some localities approach 75% (or 37 degrees). The upland areas tend to be low in relief, making traversing in these locations relatively easy.

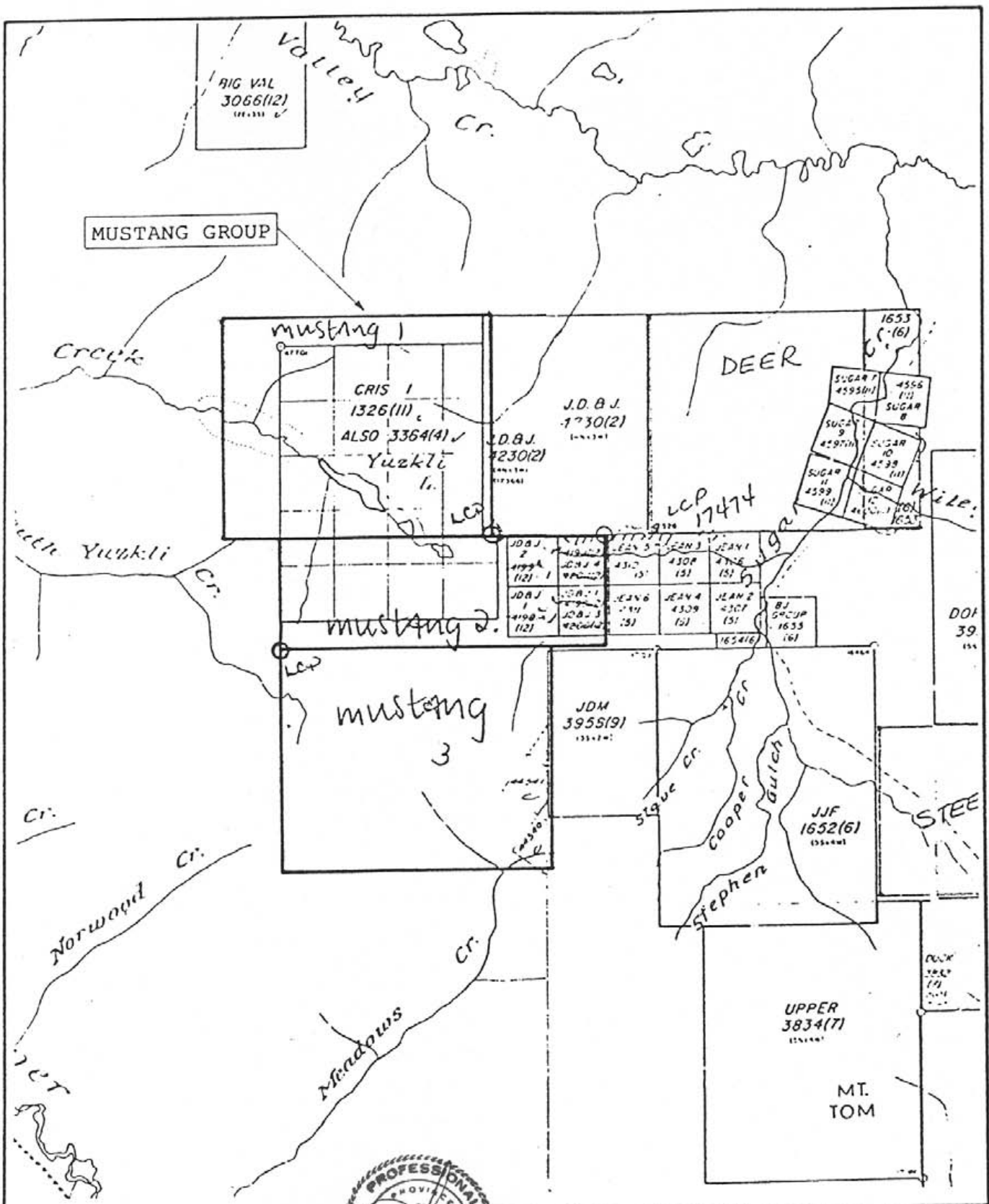
The property is totally covered by trees consisting primarily of pine and cedar varieties typical of the area. The annual precipitation is about 77 centimetres, the majority of which falls during autumn and spring. The average snowfall is about 305 centimetres and occurs from October to May. The mean annual temperature is 3 degrees (and varies from -25 degrees C to +45 degrees C).

OWNERSHIP

The property consists of three lode claims (Figure 2) that have been held by Candorado Mines Ltd. since 1983. A summary of the particulars of the claims is listed as follows and a notice to group the claims was recorded on March 14, 1983.

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Recording Date</u>	<u>Registered Holder</u>
Mustang 1	4671 (2)	20	Feb. 25, 1983	Candorado Mines Ltd.
Mustang 2	4672 (2)	12	Feb. 25, 1983	Candorado Mines Ltd.
Mustang 3	4673 (2)	20	Feb. 25, 1983	Candorado Mines Ltd.

The writer does not accept responsibility for the legal status of these claims.



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Scale 1:50,000
0 1km

FIGURE 2

CANDORADO MINES LTD.

MUSTANG GROUP

CLAIM PLAN

HISTORY

The Cariboo district is one of the oldest gold mining camps in British Columbia, the first prospectors arriving in 1858. The early miners focused on placer deposits, but by the 1880's gold quartz veins were being mined.

The property lies at the northeast end of the Barkerville Gold Belt, a northwest alignment of gold-quartz veins, gold bearing pyrite ore bodies and placer deposits.

On the property there are two known gold occurrences that received some prospecting and surface development in the 1930's. The more developed of these is the Cosalite prospect (No. 1), $\frac{1}{2}$ kilometers north of Yuzkli lake. Quartz veins in quartzite ore were reported to have contained pyrite and galena bearing a trace of gold. There are at least four places where quartz veins were exposed by shallow surface workings. The veins are described as being from 9 inches to 4 feet wide and up to 100 feet in length.

The second known gold occurrence is at the headwater of South Yuzkli Creek. This occurrence (No. 3) is shown by Hanson (1938a) on his geological map of the area. The occurrence is summarized together with a number of other quartz vein prospects as being from a few inches to 10 feet wide and mineralized with pyrite and galena with low gold values.

GEOLOGY

a) Regional (from K.V. Campbell 1985)

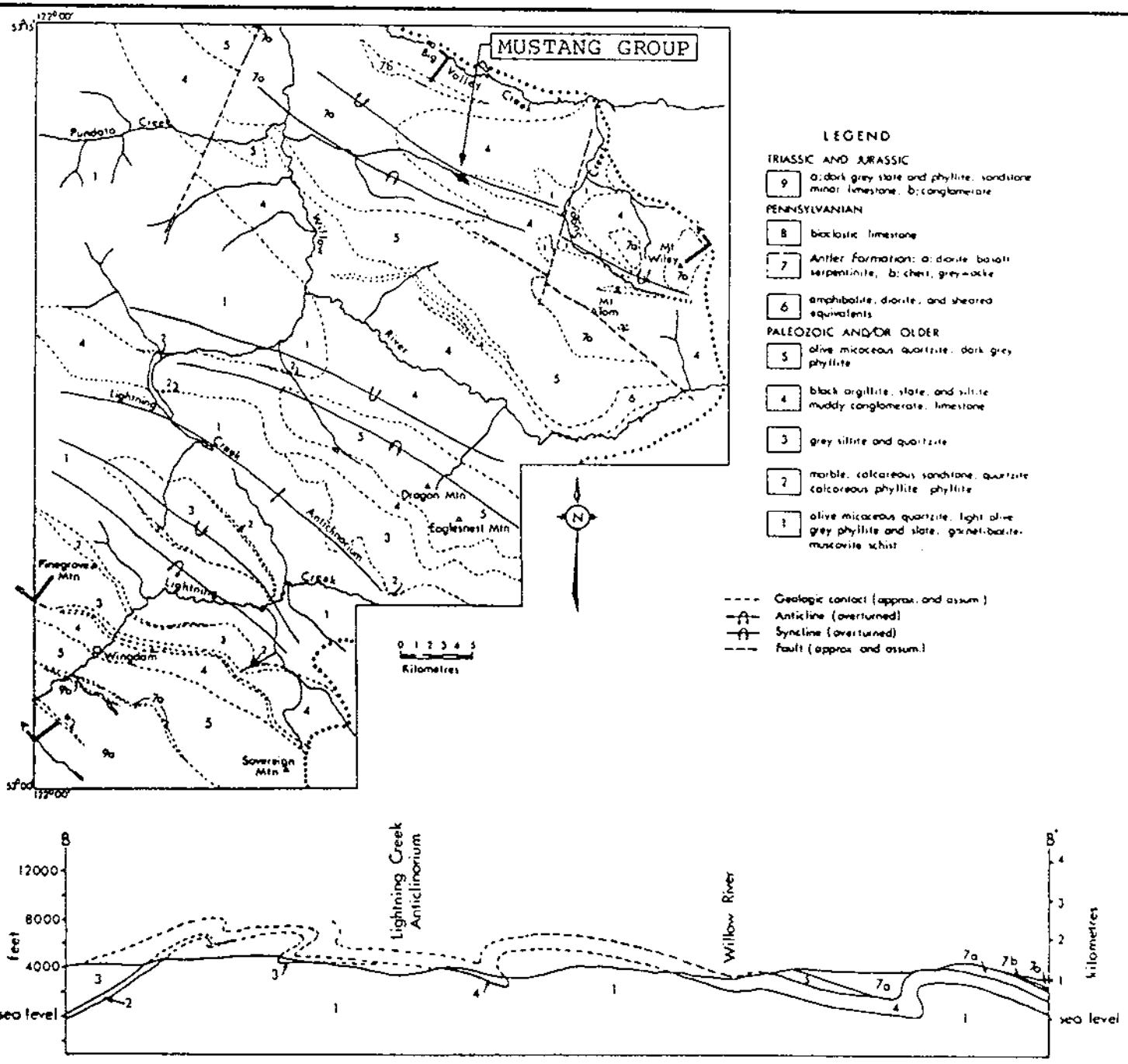
Figure 3 illustrates an interpretation of the regional geology (Struik, 1981a) with the stratigraphy outlined in the legend. The area lies along the western part of the Omineca Tectonic Belt, known for its prevalence of gold and tungsten mineral occurrences. Two regional stratigraphic sequences are shown in Figure 3. These are (1) Upper Ordovician to Permian shale, dolstone, basalt, conglomerate and limestone (units 1 to 6 and 8, Figure 3) and (2) Permian and Pennsylvanian oceanic chert and mafic and ultramafic volcanic and intrusive rocks (unit 7, Figure 3). The

Scale: as shown

FIGURE 3

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 SWANNA M. ASH
 ENGINEER

CANDORADO MINES LTD.
MUSTANG GROUP
REGIONAL GEOLOGY
 (after Struik, 1981)



latter sequence, the Antler Formation, has been thrust from the west over the basinal sequence. A third stratigraphic sequence of Hadrynian to Cambrian quartzite, carbonate and shale, representing a continental terrace wedge, is exposed to the east of the area shown in Figure 3.

Eastward thrusting of the Antler Formation commenced in post-Permian time and predated the folding and regional metamorphism of Jura-Cretaceous age that affected all rock units in the area. The major folds, such as the Lightning Creek anticlinorium, 25 km southwest of Yuzkli Lake, are relatively open. The Mustang property straddles an overturned fold couplet whose axial planes dip northeast.

The principal axis of the Barkerville Gold Belt, passing through Island Mountain and Barkerville, is located on the overturned limb of a northwest trending fold at or near the contact between Devonian-Mississippian black phyllites (unit 4, Figure 3) and micaceous quartzites containing limestone and dolomite (unit 1, Figure 3). The gold occurs mainly in pyrite or as free gold in quartz veins in the black metaclastic rocks. Gold also occurs in stratabound, massive, auriferous pyrite lenses and shoots, termed 'replacement ore', within and at the contacts of limestone beds in micaceous quartzite (Alldrick, 1983). Of critical importance to the mineral potential of the Mustang property is that this same structure passes through the claims area and affects the same rock units.

Several phases of faulting have affected the area. These are, listed from youngest to oldest, as follows (Struik, 1981b, 1982):

- (1) northerly and north-northeasterly right lateral strike slip faults,
- (2) transverse northeast trending normal faults,
- (3) east dipping high angle reverse and normal fault, and
- (4) east dipping thrust faults.

Quartz veins are common and widely distributed in the area. In general the sulphide content is low, but in certain areas they contain a fairly consistent quantity of pyrite with attendant gold (Sutherland Brown, 1957). Previous workers have all noted the pattern of occurrence of quartz veins. Four types of veins are recognized, as follows:

- (1) transverse veins; northeast strike, smallest and most numerous type, at the Cariboo Gold Quartz Mine provided 60-75% of the Quartz ore,
- (2) diagonal veins; east-northeast strike, larger and fewer than transverse veins, at the Island Mountain Mine only the diagonal veins were mineable,
- (3) northerly veins; north-northeasterly strike, occur within faults, commonly crushed and difficult to mine, and
- (4) strike veins; northwest strike, subparallel to foliation, largest and fewest type, normally barren.

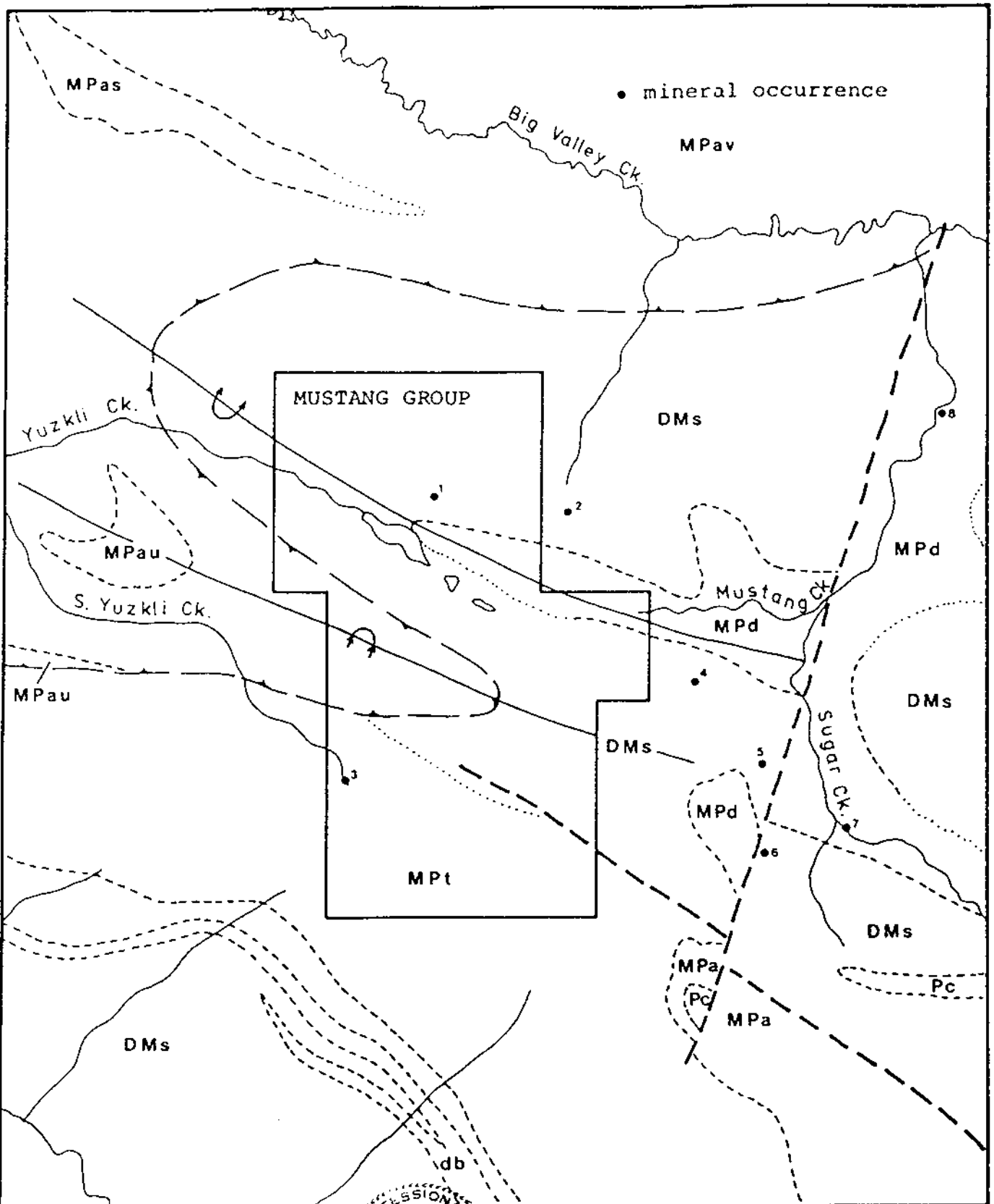
Earlier workers termed the strike veins 'A veins' and the transverse and diagonal veins 'B veins'.

Recently (Struik, 1981b), it has been recognized that the Paleozoic sedimentary units making up most of the area contain stratigraphic equivalents of the major divisions of the Selwyn basin; the Ordovician to Devonian Road River Formation and the Devonian-Mississippian Earn Group, informally called the "black clastics". These units are hosts for stratiform lead and zinc deposits in the northern Cordillera. In the Cariboo district the Black Stuart Formation (equivalent to unit 4 in Figure 3) and the Greenberry Limestone Member (unit 3 in Figure 3) are time and lithologic correlatives of the black clastic units in the northern Omineca and Mackenzie - Rocky Mountain belt. The recognition of this correlation gives the Mustang property the potential of having similar deposits.

b) Local Geology

Figure 4 illustrates the geology of the Mustang claims areas as mapped by Struik (1982). Table 1 provides an explanation of the rock units in Figure 4 and their correlation to those shown in the earlier work (Figure 3).

There are four rock units underlying the property: DMs - predominantly black phyllite; MPt - mostly olive gray micaceous quartzite, MPd - olive and gray micaceous quartzite, pllite and schist; and MPav (Antler Formation) - diorite, basalt, gabbro and serpentinite. Units DMs and MPd are the same units that host the majority, if not all, of the gold deposits along the Barkerville Gold Belt.



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Scale 1:50,000

0 1 km

FIGURE 4







CANDORADO MINES LTD.

MUSTANG GROUP

PROPERTY GEOLOGY

(after Struik, 1982)

TABLE 1
Explanation of Figure 4 -- Property Geology

Rock Units	Description
PERMIAN Pc	- gray crinoidal limestone, minor gray chert
MISSISSIPPIAN(?), PENNSYLVANIAN and PERMIAN Antler Formation	
MPav	- diorite, basalt, serpentine, gabbro
MPas	- olive and gray chert, black and green slate
MPau	- serpentine, sheared mafic rocks
MISSISSIPPIAN(?) to PERMIAN(?)	
MPt	- Tom Creek Succession; olive gray micaceous quartzite, phyllite and schist
MPd	- Downey Creek Succession; olive and gray micaceous quartzite, phyllite, gray olive and green slate, limestone, marble
MPa	- amphibolite
db	- diabase
DEVONIAN(?) and MISSISSIPPIAN(?)	
DMs	- black siltite, phyllite, gray micaceous quartzite, limestone
<hr/>	
	Fracture
	Thrust fault
	Geological contact (approximate, assumed)
	Anticline, overturned
	Syncline, overturned
	Known mineral occurrences

Correlation to Figure 3:

Figure 3

Figure 4

Unit 8	Pc
Unit 7	MPav, MPas, MPau
Unit 6	db
Unit 5	MPt
Unit 4	DMs
Unit 1	MPd

The foliation of most of the exposures dips northeasterly at moderate to steep angles. The claims are crossed by an overturned, northwest trending syncline and anticline, whose approximate locations are indicated in Figure 4. The general structure is shown in the geological section B-B' of Figure 3.

Major faults in the area, as mapped by Struik, are the north-northeasterly fault in the lower course of Sugar Creek and the northwest fault that is projected into the south part of the claims group. A thrust fault marks the base of the Antler Formation. A characteristic of this fault is the flat lying shearing developed below it. Other fractures belong to the northwest and north-northeast fault and fracture sets. Recalling that many ore deposits in the region are controlled or spatially related to north-northeasterly faults (Sutherland Brown, 1957), fractures with the latter orientation should be prospected.

c) Geomorphology

The higher parts of the property, characterized by gently rolling hills, are remnants of a Tertiary plateau. The melting of a static ice sheet which covered this surface in the Pleistocene resulted in a lodgement till deeply cut by meltwater gullies. Many of these are today occupied by only small, intermittent streams. In a few places these gullies extend to bedrock. The depth to bedrock in areas underlain by the lodgement till is estimated to be up to 6 m.

A valley glacier occupied the northwest trending valley of Yuzkli and Mustang Creeks. Its stagnation and wasting resulted in moraine deposits and a kettled aspect along this valley. The depth to bedrock in the valley is estimated to be up to 30-40 m.

Several creeks on the Mustang Group have alignments parallel to the regional fracture sets, particularly those trending north-northeast, northeast and northwest.

d) Lithology

The property is mostly underlain by Paleozoic metasedimentary and metavolcanic rocks. The metasedimentary rocks are black phyllite and siltite and gray

micaceous quartzite. Quartz veining is widespread. These rocks are the host to most of the gold occurrences in the Cariboo district. The presence of limestone and dolomite on the Mustang group is suggested by abundant float of the same north and south of Yuzkli Creek.

The metasedimentary rocks are overthrust by basalt, gabbro and serpentine of the Antler Formation.

e) Structure

The claims are crossed by a northwest trending anticline and syncline that are overturned to the southwest. The penetrative foliation of the rocks dips mostly north and northeast. Fractures trend northwest, north-northeast and northeast. At the base of the Antler Formation in the western part of the claims is a thrust fault below which the rocks are intensely sheared. Minor folding and complex cleavage and foliation relations can be expected throughout the area.

f) Mineralization

Previous work in the area focused on gold-quartz veins and there are two such known historical mineral occurrences on the property; (1) the Cosalite prospect north of Yuzkli Lake - a number of pyrite and galena-bearing quartz veins with low gold values, and (2) a similar occurrence on the south fork of Yuzkli Creek. Representative samples of vein quartz from both these locations were sampled in 1983. The sample from the Cosalite prospect assayed 0.52 oz/ton Ag, 0.001 oz/ton Au with 1.81% Pb. The sample collected from the south fork of Yuzkli Creek assayed 0.01 oz/ton Ag and 0.001 oz/ton Au. Such minimal values are to be expected where surface leaching of fractured quartz has removed precious metals.

Two types of gold mineralization are considered to be possible on the Mustang group; quartz vein mineralization and pyritic replacement in limestone. The claims lie at the northwest end of the Barkerville Gold Belt aligned along an overturned fold developed between black phyllite and gray micaceous quartzite. Gold-bearing pyritic replacement ore is found in a limestone member in the quartzite unit

adjacent to its contact with the black phyllite. Gold-quartz veins are most common and best developed along north-northeast trending faults.

The Mustang group has good potential for having deposits similar to those found to the southeast for the following reasons:

- (1) Continuity of lithology; presence of the same rock units that host gold deposits along the Barkerville Gold Belt.
- (2) Continuity of structure; the same fold structure that controls gold mineralization to the southeast extends across the property.
- (3) The presence of north-northeast and northeast trending fractures that localize gold-quartz veins along the Gold Belt.
- (4) The presence of several mineral occurrences on and near the property.

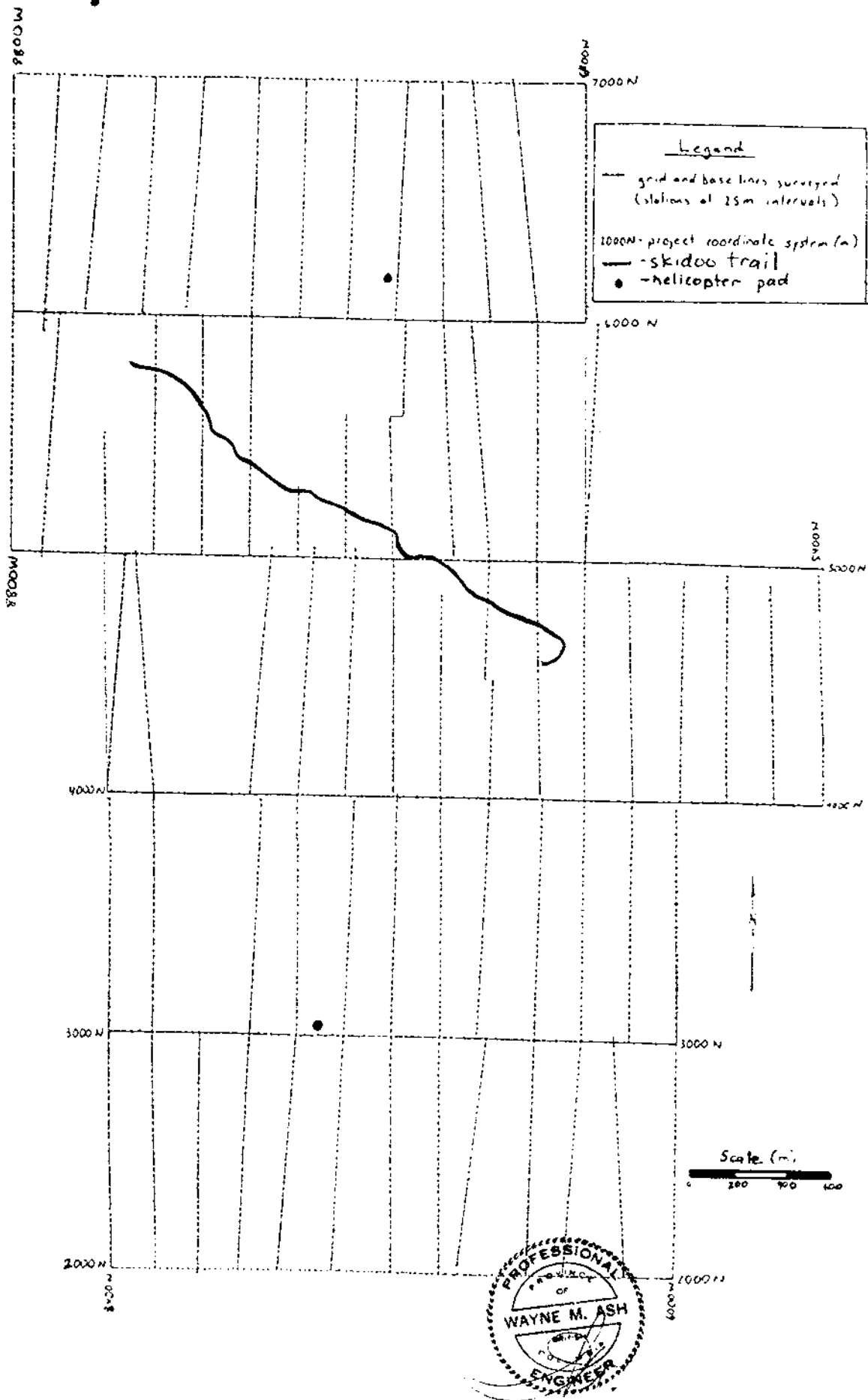
Reconnaissance geochemical silt sampling was performed in 1983 along the major drainageways. Analyses were made for arsenic, lead, silver and zinc. Virtually all the anomalies, a total of 14, are over the black phyllite and siltite unit. Half of these are located over the overturned fold limb that involves the critical geological contact of interest, that between units DMs and MPd. This lends further support to the view that there is a good potential of mineralization in the area between the traces of the two overturned fold axes. The other half of the anomalies have a close spatial relation to known mineral occurrences including sulphide-mineralized float. These are found over the black phyllite unit (DMs).

1986 FIELD EXPLORATION PROGRAM

The field work proposed for 1986 included geological mapping, geophysical surveys and soil sampling. Due to the late time of year for conducting the work, geological mapping could not be carried out and only geophysical surveys and soil sampling were undertaken.

Since the area is large and the topography rugged, the relief in some areas being very high, it was decided at the outset of the program to lay out baselines and section lines that would have closure documentation. Soil sampling was conducted

Figure 5. Survey Grid



until the depth of snow and ground freezing did not permit effective sample taking. Likewise, the VLF surveys were discontinued half-way through the program due mainly to the difficulties encountered with negotiating the heavy equipment in deep snow. Some problems relating to malfunctioning of the equipment that resulted from cold weather also contributed to the decision to discontinue from VLF geophysical surveys. Magnetometer surveys and grid layout were carried out nearly to the end of the program when, again, inclement weather and the approaching Christmas holiday season shut down these activities.

Survey Grid

Approximately eighty-three (83) kilometers of Baselines and Closure section lines were installed (Figure 5). Stations where sampling or readings would be conducted were located at 25 meter centres. The lines were well marked with ribbon and the stations were labelled.

Table 2 shows the closures recorded and includes locations where closures were not documented. As the strike of the major geological features trended east-west, the baselines were installed east to west such that the grid lines would cross these features at approximately 90 degrees. Six baselines 1 kilometre apart were installed. The grid or section lines were installed at 200 metre centres, each having stations at 25 metre intervals. Baselines were installed using split chainage and slope corrections.

As the installation of the survey grid progressed, a skidoo trail was required to reach more remote areas of the property. The skidoo trail required three days and two men to construct it and was approximately 2 km long. When even more remote areas had to be accessed, a helicopter was used. Three helicopter pads were constructed on the property and one at the base camp. These pads required four days to build (Figure 5).

TABLE 2
Survey Closures

Line	2000 - 3000	3000 - 4000	4000 - 5000	5000 - 6000	6000 - 7000
5400			5420, 4950		
5600			5625, 4930		
5800			5800, 4965		
6000	6075, 2000	6020, 4000	5980, 4940		
6200	6260, 3020	N.A.	6215, 4955		
6400	6465, 2000	N.A.	OK met at swamp in middle	6350, 6000	6400, 7000
6600	6670, 2020	6575, 3985	6585, 4035 6820, 4510	6600, 5990	6700, 7025
6800	6915, 2030	6840, 3025	6780, 4490	6880, 5980	6875, 7035
7000	N.A.	7000, 3975	7000, 4850 (lake)	6950, 5025 7250, 5690	N.A.
7200	N.A.	7185, 4010	7200, 4000	7200, 5690	7150, 7000
7400	7450, 2015	7370, 3960	7340, 5060	7400, 5600	7360, 7020
7600	7675, 2000	N.A.	7525, 5075	OK meets in middle (lake)	7575, 7030
7800	7840, 2000	7760, 3960	7750, 5045	"	7770, 7030
8000	8015, 1968	line not in	line not in	"	5070, 6040
8200	8180, 1967	N.A.	8280, 4000	N.A.	8255, 6000
8400	8400, 2000	8385, 3960	8325, 4995	8400, 5500 half way	8495, 6020
8600				8665, 5000	8670, 5920
8800				8800, 6000	8800, 7000

NOTE: N.A. indicates closure notes are not available and a straight closed line for plotting purposes was assumed.

Soil Survey

During the first week of the field program some 134 soil samples were taken at 50 metre intervals in the locations shown on Figure 6. The samples were analyzed for copper, lead, zinc, silver and arsenic. The results are shown in Appendix I.

The area is an eluvial landscape where the soils are generally well drained and precipitation exceeds evaporation. Based on the Canadian system of soils classification, the soil in the area would be classified Podzolic.

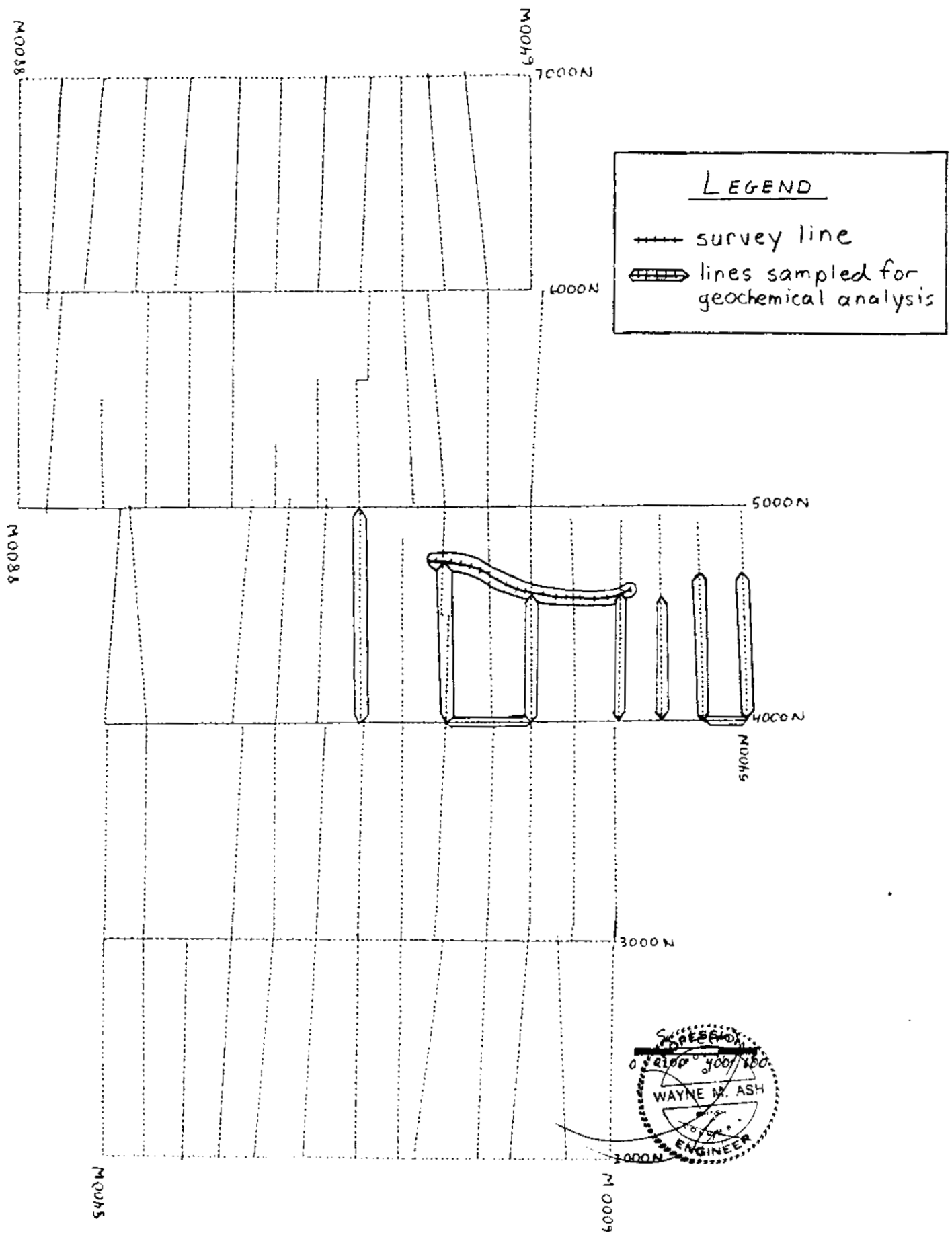
The field personnel studied the soil and land form relationships in the area and concluded that the major portion of the soils are glacial till and the samples taken were for the most part not residual and therefore likely did not represent the mineral content of the subsurface rock formations. The depth of organic matter (except in muskegs) and the horizon of alluviation (leaching) are very thin in the areas surveyed. Therefore, the major portion of samples taken were from the horizon of illuviation (the horizon enriched in clay minerals). The basic statistics for these samples are as follows:

<u>Metal Analyzed</u>	<u>No. of Samples</u>	<u>Mean ppm</u>	<u>Standard Deviation ppm</u>	<u>Lowest Value ppm</u>	<u>Highest Value ppm</u>
Copper	134	21.6	3.19	2.0	95.0
Lead	134	23.2	1.81	2.0	103.0
Zinc	134	67.5	9.59	8.0	282.0
Silver	134	0.5	0.01	0.1	3.6
Arsenic	134	12.2	1.64	2.0	67.0

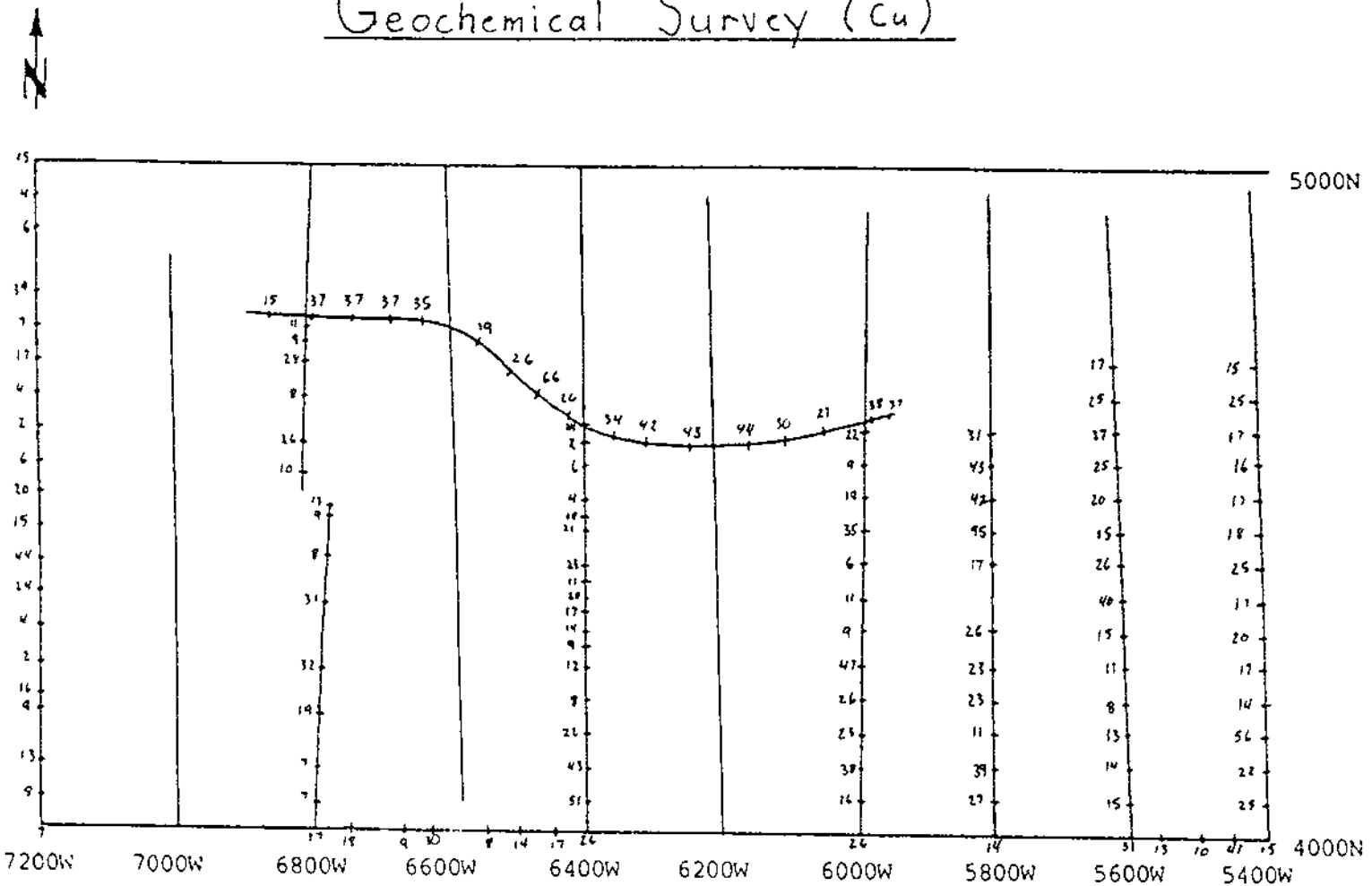
The mean, standard deviation and variances were calculated for each element, both normally and log-normally. This statistical analysis is located in Appendix II.

The locations of the survey points and results of the geochemical analysis for copper, lead, zinc, silver and arsenic are shown in Figures 7, 8, 9, 10 and 11, respectively. An inspection of the data reflected the east to west trend of the geological structures.



Figure 6. SOIL SURVEY

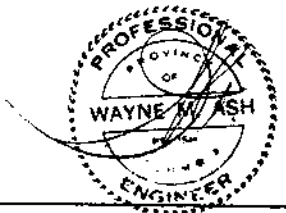
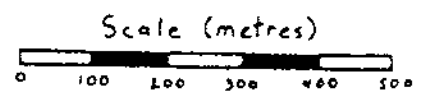


Geochemical Survey (Cu)



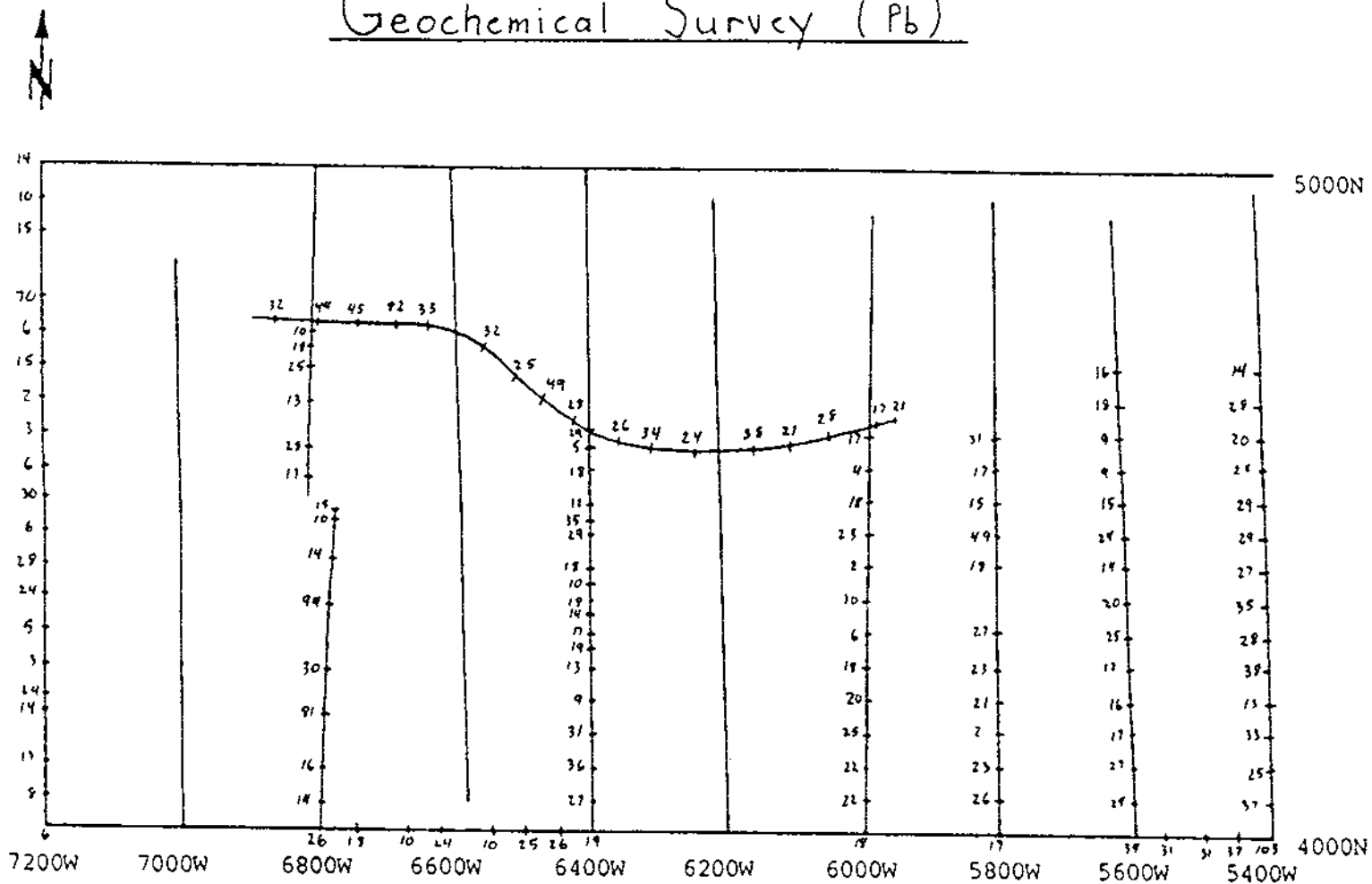
LEGEND

-  station and assay value (ppm)
-  contour interval in standard deviations



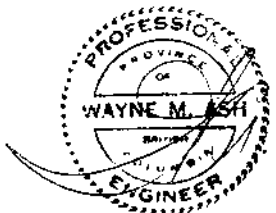
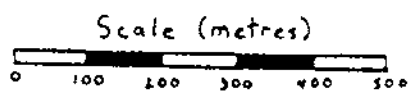
Org. No.
Fig. 7

Geochemical Survey (Pb)



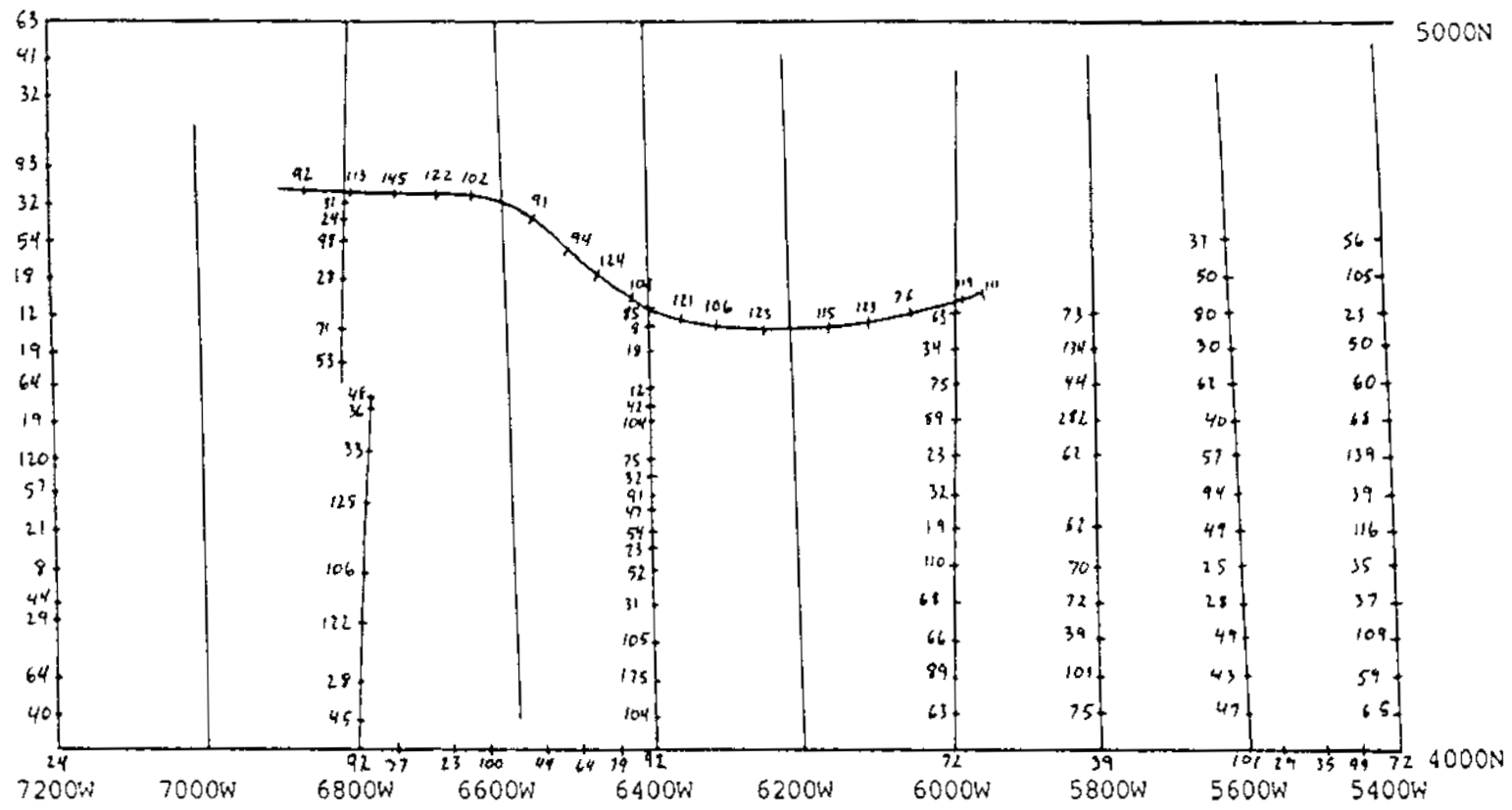
LEGEND

- station and assay value (ppm)
- contour interval in standard deviations



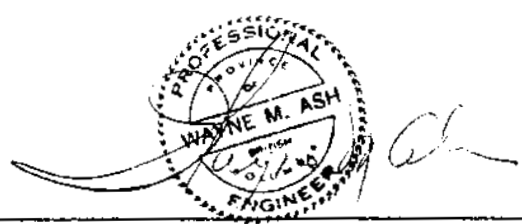
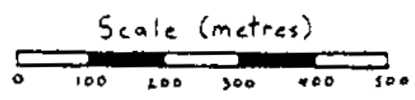
Org. No.
Fig. 8

Geochemical Survey (Zn)



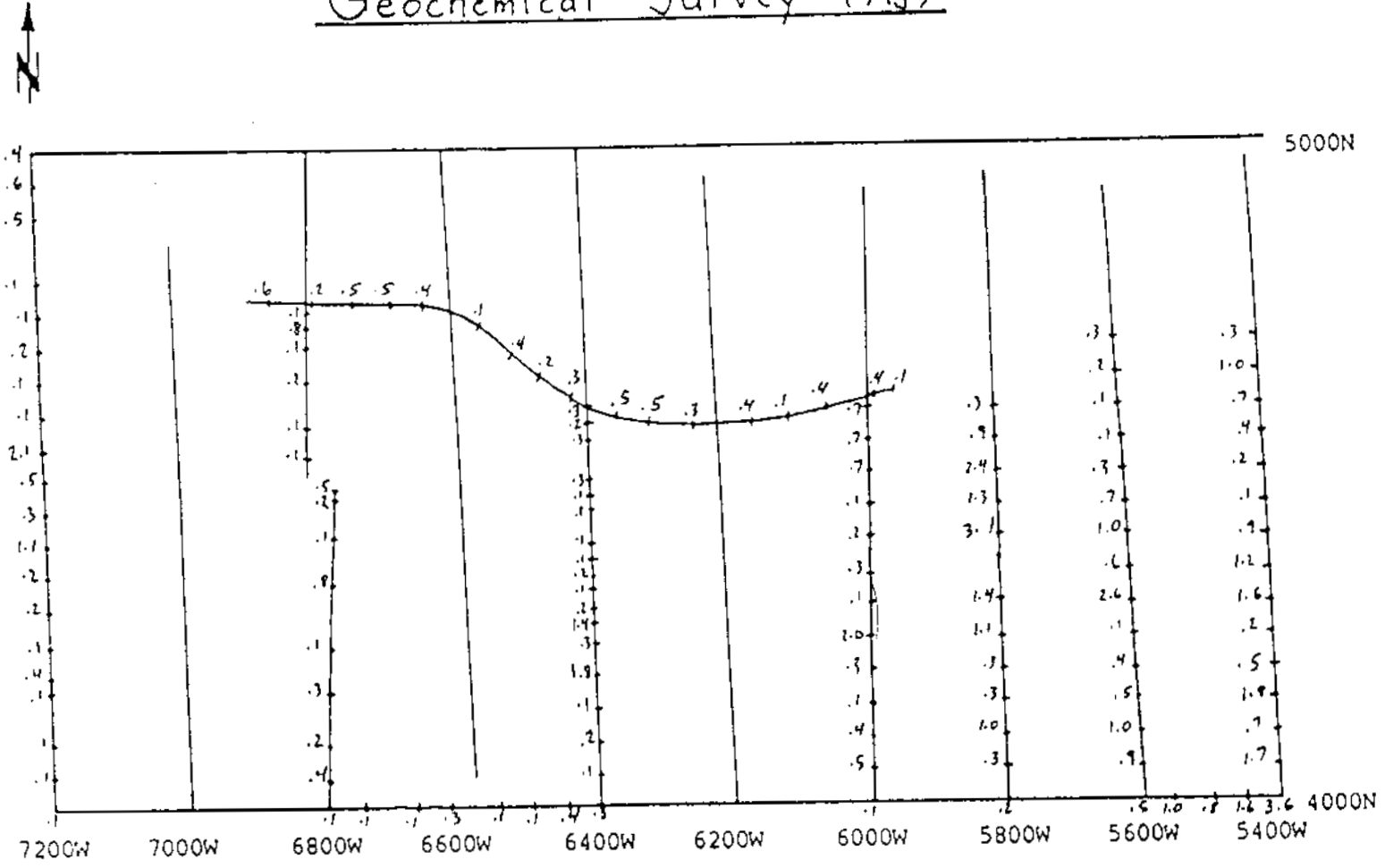
LEGEND

- station and assay value (ppm)
- contour interval in standard deviations



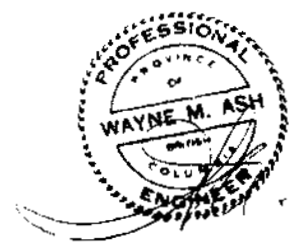
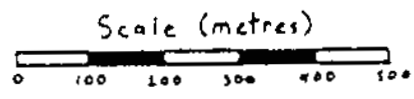
Drg. No. Fig. 9

Geochemical Survey (Ag)



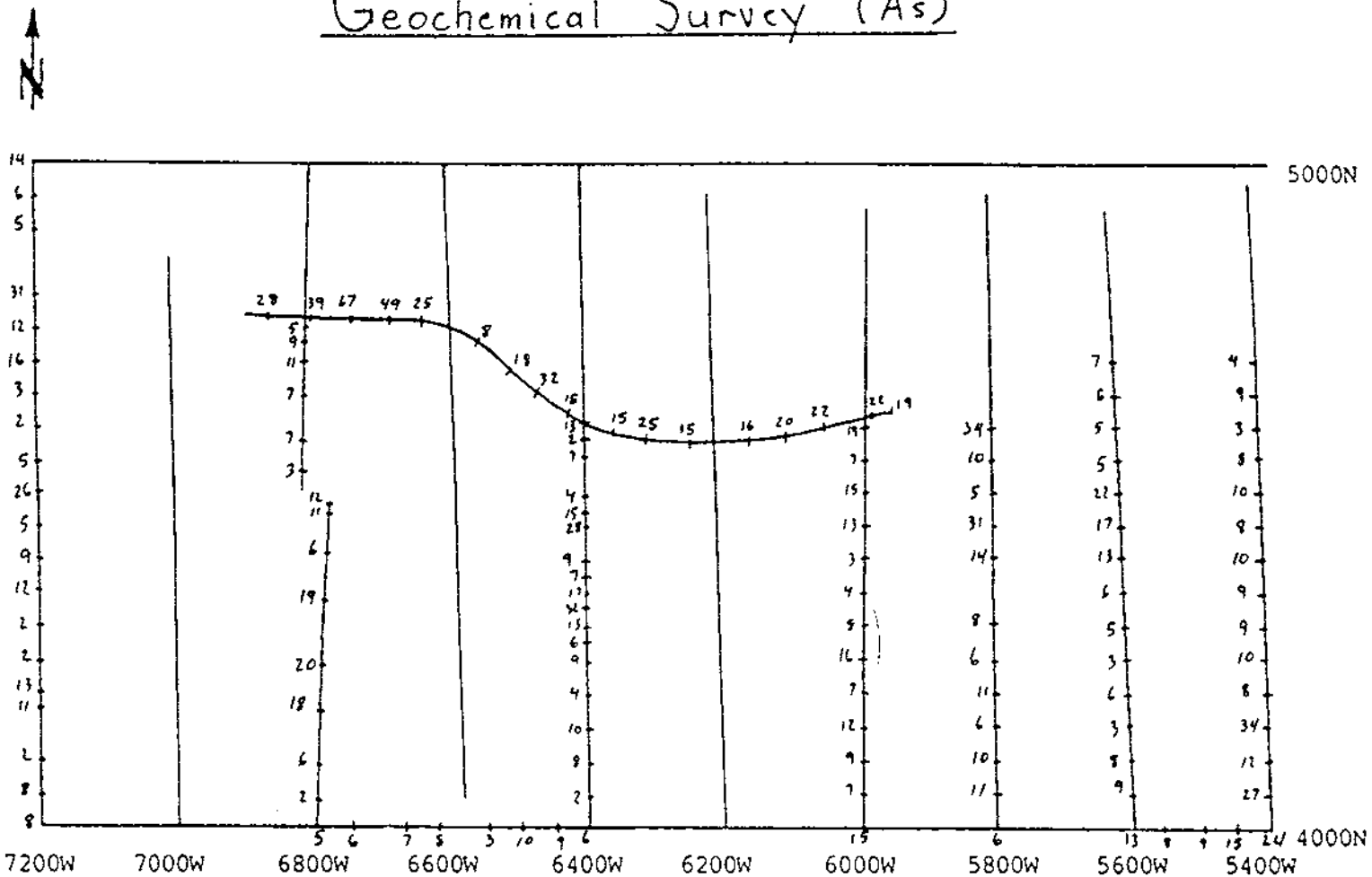
LEGEND

- +— station and assay value (ppm)
- contour interval in standard deviations



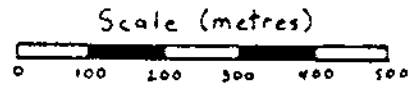
Dwg. No. Fig. 10	100 200 300 400 500

Geochemical Survey (As)



LEGEND

- + station and assay value (ppm)
- contour interval in standard deviations



Drg. No. Fig. 11

VLF-EM Geophysical Survey

Some 1,200 VLF-EM readings were taken at 12.5 metre intervals along the grid shown in Figure 12, representing 14.1 kilometres of grid line. The VLF-EM survey employed the SE-88 Genie electromagnetic system. This system is designed mainly for use in mineral prospecting for massive sulphide ore bodies. It is also useful for detecting faults or shear zones and for obtaining information about subsurface conductivity for geological mapping.

The system consists of a transmitter and receiver weighing 15 kg and 4 kg, respectively. It is designed for rapid two-person operation and minimizes geometrically derived errors. The measurements are based on the simultaneous transmission of two pre-selected, well separated frequencies and the comparisons of the amplitudes of the two signals at the receiver. The two transmitted frequencies are picked up by a single receiving coil, amplified and noise filtered. A proportional D.C. voltage is obtained from each signal, averaged over a selectable time period, and then the computed result x 100 is displayed in percent on the digital display with a resolution of 0.1%.

Under most field conditions, the system, whose sensitivity and repeatability are basically only limited by atmospheric noise, can detect amplitude ratio changes to better than 0.5%. Useful measurements may be made for a transmitter-receiver separation of 200 metres. Fifty (50) metres separation was used on the Mustang Property and readings were taken at 12.5 metre intervals along each grid line surveyed.

The frequency pairs used in the survey were 112 Hz / 3037 Hz, 112 Hz / 1012 Hz, and 112 Hz / 337 Hz. The field readings required no further filtering and were plotted directly. Since this system has, for the most part, eliminated all noise, the greater portion of readings taken show very little amplitude ratio change. The field operating strategy was as follows:

1. To save time for the field crew, one set of readings was taken. The frequency pair used was 112 Hz / 3037 Hz, the frequencies that differ the most. This frequency pair shows the strongest amplitude ratio change.

Figure 12. VLF-EM Survey

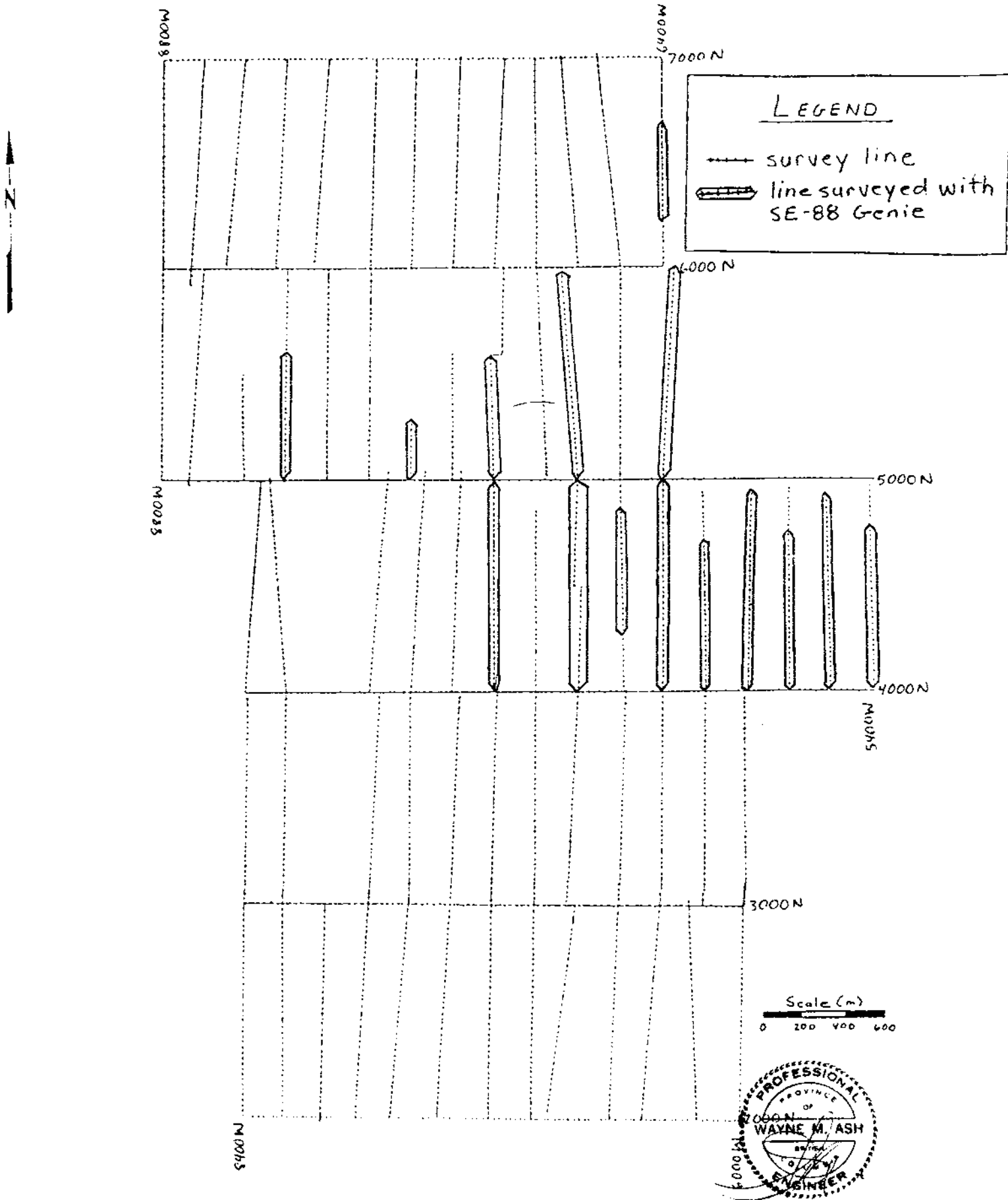
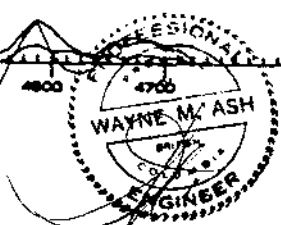
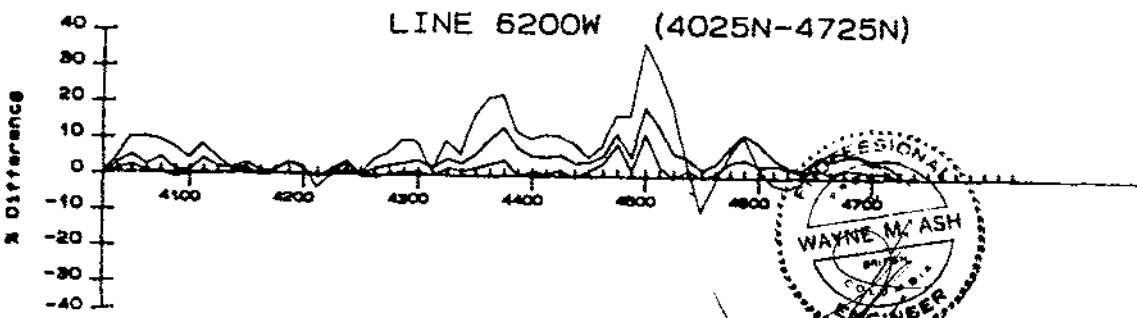
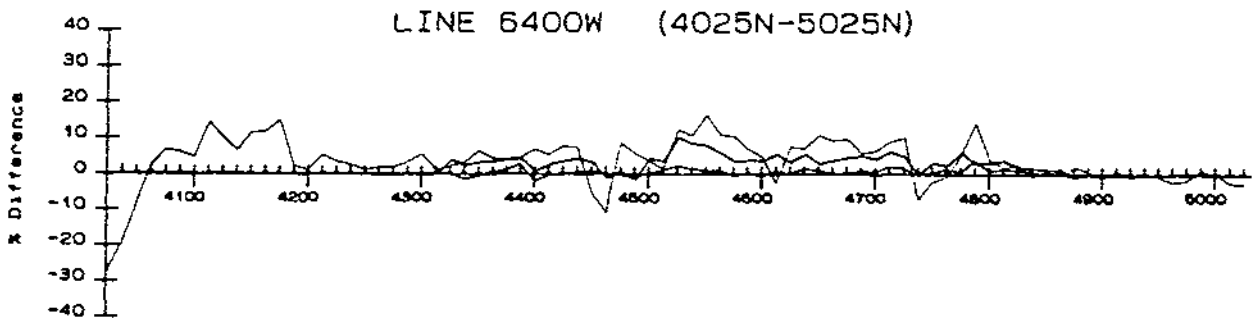
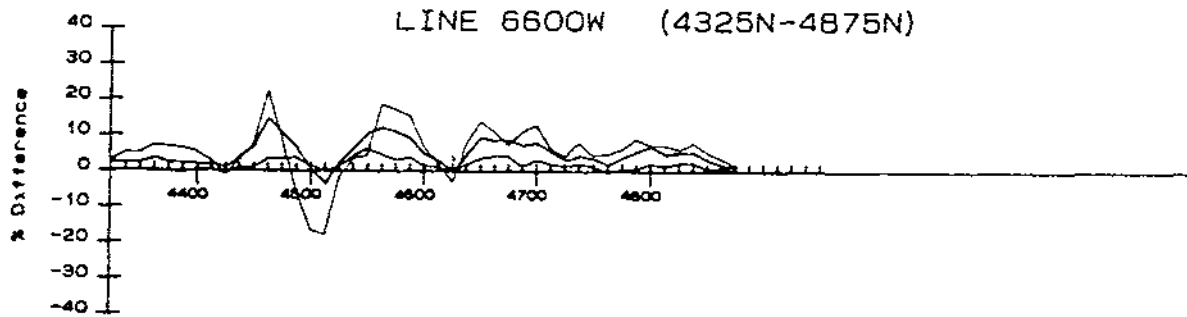
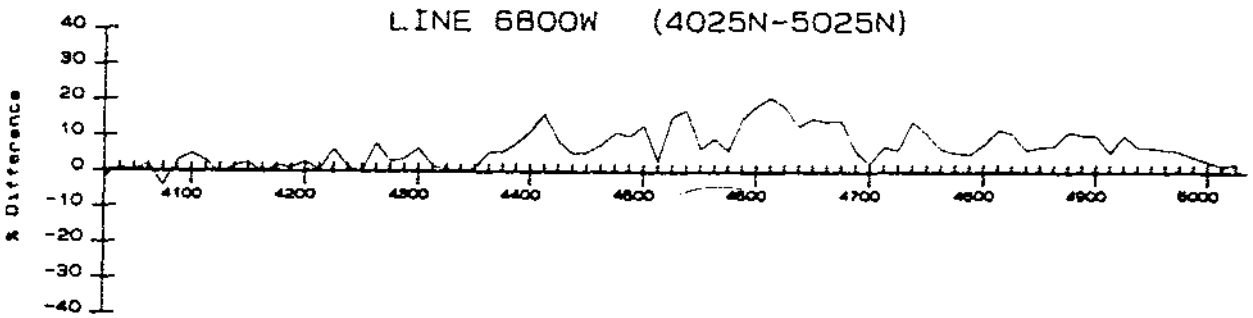
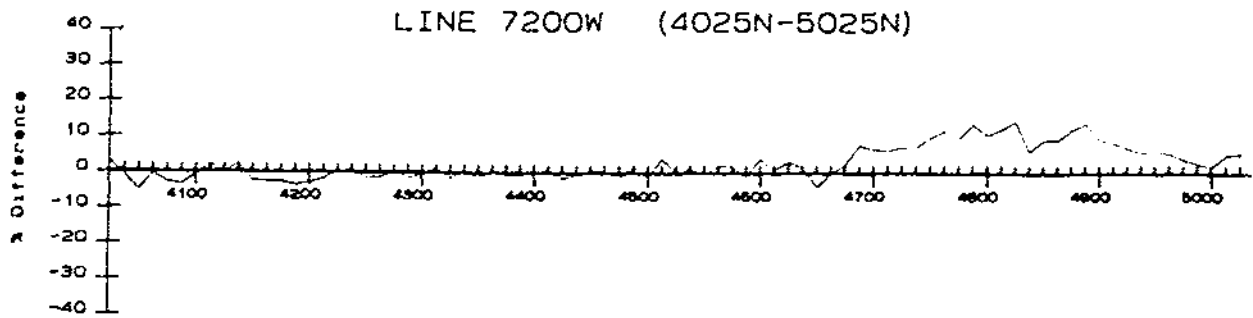
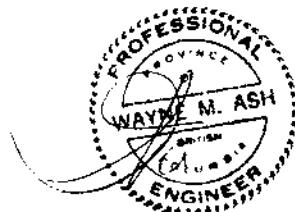
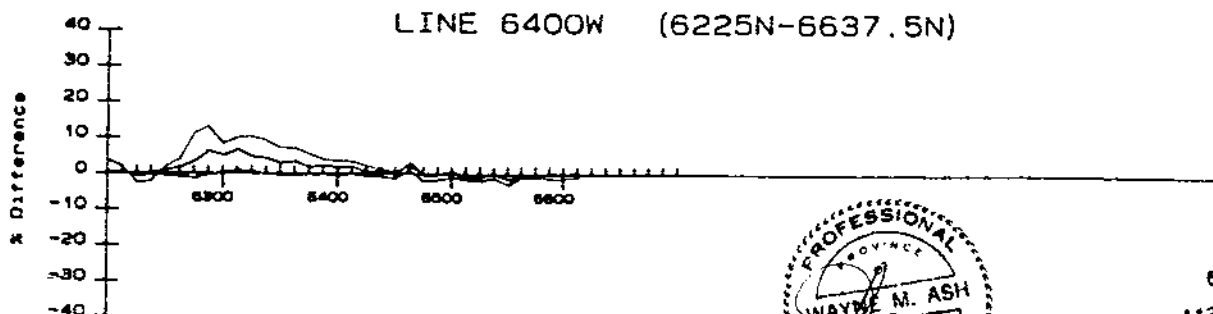
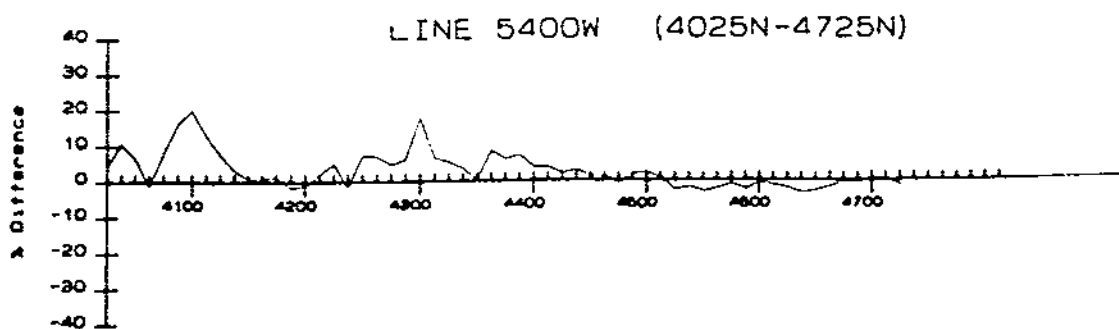
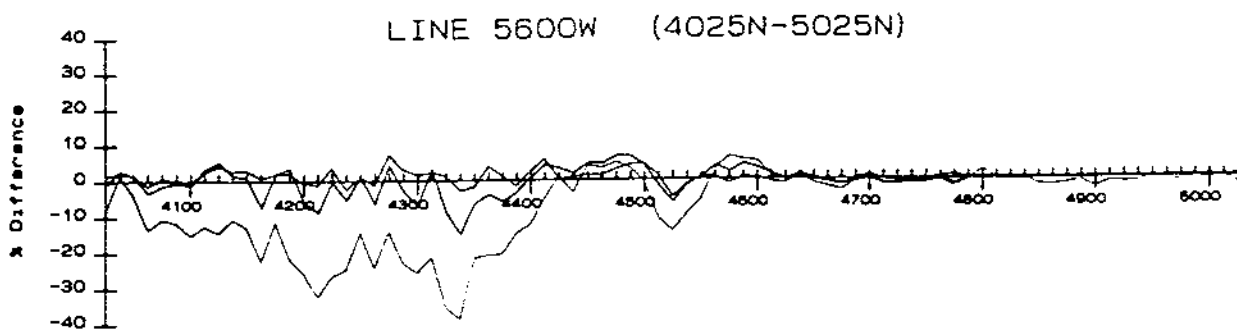
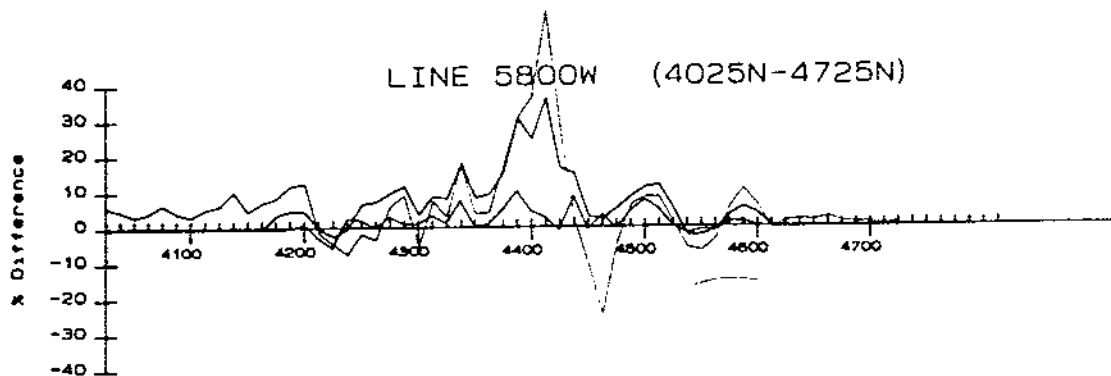
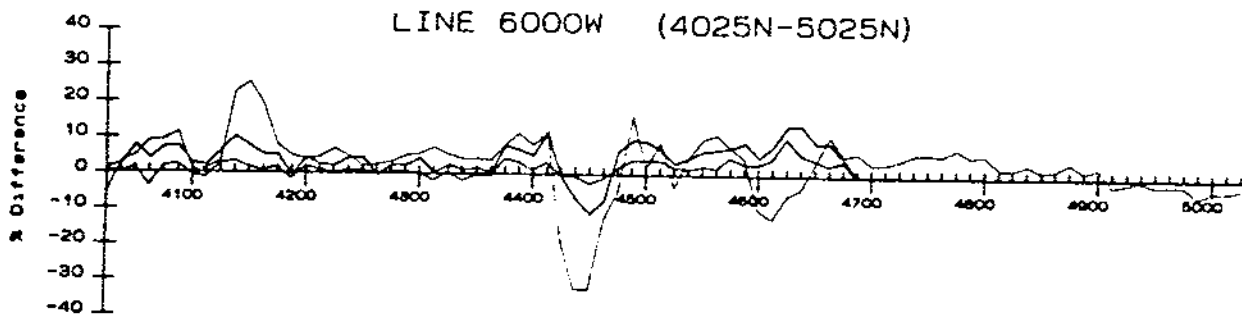


Figure 13. VLF-EM Profiles



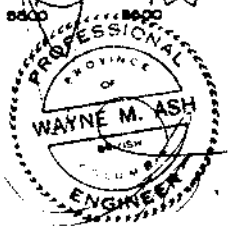
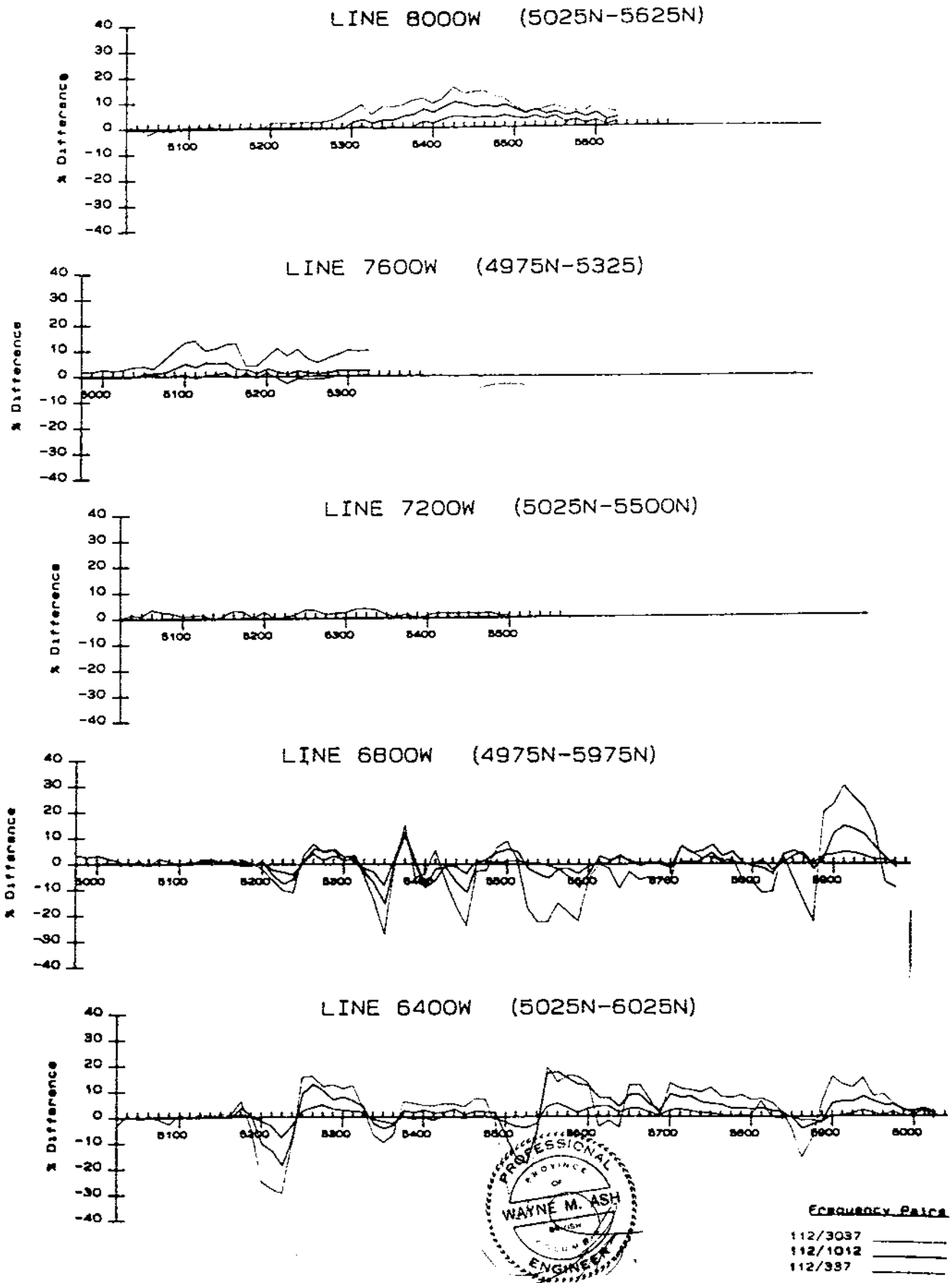
Frequency, Hz
 112/3037 _____
 112/1012 _____
 112/537 _____

Figure 14. VLF-EM Profiles



ECORADCOY PAIRS
 112/3037 _____
 112/1012 _____
 112/397 _____

Figure 15. VLF-EM Profiles



2. When the first frequency pair shows a strong, anomalous amplitude ratio change, all three frequency pairs are used. As soon as the readings level off, the field crew returns to using the first frequency pair alone.

The field readings for the VLF-EM survey are in Appendix III. The plots of the data, showing anomalous readings, are in Figures 13, 14 and 15.

Magnetometer Geophysical Survey

Some 1,200 stations representing 60 km of grid and base lines were surveyed (Figure 16). Two magnetometers were used, the first being the Scintrex MP-2. It is a proton precession magnetometer that measures the total intensity of the earth's magnetic field. The second magnetometer used was the Phoenix MV-1 fluxgate magnetometer. It measures the vertical component of the earth's magnetic field. Because two different magnetometers were used to complete the survey, a correlation factor had to be derived. This factor was determined by simultaneous measurements at the camp base station before and at the end of the day. The readings were as follows:

Date	Time	Reading (gamma)		Difference (gamma)
		Magnetometer 1	Magnetometer 2	
12/08/86	AM	58140	-110	58250
	PM		-150	
12/09/86	AM	58174	-320	58494
	PM		-190	
12/10/86	AM	58218	-260	58478
	PM		-380	
12/11/86	AM	58164	-280	58344
	PM		-180	
12/12/86	AM	58163	-320	58483
	PM	58167		

Note: Magnetometer 1 was the Scintrex MP-2 Proton Precession Magnetometer. It measures the total intensity of the earth's magnetic field.

Magnetometer 2 was the Phoenix MV-1 fluxgate magnetometer. It measures the vertical component of the earth's magnetic field.

Figure 16. Magnetic Survey

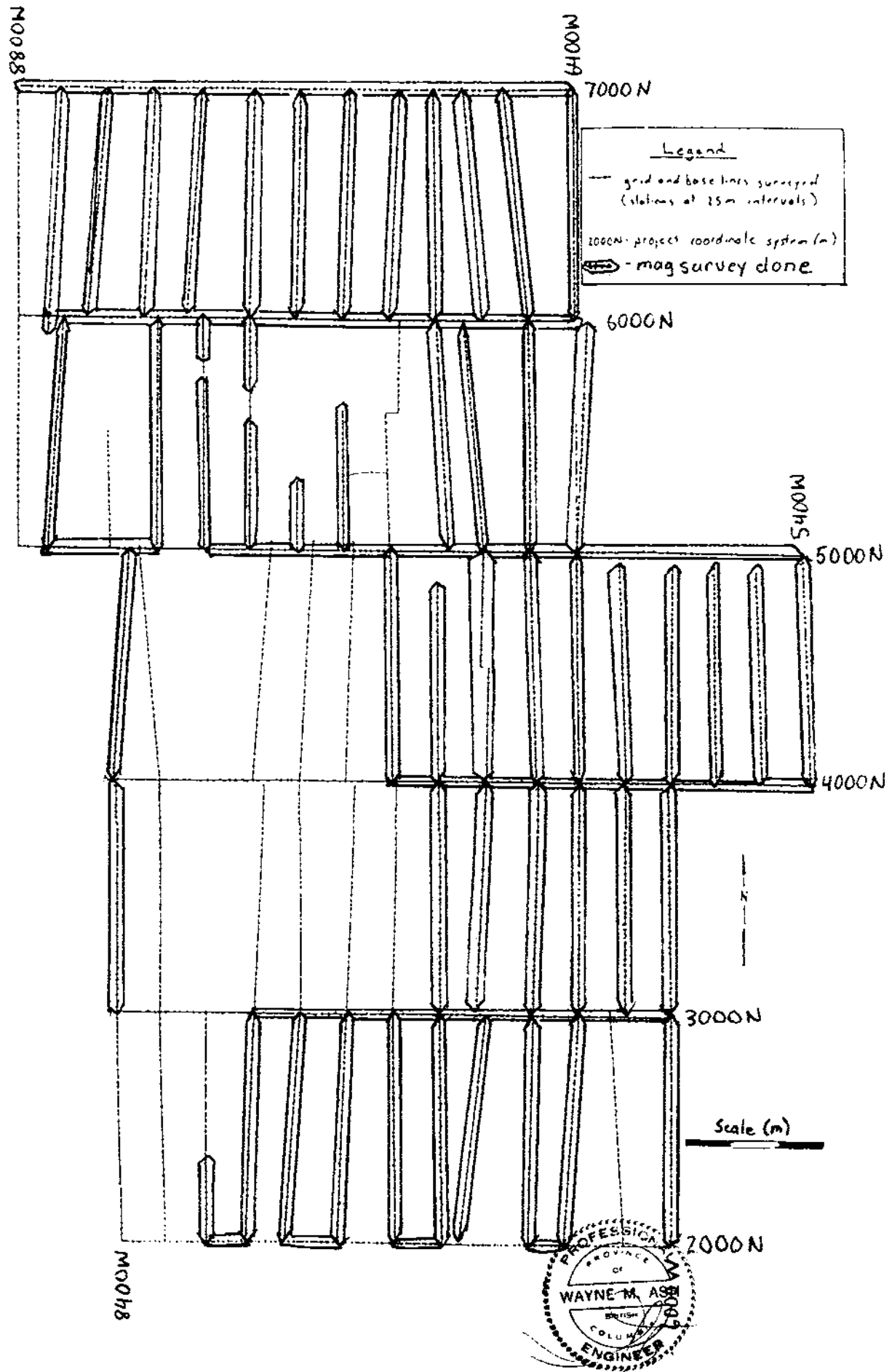
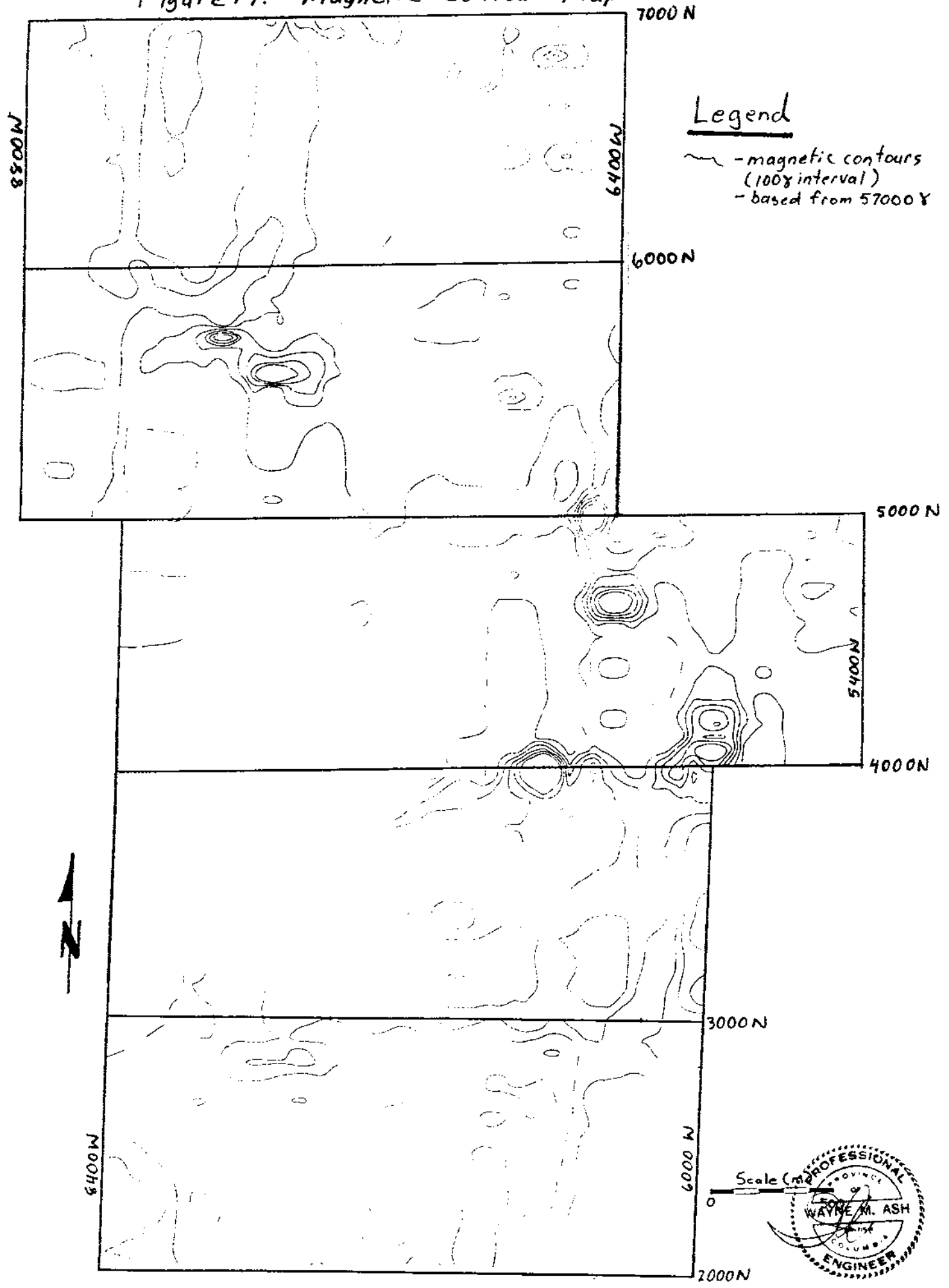


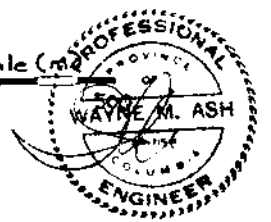
Figure 17. Magnetic Contour Map



Legend

- magnetic contours (100γ interval)
- based from 57000 γ

Scale (m)



Of the five sets of readings used to determine the correlation factor, only three were consistent. Consequently, the readings taken on 12/8/86 and 12/11/86 were ignored. The average difference of the three remaining sets of readings was 58485 gammas and this is the correlation factor that was used. For example, a reading from Magnetometer 2 of -280 gammas would be changed to $(-280 + 58485 =) 58205$ gammas. Thus, all readings from both magnetometers were correlated and were called the Total Field Intensity (Appendix IV). From this point, the data was corrected for diurnal variations.

The diurnal variations were determined by two methods. The first method consisted of surveying a closed loop in one working day. By doing so, a reading was taken at a known reference point at the beginning and end of each day. The difference in the readings, the diurnal variation, was then applied to the data. The second method of measuring diurnal variations involved measuring the magnetic intensity at the camp base station, again, at the beginning and end of each day. The diurnal variation was then applied to the data in the same manner. The diurnal variations and corrected total field are also listed in Appendix IV.

The results of the magnetic survey were presented in the form of a magnetic contour map (Figure 17). The corrected total field (gamma) was contoured from a base of 57000 gamma. This contour map enables local anomalies to be easily located.

COST OF 1986 FIELD PROGRAM

Mobilization and demobilization	\$ 5,867.38
Road construction and maintenance	16,990.63
Site ground transportation	6,380.74
Helicopter and fixed wing air service (including helicopter preparation)	21,892.63
Baseline survey - 27 km at \$600/km	16,200.00
Grid survey - 56 km at \$300/km	16,800.00
Magnetometer survey - 60 km at \$210/km	12,600.00
VLF-EM (Genie) survey - 14.1 km at \$600/km	8,460.00
Soil sampling - 135 samples at \$25/sample	3,375.00
Supervision and administration	32,063.13
Report preparation	<u>6,003.75</u>
 Total Program	 <u>\$ 146,633.26</u>

DISCUSSION AND CONCLUSIONS

In November and December of 1986, a field exploration program of the Mustang Mineral Claim Group was carried out by Minore Mine Management Ltd. The results of this program were the installation of 83 km of base and grid line, 134 soil geochemical samples, 14.1 km of VLF-EM survey, and 60 km of magnetic survey.

The soil samples were analyzed for copper, lead, zinc, silver and arsenic. The results, however, were disappointing as no significant anomalies were found. The quality of this sampling program was affected by weather conditions, though, as deep snow and freezing temperatures not only caused the program to be stopped, but may have resulted in less than ideal samples to be taken.

The VLF-EM survey was considerably more successful, as several large anomalies were encountered. A brief examination of these anomalies indicated that, in some cases, they can be correlated, from grid line to grid line along the known strike of

other local geological features. This would suggest that some geological features on the property are quite extensive.

Although the magnetic surey was the most extensive, it too failed to yield any significant anomalies. The Mustang Mineral Claim Group appears to be, in magnetic terms, rather quiet. The anomalies that are present, shown on the contoured map, are very small (up to 500 gamrnas) and, generally, the values do not vary more than 100 or 200 gammas. There was a significant area which was not covered by the magnetic survey, but the results from the rest of the property suggest that continuing the magnetic survey would not be beneficial.

PROPOSAL FOR FUTURE DEVELOPMENT

Phase 1

In the 1986 field program, the VLF-EM survey produced the only significant anomalies. The survey, however, was cut short and did not near completion. Consequently, it is proposed that the VLF-EM survey be continued. By continuing this program in the spring or summer, the problems encountered in the winter of 1986 would be avoided and the survey would progress more quickly. In order to continue this survey, two people would be required, one operator for the transmitter and one for the receiver. It is estimated that the survey could be completed in two weeks.

The areas that the VLF-EM survey show to be interesting should also be mapped. Reconnaissance geological mapping could be conducted by a geologist, who could work in conjunction with the VLF-EM operators. The reconnaissance mapping is necessary, as it could not be undertaken with a snow cover in the 1986 program.

The final step in Phase 1 involves data collection and report writing. Both the mapping and the VLF-EM survey results could be reported on by the geologist. The time required for this is estimated at five days.

Phase 2

Dependent upon Phase 1, the second phase of this proposal involves the trenching and sampling of the anomalous zones encountered by the VLF-EM survey and the reconnaissance mapping. The trenching would require a backhoe and its operator only. The sampling could be carried out by a geologist, alone. It is estimated that both the trenching and sampling could be completed in five days. After this, the final step, again, involves the writing of a report by the geologist. This is estimated to take three days.

COST OF PROPOSED PROGRAM

Phase 1

VLF-EM Survey: 25 km at \$450/km	\$ 11,250.00
Mapping: 10 days at \$300/day	3,000.00
Camp and Supplies: 14 days at \$100/day	1,400.00
Transportation: 14 days at \$50/day	700.00
Mob and demobilization: 1 day at \$400/day	400.00
Report Writing: 5 days at \$300/day	<u>1,500.00</u>
Total Phase 1	\$ 18,250.00

Phase 2

Trenching: 2000 ft at \$10/ft	\$ 20,000.00
Sampling: 5 days at \$300/day	1,500.00
Camp and Supplies: 5 days at \$100/day	500.00
Transportation: 5 days at \$50/day	250.00
Backhoe Mob and Demobilization: 1 ½ days at \$600/day	900.00
Report Writing: 3 days at \$300/day	900.00
Assays: 150 at \$15/sample	<u>2,250.00</u>
Total Phase 2	\$ 26,300.00
TOTAL COST PHASE 1 AND PHASE 2	<u>\$ 44,550.00</u>

REFERENCES

The following is a list of publications relevant to the area of the Mustang Group:

- Alldrick, D.J., 1983; The Mosquito Creek Mine, Cariboo Gold Belt, B.C. Ministry of Mines, Geological Fieldwork 1982.
- B.C. Minister of Mines Annual Report, 1934; pages 26, 27.
- B.C. Minister of Mines Annual Report, 1947; pages 117-123.
- Bowman, A., 1888; Report on the Geology of the Mining District of Cariboo, B.C., Geological Survey of Canada, Annual Report 1888, v. 3, pt. 1.
- Boyle, R.W., 1979; The Geochemistry of Gold and its Deposits, Geological Survey of Canada, Bulletin 280.
- Campbell, K.V.; Mustang Group, Cariboo Mining Division, Geology and Proposal for Gold Exploration, June 1985.
- Campbell, R.B., Mountjoy, E.W. and Young, F.G., 1973; Geology of the McBride Map Area, Geological Survey of Canada, Paper 72-35.

CERTIFICATE OF QUALIFICATIONS

I, Wayne M. Ash, P. Eng., of 401 - 1765 Duchess Street, West Vancouver, British Columbia, do hereby certify as follows:

1. I am a graduate of the Haileybury School of Mines (Ontario, 1965) and Michigan Technological University (Michigan, B. Sc. Mining Engineering, 1969).
2. I have been directly associated with the mining industry for the past twenty-six years and have been a member of the Association of Professional Engineers of British Columbia since 1971 (Registration No. 7940).
3. I have no interest, either directly or indirectly in the property or securities of Candorado Mines Ltd., but may gain an interest in the future.
4. I inspected the property in November and December 1986, and co-ordinated field operations conducted in 1986.
5. I hereby grant permission to Candorado Mines Ltd. to use this report, or any portion of it, for any legal purposes normal to the business of the firm, so long as the portions used do not materially deviate from the intent of this report, as set out in the whole.

Dated at Vancouver, B.C., this 24th day of April, 1987.



Wayne M. Ash, P. Eng.

CERTIFICATE OF QUALIFICATIONS

I, Kenneth D.K. Embree, of 8588 Woodgrove Place, Burnaby, British Columbia, do hereby certify as follows:

1. I am a graduate of the University of Saskatchewan (B.Sc. Geological Engineering, 1986).
2. I have been directly associated with the mining industry for the past six months and have been a member of the Association of Professional Engineers of British Columbia, as an Engineer-In-Training, since 1986.
3. I acted as a supervisor and helped to carry out the field work on this project. I also helped in compiling all data and preparing this report.

Dated at Vancouver, B.C., this 24th day of April, 1987.



Kenneth D.K. Embree

A P P E N D I C E S

APPENDIX I

SOIL SURVEY RESULTS

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: MAR 3 1987

DATE REPORT MAILED: *Mar. 10/87*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SM, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-4 SOILS -80 MESH .75 CYANIDE SOLUTION

ASSAYER: *Dean Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

MINORE MINE MANAGEMENT

FILE # 87-0559

PAGE 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
72+00W 50+00N	15	14	63	.4	14
72+00W 49+50N	4	10	41	.6	6
72+00W 49+00N	6	15	32	.5	5
72+00W 48+00N	39	70	83	.1	31
72+00W 47+50N	7	6	32	.1	12
72+00W 47+00N	17	15	54	.2	16
72+00W 46+50N	4	2	18	.1	3
72+00W 46+00N	2	3	12	.1	2
72+00W 45+50N	6	6	19	2.1	5
72+00W 45+00N	20	30	64	.5	26
72+00W 44+50N	15	6	19	.3	5
72+00W 44+00N	44	28	120	1.1	9
72+00W 43+50N	24	24	57	.2	12
72+00W 43+00N	4	5	21	.2	2
72+00W 42+50N	2	3	8	.1	2
72+00W 42+00N	16	24	44	.4	13
72+00W 41+75N	9	14	29	.1	11
72+00W 41+00N	13	17	64	.1	2
72+00W 40+50N	8	8	40	.1	8
72+00W 40+00N	7	6	24	.1	8
68+00W 47+50N	11	10	31	.1	5
68+00W 47+25N	9	18	24	.8	9
68+00W 47+00N	28	25	98	.1	11
68+00W 46+50N	8	13	28	.2	7
68+00W 45+75N	26	28	71	.1	7
68+00W 45+25N	10	17	53	.1	3
68+00W 45+00N A	13	15	48	.5	12
68+00W 44+75N	9	10	36	.2	11
68+00W 44+25N	8	14	33	.1	6
68+00W 43+50N	31	94	128	.8	19
68+00W 42+50N	32	30	106	.1	20
68+00W 41+75N	19	81	122	.3	18
68+00W 41+00N	7	16	28	.2	6
68+00W 40+50N	17	14	45	.4	2
68+00W 40+00N	17	26	92	.1	5
64+00W 46+00N	24	29	65	.3	13
STD C	59	37	135	6.9	39

MINORE MINE MANAGEMENT

FILE # 87-0559

PAGE

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
64+00W 45+75N	2	5	8	.2	2
64+00W 45+50N	6	18	18	.3	7
64+00W 45+00N	4	12	12	.3	4
64+00W 44+75N	18	35	42	.1	15
64+00W 44+50N	21	29	104	.1	28
64+00W 44+00N	23	18	75	.1	9
64+00W 43+75N	11	10	32	.1	7
64+00W 43+50N	20	18	91	.2	17
64+00W 43+25N	17	14	47	.1	32
64+00W 43+00N	14	17	54	.2	13
64+00W 42+75N	9	19	23	1.4	6
64+00W 42+50N	12	13	52	.3	9
64+00W 42+00N	8	9	31	1.8	4
64+00W 41+50N	22	31	105	.1	10
64+00W 41+00N	43	36	175	.2	8
64+00W 40+50N	51	27	104	.1	2
64+00W 40+00N	26	19	92	.3	6
60+00W 46+00N	22	17	63	.7	19
60+00W 45+50N	9	4	34	.7	7
60+00W 45+00N	19	18	75	.7	15
60+00W 44+50N	35	23	89	.1	13
60+00W 44+00N	6	2	23	.2	3
60+00W 43+50N	11	10	32	.3	4
60+00W 43+00N	9	6	19	.1	8
60+00W 42+50N	47	18	110	2.0	16
60+00W 42+00N	26	20	68	.3	7
60+00W 41+50N	23	25	66	.1	12
60+00W 41+00N	38	22	89	.4	9
60+00W 40+50N	16	22	63	.5	7
60+00W 40+00N	26	18	72	.1	15
58+00W 46+00N	31	31	73	.3	34
58+00W 45+50N	43	17	134	.9	10
58+00W 45+00N	42	15	44	2.4	5
58+00W 44+50N	95	49	282	1.3	31
58+00W 44+00N	17	18	62	3.1	14
58+00W 43+00N	26	12	62	1.4	8
STD C	58	36	131	6.8	41

MINORE MINE MANAGEMENT

FILE # 87-0559

PAGE

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
58+00W 42+50N	23	27	70	1.1	6
58+00W 42+00N	23	23	72	.3	11
58+00W 41+50N	11	21	39	.3	6
58+00W 41+00N	39	23	101	1.0	10
58+00W 40+50N	27	26	75	.3	11
58+00W 40+00N	14	17	39	.2	6
56+00W 47+00N	17	16	37	.3	7
56+00W 46+50N	25	18	50	.2	6
56+00W 46+00N	37	9	80	.1	5
56+00W 45+50N	25	9	30	.1	5
56+00W 45+00N	20	15	62	.3	22
56+00W 44+50N	15	24	40	.7	17
56+00W 44+00N	26	14	57	1.0	13
56+00W 43+50N	40	20	94	.6	6
56+00W 43+00N	15	25	49	2.6	5
56+00W 42+50N	11	12	25	.1	3
56+00W 42+00N	8	16	28	.4	6
56+00W 41+50N	13	17	49	.5	3
56+00W 41+00N	14	27	43	1.0	8
56+00W 40+50N	15	24	47	.9	9
56+00W 40+00N	31	34	101	.5	13
54+00W 47+00N	15	14	56	.3	4
54+00W 46+50N	25	28	105	1.0	9
54+00W 46+00N	17	20	23	.7	3
54+00W 45+50N	16	25	50	.4	8
54+00W 45+00N	17	29	60	.2	10
54+00W 44+50N	18	29	68	.1	8
54+00W 44+00N	25	27	139	.9	10
54+00W 43+50N	17	35	39	1.2	9
54+00W 43+00N	20	28	116	1.6	9
54+00W 42+50N	17	38	35	.2	10
54+00W 42+00N	14	13	37	.5	8
54+00W 41+50N	56	33	109	1.8	34
54+00W 41+00N	22	25	59	.7	12
54+00W 40+50N	25	37	65	1.7	27
54+00W 40+00N	15	103	72	3.6	24
STD C	58	38	133	6.9	41

MINORE MINE MANAGEMENT

FILE # 87-0559

PAGE

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
40+00N 67+50W	18	18	77	.1	6
40+00N 66+75W	9	10	23	.1	7
40+00N 66+25W	30	24	100	.3	8
40+00N 65+50W	8	10	44	.1	3
40+00N 65+00W	14	25	64	.1	10
40+00N 64+50W	17	26	79	.4	9
40+00N 55+50W	13	31	29	1.0	8
40+00N 55+00W	10	31	35	.8	9
40+00N 54+50W	41	37	99	1.6	15
R1	15	32	92	.6	28
R2	37	44	113	.2	39
R3	37	45	145	.5	67
R4	37	82	122	.5	49
R5	35	33	102	.4	25
R6	19	32	91	.1	8
R7	26	25	94	.4	18
R8	66	49	124	.2	32
R9	26	28	104	.3	15
R10	34	26	121	.5	15
R11	42	34	106	.5	25
R13	43	24	123	.3	15
R14	44	38	115	.4	16
R15	30	21	123	.1	20
R16	27	28	76	.4	22
R17	38	17	119	.4	22
R18	37	21	111	.1	19
STD C	59	38	135	6.8	41

APPENDIX II

SOIL SURVEY STATISTICS

Cu1

Cu(ppm)	log	ppm^2	log^2
15	1.1768913	225	1.3831906
4	.68285999	16	.36247623
6	.77815125	36	.60551937
39	1.5918646	1521	2.5314866
7	.84589884	49	.71419878
17	1.2384489	289	1.5148845
4	.68285999	16	.36247623
30	1.3818388	4	.09861986
6	.77815125	36	.60551937
28	1.3818388	400	1.6926790
15	1.1768913	225	1.3831906
44	1.6434527	1936	2.7889367
24	1.3882112	576	1.9849831
4	.68285999	16	.36247623
30	1.3818388	4	.09861986
16	1.2841288	256	1.4499849
9	.95424251	81	.91857877
13	1.1139434	169	1.2488698
8	.98388999	64	.81557152
7	.84589884	49	.71419878
11	1.0413927	121	1.0844987
9	.95424251	81	.91857877
28	1.4471588	784	2.0942664
8	.98388999	64	.81557152
26	1.4149733	676	2.0821496
18	1	188	1
13	1.1139434	169	1.2488698
9	.95424251	81	.91857877
8	.98388999	64	.81557152
31	1.4913617	961	2.2241597
32	1.5851588	1824	2.2654765
19	1.2787536	361	1.6352188
7	.84589884	49	.71419877
17	1.2384489	289	1.5148845
17	1.2384489	289	1.5148845
24	1.3882112	576	1.9849831
30	1.3818388	4	.09861986
6	.77815125	36	.60551937
4	.68285999	16	.36247623
18	1.2552725	324	1.5757891
21	1.3222193	441	1.7482639
23	1.3617278	529	1.8543827
11	1.0413927	121	1.0844987
28	1.3818388	400	1.6926790
17	1.2384489	289	1.5148845
14	1.1461288	196	1.3136895
9	.95424251	81	.91857877
12	1.0791812	144	1.1646322
8	.98388999	64	.81557152
22	1.3424227	484	1.8828987
43	1.6334685	1849	2.6682192
51	1.7875782	2601	2.9157959
26	1.4149733	676	2.0821496
22	1.3424227	484	1.8828987
9	.95424251	81	.91857877
19	1.2787536	361	1.6352188
35	1.5448688	1225	2.3841461
6	.77815125	36	.60551937

CaZ

11	1.8413927	121	1.8844987
9	.95424251	81	.91857877
47	1.6728979	2289	2.7959112
26	1.4149733	676	2.8821496
23	1.3617278	529	1.8543827
38	1.5797836	1444	2.4957162
16	1.2841288	256	1.4499849
26	1.4149733	676	2.8821496
31	1.4913617	961	2.2241597
43	1.6334685	1849	2.6682192
42	1.6232493	1764	2.6349383
99	1.9777236	9825	3.9113987
17	1.2384489	289	1.5148845
26	1.4149733	676	2.8821496
23	1.3617278	529	1.8543827
23	1.3617278	529	1.8543827
11	1.8413927	121	1.8844987
39	1.5918646	1521	2.5314866
27	1.4313638	729	2.8488822
14	1.1461288	196	1.3136895
17	1.2384489	289	1.5148845
25	1.3979488	625	1.9542363
37	1.5682817	1369	2.4592566
25	1.3979488	625	1.9542363
28	1.3818388	488	1.6926798
15	1.1768913	225	1.3831986
26	1.4149733	676	2.8821496
48	1.6828688	1688	2.5665962
15	1.1768913	225	1.3831986
11	1.8413927	121	1.8844987
8	.98388999	64	.81557152
13	1.1139434	169	1.2488698
14	1.1461288	196	1.3136895
15	1.1768913	225	1.3831986
31	1.4913617	961	2.2241597
15	1.1768913	225	1.3831986
25	1.3979488	625	1.9542363
17	1.2384489	289	1.5148845
16	1.2841288	256	1.4499849
17	1.2384489	289	1.5148845
18	1.2552725	324	1.5757891
25	1.3979488	625	1.9542363
17	1.2384489	289	1.5148845
28	1.3818388	488	1.6926798
17	1.2384489	289	1.5148845
14	1.1461288	196	1.3136895
56	1.7481888	3136	3.8561614
22	1.3424227	484	1.8828987
25	1.3979488	625	1.9542363
15	1.1768913	225	1.3831986
18	1.2552725	324	1.5757891
9	.95424251	81	.91857877
38	1.4771213	988	2.1818872
8	.98388999	64	.81557152
14	1.1461288	196	1.3136895
17	1.2384489	289	1.5148845
13	1.1139434	169	1.2488698
18	1	188	1
41	1.6127839	1681	2.6818718

Cu 3

15	1.1760913	225	1.3831986
37	1.5682017	1369	2.4592566
37	1.5682017	1369	2.4592566
37	1.5682017	1369	2.4592566
35	1.5440600	1225	2.3841461
19	1.2707536	361	1.6352108
26	1.4149733	676	2.0021496
66	1.0195439	4356	3.3107401
26	1.4149733	676	2.0021496
34	1.5314789	1156	2.3454277
42	1.6232493	1764	2.6349383
43	1.6334685	1849	2.6682192
44	1.6434527	1936	2.7009367
30	1.4771213	900	2.1018872
27	1.4313630	729	2.0408022
30	1.5797836	1444	2.4957162
37	1.5682017	1369	2.4592566

sum	sum	sum	sum
2908	166.37822	8924	219.18751

mean	mean
21.641791	1.2416270

median	median

variance	variance
10.216418	.01035266

standard deviation	standard deviation
3.1963132	.1017200

SD = 3.20

	A	B	C	D
	\log	\log	\log^2	\log^2
1				
2	14	1.1461288	196	1.3136895
3	18	1	188	1
4	15	1.1768913	225	1.3831986
5	78	1.8458988	4908	3.4843868
6	6	.77815125	36	.68551937
7	15	1.1768913	225	1.3831986
8	3	.38183888	4	.89861986
9	3	.47712125	9	.22764469
10	6	.77815125	36	.68551937
11	38	1.4771213	988	2.1818872
12	6	.77815125	36	.68551937
13	28	1.4471588	784	2.8942664
14	24	1.3882112	576	1.9849831
15	5	.69897888	25	.48855987
16	3	.47712125	9	.22764469
17	24	1.3882112	576	1.9849831
18	14	1.1461288	196	1.3136895
19	17	1.2384489	289	1.5148845
20	8	.98388999	64	.81557152
21	6	.77815125	36	.68551937
22	18	1	188	1
23	18	1.2552725	324	1.5757891
24	25	1.3979488	625	1.9542363
25	13	1.1139434	169	1.2488698
26	28	1.4471588	784	2.8942664
27	17	1.2384489	289	1.5148845
28	15	1.1768913	225	1.3831986
29	18	1	188	1
30	14	1.1461288	196	1.3136895
31	94	1.9731279	8836	3.8932335
32	38	1.4771213	988	2.1818872
33	81	1.9884858	6561	3.6423151
34	16	1.2841288	256	1.4499849
35	14	1.1461288	196	1.3136895
36	26	1.4149733	676	2.8821496
37	29	1.4623988	841	2.1386879
38	5	.69897888	25	.48855987
39	18	1.2552725	324	1.5757891
40	12	1.8791812	144	1.1646322
41	35	1.5448688	1225	2.3841461
42	29	1.4623988	841	2.1386879
43	18	1.2552725	324	1.5757891
44	18	1	188	1
45	18	1.2552725	324	1.5757891
46	14	1.1461288	196	1.3136895
47	17	1.2384489	289	1.5148845
48	19	1.2787536	361	1.6352188
49	13	1.1139434	169	1.2488698
50	9	.95424251	81	.91857877
51	31	1.4913617	961	2.2241597
52	36	1.5563825	1296	2.4228775
53	27	1.4313638	729	2.8488822
54	19	1.2787536	361	1.6352188
55	17	1.2384489	289	1.5148845
56	4	.68285999	16	.36247623
57	18	1.2552725	324	1.5757891

58	23	1.3617278	529	1.8543827
59	23	1.3617278	4	.89861986
60	18	1	188	1
61	6	.77815125	36	.68551937
62	18	1.2552725	324	1.5757891
63	28	1.3818388	488	1.6926798
64	25	1.3979488	625	1.9542363
65	22	1.3424227	484	1.8828987
66	22	1.3424227	484	1.8828987
67	18	1.2552725	324	1.5757891
68	31	1.4913617	961	2.2241597
69	17	1.2384489	289	1.5148845
70	15	1.1768913	225	1.3831986
71	49	1.6981961	2481	2.8567628
72	18	1.2552725	324	1.5757891
73	12	1.8791812	144	1.1646322
74	27	1.4313638	729	2.8488822
75	23	1.3617278	529	1.8543827
76	21	1.3222193	441	1.7482639
77	23	1.3617278	529	1.8543827
78	26	1.4149733	676	2.8821496
79	17	1.2384489	289	1.5148845
80	16	1.2841288	256	1.4499849
81	18	1.2552725	324	1.5757891
82	9	.95424251	81	.91857877
83	9	.95424251	81	.91857877
84	15	1.1768913	225	1.3831986
85	24	1.3882112	576	1.9849831
86	14	1.1461288	196	1.3136895
87	28	1.3818388	488	1.6926798
88	25	1.3979488	625	1.9542363
89	12	1.8791812	144	1.1646322
90	16	1.2841288	256	1.4499849
91	17	1.2384489	289	1.5148845
92	27	1.4313638	729	2.8488822
93	24	1.3882112	576	1.9849831
94	34	1.5314789	1156	2.3454277
95	14	1.1461288	196	1.3136895
96	28	1.4471588	784	2.8942664
97	28	1.3818388	488	1.6926798
98	25	1.3979488	625	1.9542363
99	29	1.4623988	841	2.1386879
100	29	1.4623988	841	2.1386879
101	27	1.4313638	729	2.8488822
102	35	1.5448688	1225	2.3841461
103	28	1.4471588	784	2.8942664
104	38	1.5797836	1444	2.4957162
105	13	1.1139434	169	1.2488698
106	33	1.5185139	1089	2.3858846
107	25	1.3979488	625	1.9542363
108	37	1.5682817	1369	2.4592566
109	40	2.0128372	18689	4.8515137
110	18	1.2552725	324	1.5757891
111	18	1	188	1
112	24	1.3882112	576	1.9849831
113	18	1	188	1
114	25	1.3979488	625	1.9542363
115	26	1.4149733	676	2.8821496
116	31	1.4913617	961	2.2241597
117	31	1.4913617	961	2.2241597

Pb 2

118	37	1.5682017	1369	2.4592566
119	32	1.5051500	1024	2.2654765
120	44	1.6434527	1936	2.7009367
121	45	1.6532125	2025	2.7331116
122	82	1.9130139	6724	3.6626835
123	33	1.5185139	1089	2.3050046
124	32	1.5051500	1024	2.2654765
125	25	1.3979400	625	1.9542363
126	49	1.6901961	2401	2.8567628
127	28	1.4471580	784	2.8942664
128	26	1.4149733	676	2.8021496
129	34	1.5314709	1156	2.3454277
130	24	1.3802112	576	1.9849831
131	38	1.5797036	1444	2.4957162
132	21	1.3222193	441	1.7482639
133	28	1.4471580	784	2.8942664
134	17	1.2304489	289	1.5140045
135	21	1.3222193	441	1.7482639
136	-----			
137	sum	sum	sum	sum
138	3115	171.10710	106301	230.28735
139	-----			
140	mean	mean		
141	23.246269	1.2775157		
142	-----			
143	median	median		
144				
145	-----			
146	variance	variance		
147	3.2910448	.01304675		
148	-----			
149	standard	standard		
150	deviation	deviation		
151	1.8123081	1.1422235		

$SD = 1.81$

	A	B	C	D
	Zn(ppm)	log	ppm^2	log^2
2	63	1.7993405	3969	3.2376264
3	41	1.6127039	1681	2.6010718
4	32	1.5051500	1024	2.2654765
5	83	1.9190701	6889	3.6820607
6	32	1.5051500	1024	2.2654765
7	54	1.7323930	2916	3.0011881
8	18	1.2552725	324	1.5757091
9	12	1.0791012	144	1.1646322
10	19	1.2787536	361	1.6352108
11	64	1.8061000	4096	3.2622061
12	19	1.2787536	361	1.6352108
13	128	2.0791012	14400	4.3229947
14	57	1.7550749	3249	3.0030965
15	21	1.3222193	441	1.7402639
16	.90300999		64	.81557152
17	44	1.6434527	1936	2.7009367
18	29	1.4623900	841	2.1306079
19	64	1.8061000	4096	3.2622061
20	40	1.6020600	1600	2.5665962
21	24	1.3802112	576	1.9049031
22	31	1.4913617	961	2.2241597
23	24	1.3802112	576	1.9049031
24	90	1.9912261	9604	3.9649013
25	28	1.4471500	784	2.0942664
26	71	1.8512503	5041	3.4271575
27	53	1.7242759	2809	2.9731273
28	48	1.6812412	2304	2.8265721
29	36	1.5563025	1296	2.4220775
30	33	1.5105139	1089	2.3050046
31	128	2.1072100	16384	4.4403339
32	106	2.0253059	11236	4.1010630
33	122	2.0863590	14884	4.3520973
34	20	1.4471500	784	2.0942664
35	45	1.6532125	2025	2.7331116
36	92	1.9637070	8464	3.8564626
37	85	1.9294109	7225	3.7226574
38	.90300999		64	.81557152
39	18	1.2552725	324	1.5757091
40	12	1.0791012	144	1.1646322
41	42	1.6232493	1764	2.6349303
42	104	2.0170333	10816	4.0684235
43	75	1.8750613	5625	3.5150547
44	32	1.5051500	1024	2.2654765
45	91	1.9590414	8281	3.8370432
46	47	1.6720979	2209	2.7959112
47	54	1.7323930	2916	3.0011881
48	23	1.3617270	529	1.8543027
49	52	1.7160033	2704	2.9446675
50	31	1.4913617	961	2.2241597
51	105	2.0211093	11025	4.0052062
52	175	2.2430300	30625	5.0312197
53	104	2.0170333	10816	4.0684235
54	92	1.9637070	8464	3.8564626
55	63	1.7993405	3969	3.2376264
56	34	1.5314709	1156	2.3454277
57	75	1.8750613	5625	3.5150547

Zn 1

zn 2

3	89	1.9493900	7921	3.8001214
3	23	1.3617278	529	1.8543027
4	32	1.5051500	1024	2.2654765
1	19	1.2787536	361	1.6352188
2	112	2.0413927	12102	4.1672841
3	68	1.8325089	4624	3.3580089
4	66	1.8195439	4356	3.3107401
5	89	1.9493900	7921	3.8001214
5	63	1.7993405	3969	3.2376264
7	72	1.8573325	5184	3.4496840
3	73	1.8633229	5329	3.4719721
9	134	2.1271048	17956	4.5245748
8	44	1.6434527	1936	2.7009367
1	222	2.4502491	79524	6.0037207
2	62	1.7923917	3844	3.2126680
3	62	1.7923917	3844	3.2126680
4	70	1.8450300	4900	3.4043960
5	72	1.8573325	5184	3.4496840
76	39	1.5910646	1521	2.5314866
77	101	2.0043214	10201	4.0173042
78	75	1.8758613	5625	3.5158547
79	39	1.5910646	1521	2.5314866
80	37	1.5682017	1369	2.4592566
81	50	1.6989700	2500	2.8864991
82	80	1.9030900	6400	3.6217515
83	30	1.4771213	900	2.1810872
84	62	1.7923917	3844	3.2126680
85	40	1.6020600	1600	2.5665962
86	57	1.7558749	3249	3.0830965
87	94	1.9731279	8836	3.8932335
88	49	1.6901961	2401	2.8567628
89	25	1.3979400	625	1.9542363
90	28	1.4471500	784	2.0517654
91	49	1.6901961	2401	2.8567628
92	43	1.6334685	1849	2.6682192
93	47	1.6720979	2209	2.7959112
94	101	2.0043214	10201	4.0173042
95	56	1.7401880	3136	3.0561614
96	105	2.0211893	11025	4.0852062
97	23	1.3617278	529	1.8543027
98	50	1.6989700	2500	2.8864991
99	60	1.7701513	3600	3.1610219
100	68	1.8325089	4624	3.3580089
101	139	2.1430140	19321	4.5925124
102	39	1.5910646	1521	2.5314866
103	116	2.0644500	13456	4.2619068
104	35	1.5440600	1225	2.3041461
105	37	1.5682017	1369	2.4592566
106	109	2.0374265	11881	4.1511067
107	59	1.7708520	3481	3.1359168
108	65	1.8129134	4225	3.2866540
109	72	1.8573325	5184	3.4496840
110	77	1.8864907	5929	3.5588473
111	23	1.3617278	529	1.8543027
112	100	2	10000	4
113	44	1.6434527	1936	2.7009367
114	64	1.8061000	4096	3.2622861
115	79	1.8976271	6241	3.6009886
116				

Zn 3

```
118      99 1.9956352      9881 3.9825598
119      92 1.9637878      8464 3.8564626
120     113 2.2538784     12769 4.2151311
121     145 2.1613688     21825 4.6715116
122     122 2.2863598     14884 4.3528973
123     182 2.2886882     12484 4.2344747
124      91 1.9598414      8281 3.8378432
125      94 1.9731279      8836 3.8932335
126     124 2.28934217    15376 4.3824144
127     184 2.2178333     18816 4.0684235
128     121 2.2827854     14641 4.3379949
129     186 2.2253859     11236 4.1818638
130     123 2.2899851     15129 4.3677834
131     115 2.2886978     13225 4.2464756
132     123 2.2899851     15129 4.3677834
133      76 1.8888136      5776 3.5374598
134     119 2.2755478     14161 4.3878952
135     111 2.28453238    12321 4.1833461
136 -----
137      sub      sub      sub      sub
138     9849 234.44965    823189 428.65798
139 -----
140      mean      mean
141     67.529951 1.7496242
142 -----
143      median      median
144
145 -----
146      variance      variance
147     91.947761 .83121988
148 -----
149      standard      standard
150      deviation      deviation
151     9.5893755 7668899
```

$SD = 9.59$

Ag 1

	A	B	C	D
	Ag(ppm)	log	ppm ²	log ²
1				
2	.4	-.3979488	.16	.15835625
3	.6	-.2218487	.36	.04921687
4	.5	-.3818388	.25	.09861986
5	.1	-1	.01	1
6	.1	-1	.01	1
7	.2	-.6989788	.04	.48855987
8	.1	-1	.01	1
9	.1	-1	.01	1
10	2.1	.32221929	4.41	.18382527
11	.5	-.3818388	.25	.09861986
12	.3	-.5228787	.09	.27348218
13	1.1	.84139269	1.21	.00171325
14	.2	-.6989788	.04	.48855987
15	.2	-.6989788	.04	.48855987
16	.1	-1	.01	1
17	.4	-.3979488	.16	.15835625
18	.1	-1	.01	1
19	.1	-1	.01	1
20	.1	-1	.01	1
21	.1	-1	.01	1
22	.1	-1	.01	1
23	.8	-.8969188	.64	.80939155
24	.1	-1	.01	1
25	.2	-.6989788	.04	.48855987
26	.1	-1	.01	1
27	.1	-1	.01	1
28	.5	-.3818388	.25	.09861986
29	.2	-.6989788	.04	.48855987
30	.1	-1	.01	1
31	.8	-.8969188	.64	.80939155
32	.1	-1	.01	1
33	.3	-.5228787	.09	.27348218
34	.2	-.6989788	.04	.48855987
35	.4	-.3979488	.16	.15835625
36	.1	-1	.01	1
37	.3	-.5228787	.09	.27348218
38	.2	-.6989788	.04	.48855987
39	.3	-.5228787	.09	.27348218
40	.3	-.5228787	.09	.27348218
41	.1	-1	.01	1
42	.1	-1	.01	1
43	.1	-1	.01	1
44	.1	-1	.01	1
45	.2	-.6989788	.04	.48855987
46	.1	-1	.01	1
47	.2	-.6989788	.04	.48855987
48	1.4	.14612884	1.96	.02135348
49	.3	-.5228787	.09	.27348218
50	1.8	.25527251	3.24	.06516405
51	.1	-1	.01	1
52	.2	-.6989788	.04	.48855987
53	.1	-1	.01	1
54	.3	-.5228787	.09	.27348218
55	.7	-.1549828	.49	.02399462
56	.7	-.1549828	.49	.02399462
57	.7	-.1549828	.49	.02399462

58	.1	-1	.01	1
59	.2	-.6989788	.04	.48855987
60	.3	-.5228787	.09	.27348218
61	.1	-1	.01	1
62	2	.38183888	4	.89861986
63	.3	-.5228787	.09	.27348218
64	.1	-1	.01	1
65	.4	-.3979488	.16	.15835625
66	.5	-.38183888	.25	.89861986
67	.1	-1	.01	1
68	.3	-.5228787	.09	.27348218
69	.9	-.8457575	.81	.88289375
70	2.4	.38821124	5.76	.14456859
71	1.3	.11394335	1.69	.81298389
72	3.1	.49136169	9.61	.24143631
73	1.4	.14612884	1.96	.82135348
74	1.1	.84139269	1.21	.88171335
75	.3	-.5228787	.09	.27348218
76	.3	-.5228787	.09	.27348218
77	1	0	1	0
78	.3	-.5228787	.09	.27348218
79	.2	-.6989788	.04	.48855987
80	.3	-.5228787	.09	.27348218
81	.2	-.6989788	.04	.48855987
82	.1	-1	.01	1
83	.1	-1	.01	1
84	.3	-.5228787	.09	.27348218
85	.7	-.1549828	.49	.82399462
86	1	0	1	0
87	.6	-.2218487	.36	.884921687
88	2.6	.41497335	6.76	.17228288
89	.1	-1	.01	1
90	.4	-.3979488	.16	.15835625
91	.5	-.38183888	.25	.89861986
92	1	0	1	0
93	.9	-.8457575	.81	.88289375
94	.5	-.38183888	.25	.89861986
95	.3	-.5228787	.09	.27348218
96	1	0	1	0
97	.7	-.1549828	.49	.82399462
98	.4	-.3979488	.16	.15835625
99	.2	-.6989788	.04	.48855987
100	.1	-1	.01	1
101	.9	-.8457575	.81	.88289375
102	1.2	.87519175	1.44	.88626967
103	1.6	.28411998	2.56	.84166497
104	.2	-.6989788	.04	.48855987
105	.5	-.38183888	.25	.89861986
106	1.8	.25527251	3.24	.86516485
107	.7	-.1549828	.49	.82399462
108	1.7	.23844892	2.89	.85318671
109	12.96	.55638258	12.96	.38947247
110	.1	-1	.01	1
111	.1	-1	.01	1
112	.3	-.5228787	.09	.27348218
113	.1	-1	.01	1
114	.1	-1	.01	1
115	.4	-.3979488	.16	.15835625
116	1	0	1	0
117	.8	-.8969188	.64	.88939155

.18	1.6	.20411998	2.56	.84166497
.19	.6	-.2218487	.36	.04921687
.20	.2	-.6989728	.04	.48855987
.21	.5	-.3818382	.25	.09861986
.22	.5	-.3818382	.25	.09861986
.23	.4	-.3979422	.16	.15835625
.24	.1	-1	.01	1
.25	.4	-.3979422	.16	.15835625
.26	.2	-.6989728	.04	.48855987
.27	.3	-.5228787	.09	.27340218
.28	.5	-.3818382	.25	.09861986
.29	.5	-.3818382	.25	.09861986
.30	.3	-.5228787	.09	.27340218
.31	.4	-.3979422	.16	.15835625
.32	.1	-1	.01	1
.33	.4	-.3979422	.16	.15835625
.34	.4	-.3979422	.16	.15835625
.35	.1	-1	.01	1
.36	-----			
.37	sum	sum	sum	sum
.38	71.1	-65.74326	88.27	56.117572
.39	-----			
.40	mean	mean		
.41	.53859781	-.4986213		
.42	-----			
.43	median	median		
.44				
.45	-----			
.46	variance	variance		
.47	.28887463	.22746269		
.48	-----			
.49	standard	standard		
.50	deviation	deviation		
.51	.53859781	.4986213		

$SD = 0.01$

	A	B	C	D
	As(ppm)	log	ppm ²	log ²
1				
2	14	1.1461262	196	1.3136095
3	6	.77815125	36	.60551937
4	5	.69897000	25	.48855907
5	31	1.4913617	961	2.2241597
6	12	1.0791812	144	1.1646322
7	16	1.2041200	256	1.4499849
8	3	.47712125	9	.22764469
9	4	.30103000	4	.09061906
10	5	.69897000	25	.48855907
11	26	1.4149733	676	2.0021496
12	5	.69897000	25	.48855907
13	9	.95424251	81	.91057877
14	12	1.0791812	144	1.1646322
15	4	.30103000	4	.09061906
16	4	.30103000	4	.09061906
17	13	1.1139434	169	1.2408698
18	11	1.0413927	121	1.0844987
19	4	.30103000	4	.09061906
20	8	.90300999	64	.81557152
21	8	.90300999	64	.81557152
22	5	.69897000	25	.48855907
23	9	.95424251	81	.91057877
24	11	1.0413927	121	1.0844987
25	7	.84509804	49	.71419070
26	7	.84509804	49	.71419070
27	3	.47712125	9	.22764469
28	12	1.0791812	144	1.1646322
29	11	1.0413927	121	1.0844987
30	6	.77815125	36	.60551937
31	19	1.2787536	361	1.6352100
32	20	1.30103000	400	1.6926790
33	18	1.2552725	324	1.5757091
34	5	.77815125	36	.60551937
35	4	.30103000	4	.09061906
36	5	.69897000	25	.48855907
37	13	1.1139434	169	1.2408698
38	4	.30103000	4	.09061906
39	7	.84509804	49	.71419070
40	4	.60205999	16	.36247623
41	15	1.1760913	225	1.3831906
42	20	1.4471500	784	2.0942664
43	9	.95424251	81	.91057877
44	7	.84509804	49	.71419070
45	17	1.2304489	289	1.5140045
46	32	1.5051500	1024	2.2654765
47	13	1.1139434	169	1.2408698
48	6	.77815125	36	.60551937
49	9	.95424251	81	.91057877
50	4	.60205999	16	.36247623
51	10	1	100	1
52	8	.90300999	64	.81557152
53	4	.30103000	4	.09061906
54	6	.77815125	36	.60551937
55	19	1.2787536	361	1.6352100
56	7	.84509804	49	.71419070
57	15	1.1760913	225	1.3831906

58	13 1.1139434	169 1.2488698
59	3 .47712125	9 .22764469
62	4 .60205999	16 .36247623
61	8 .90308999	64 .81557152
62	16 1.2041200	256 1.4499044
63	7 .84509004	49 .71419070
64	12 1.0791012	144 1.1646322
65	9 .95424251	81 .91057077
66	7 .84509004	49 .71419070
67	15 1.1760913	225 1.3031906
68	34 1.5314709	1156 2.3454277
69	10 :	100 1
70	5 .69097000	25 .48055907
71	31 1.4913617	961 2.2241597
72	14 1.1461200	196 1.3136095
73	8 .90308999	64 .81557152
74	6 .77015125	36 .60551937
75	11 1.0413927	121 1.0844907
76	6 .77015125	36 .60551937
77	10 1	100 1
78	11 1.0413927	121 1.0844907
79	6 .77015125	36 .60551937
80	7 .84509004	49 .71419070
81	6 .77015125	36 .60551937
82	5 .69097000	25 .48055907
83	5 .69097000	25 .48055907
84	22 1.3424227	484 1.8020907
85	17 1.2304409	289 1.5140045
86	13 1.1139434	169 1.2488698
87	6 .77015125	36 .60551937
88	5 .69097000	25 .48055907
89	3 .47712125	9 .22764469
90	6 .77015125	36 .60551937
91	3 .47712125	9 .22764469
92	8 .90308999	64 .81557152
93	9 .95424251	81 .91057077
94	13 1.1139434	169 1.2488698
95	4 .60205999	16 .36247623
96	9 .95424251	81 .91057077
97	3 .47712125	9 .22764469
98	8 .90308999	64 .81557152
99	10 1	100 1
100	8 .90308999	64 .81557152
101	10 1	100 1
102	9 .95424251	81 .91057077
103	9 .95424251	81 .91057077
104	10 1	100 1
105	8 .90308999	64 .81557152
106	34 1.5314709	1156 2.3454277
107	12 1.0791012	144 1.1646322
108	27 1.4313630	729 2.0400022
109	24 1.3002112	576 1.9049031
110	6 .77015125	36 .60551937
111	7 .84509004	49 .71419070
112	8 .90308999	64 .81557152
113	3 .47712125	9 .22764469
114	10 :	100 1
115	9 .95424251	81 .91057077
116	8 .90308999	64 .81557152
117	9 .95424251	81 .91057077

118	15	1.1768913	225	1.3831986
119	28	1.4471580	784	2.8942664
120	39	1.5918646	1521	2.5314866
121	49	1.8268748	4489	3.3345492
122	49	1.6981961	2401	2.8567628
123	25	1.3979488	625	1.9542363
124	9	.92388999	64	.81557152
125	18	1.2552725	324	1.5757891
126	32	1.5851588	1024	2.2654765
127	15	1.1768913	225	1.3831986
128	15	1.1768913	225	1.3831986
129	25	1.3979488	625	1.9542363
130	15	1.1768913	225	1.3831986
131	16	1.2841288	256	1.4499849
132	22	1.3818388	488	1.6926798
133	22	1.3424227	484	1.8828987
134	22	1.3424227	484	1.8828987
135	19	1.2787536	361	1.6352188
136	-----			
137	SUM	SUM	SUM	SUM
138	1635	138.36435	32739	148.24468
139	-----			
140	mean	mean		
141	12.281493	.97286829		
142	-----			
143	median	median		
144				
145	-----			
146	variance	variance		
147	2.6948299	.21222387		
148	-----			
149	standard	standard		
150	deviation	deviation		
151	1.641588	.11846749		

$$SD = 1.64$$

APPENDIX III

VLF-EM SURVEY RESULTS

	A	B	C	D	E
1	WEST	NORTH	112\3037	112\1012	112\337
2		LINE 5400W	(4025N-5025N)		
3	5400	4025	4.9		
4	5400	4037.5	11.1		
5	5400	4050	7		
6	5400	4062.5	-1.9		
7	5400	4075	8.3		
8	5400	4087.5	16.5		
9	5400	4100	20.4		
10	5400	4112.5	13.5		
11	5400	4125	8		
12	5400	4137.5	3.7		
13	5400	4150	1.1		
14	5400	4162.5	1.3		
15	5400	4175	1.8		
16	5400	4187.5	-1.4		
17	5400	4200	-1.6		
18	5400	4212.5	2.5		
19	5400	4225	5.4		
20	5400	4237.5	-1.3		
21	5400	4250	7.7		
22	5400	4262.5	7.4		
23	5400	4275	5.1		
24	5400	4287.5	6.6		
25	5400	4300	18.3		
26	5400	4312.5	6.8		
27	5400	4325	5.7		
28	5400	4337.5	3.9		
29	5400	4350	.6		
30	5400	4362.5	8.8		
31	5400	4375	6.5		
32	5400	4387.5	7.6		
33	5400	4400	4.2		
34	5400	4412.5	4.1		
35	5400	4425	2.4		
36	5400	4437.5	3.4		
37	5400	4450	1.5		
38	5400	4462.5	1.5		
39	5400	4475	-1.5		
40	5400	4487.5	2.2		
41	5400	4500	2.6		
42	5400	4512.5	.8		
43	5400	4525	-2.5		
44	5400	4537.5	-1.5		
45	5400	4550	-2.9		
46	5400	4562.5	-2		
47	5400	4575	-1.7		
48	5400	4587.5	-2.2		
49	5400	4600	-1.4		
50	5400	4612.5	-1.1		
51	5400	4625	-1.8		
52	5400	4637.5	-3.3		
53	5400	4650	-2.6		
54	5400	4662.5	-1.4		
55	5400	4675	-1.5		
56	5400	4687.5	.4		
57	5400	4700	.8		
58	5400	4712.5	.8		
59	5400	4725	-1.1		
60		LINE 5600W	(4025N-5025N)		
61	5600	4025	8.3	1.1	1.7
62	5600	4037.5	1.9	2.8	2.4

63	5600	4050	-3.9	1.4	1.7
64	5600	4062.5	-13.4	-3.5	-1.2
65	5600	4075	-10.5	-1.5	.8
66	5600	4087.5	-11.6	-.7	.5
67	5600	4100	-15.1	-1.5	-.3
68	5600	4112.5	-12.4	3.2	2.6
69	5600	4125	-14.3	5.3	4.5
70	5600	4137.5	-10.5	1.5	.3
71	5600	4150	-12.9	.8	3.2
72	5600	4162.5	-22.3	-7.5	1.1
73	5600	4175	-11.3	1.8	2.1
74	5600	4187.5	-21.6	3.5	2.4
75	5600	4200	-25.7	-5.8	-.3
76	5600	4212.5	-32.4	-9.2	-1.1
77	5600	4225	-26.5	-.5	3.9
78	5600	4237.5	-24.6	-5.6	-2.4
79	5600	4250	-14.5	.9	1.2
80	5600	4262.5	-24.4	-6.6	-1.2
81	5600	4275	-14	4.1	7.5
82	5600	4287.5	-22.9	-3.1	3.2
83	5600	4300	-25.7	-7.3	1.8
84	5600	4312.5	-21.1	3.1	2.5
85	5600	4325	-35.5	-.9	1.4
86	5600	4337.5	-38.7	-15.2	-2.8
87	5600	4350	-21.5	-6.7	-1.6
88	5600	4362.5	-20.7	-4.1	4.1
89	5600	4375	-20.5	-6.1	1.3
90	5600	4387.5	-14.8	-3.6	-1.5
91	5600	4400	-12.3	.6	2.6
92	5600	4412.5	-5.2	4	6
93	5600	4425	1.1	3	.4
94	5600	4437.5	-3.6	1.6	1.1
95	5600	4450	4	4.5	1.5
96	5600	4462.5	3.4	4.3	1.5
97	5600	4475	5.1	6.5	3.1
98	5600	4487.5	3.3	6.4	4.4
99	5600	4500	-.3	3.8	4.5
100	5600	4512.5	-10.8	-2	1.3
101	5600	4525	-14.5	-6.6	-4.8
102	5600	4537.5	-9.6	-1.8	-1.2
103	5600	4550	-5.4	.5	.8
104	5600	4562.5	3.2	3.6	.9
105	5600	4575	6.5	1.9	-1.2
106	5600	4587.5	5.6	4	.9
107	5600	4600	5.2	2.9	.5
108	5600	4612.5	1.4	1.2	-.8
109	5600	4625	-.4	-.2	-1.1
110	5600	4637.5	2.1	.9	1.2
111	5600	4650	.4	-.5	-1.1
112	5600	4662.5	-.4	-1.1	-2.1
113	5600	4675	-1.3	-1.9	-.3
114	5600	4687.5	-.7	-.1	-.6
115	5600	4700	.3	1	.2
116	5600	4712.5	-1.7	-.5	-1.1
117	5600	4725	-.8	-.4	-1.5
118	5600	4737.5	-.9	-.5	-1
119	5600	4750	-.9	-.5	-1.2
120	5600	4762.5	-.5	.5	.2
121	5600	4775	-2.2	.9	-1.4
122	5600	4787.5	-.3		
123	5600	4800	2.7		
124	5600	4812.5	.1		
125	5600	4825	-.5		
126	5600	4837.5	-.1		
127	5600	4850	-1.6		
128	5600	4862.5	-1.8		

129	5600	4875	-1.3		
130	5600	4887.5	-.7		
131	5600	4900	-2.6		
132	5600	4912.5	-.9		
133	5600	4925	-1.3		
134	5600	4937.5	-1		
135	5600	4950	.4		
136	5600	4962.5	-.9		
137	5600	4975	-1.1		
138	5600	4987.5	.1		
139	5600	5000	-.5		
140	5600	5012.5	.3		
141	5600	5025	-2		
142		LINE 5800W (4025N-4725N)			
143	5800	4025	6.1		
144	5800	4037.5	5		
145	5800	4050	3.5		
146	5800	4062.5	4.5		
147	5800	4075	6.8		
148	5800	4087.5	4.4		
149	5800	4100	3.4		
150	5800	4112.5	5.6		
151	5800	4125	6.5		
152	5800	4137.5	10.5		
153	5800	4150	4.9		
154	5800	4162.5	7.3		
155	5800	4175	8.6	3.7	-.2
156	5800	4187.5	12.1	4.8	.1
157	5800	4200	12.7	4.6	1.3
158	5800	4212.5	-1.2	-.3	-2.7
159	5800	4225	-4.3	-2.4	-5.5
160	5800	4237.5	-7.3	-.3	2.9
161	5800	4250	-1.5	6.7	2.3
162	5800	4262.5	-3.2	7.4	.2
163	5800	4275	6.2	9.8	3.4
164	5800	4287.5	9.4	11.8	1.4
165	5800	4300	-5.4	3.7	1.3
166	5800	4312.5	7.7	8.8	3.6
167	5800	4325	3.2	8.2	1.4
168	5800	4337.5	17.9	18.3	7.9
169	5800	4350	4.3	8.4	.7
170	5800	4362.5	4.4	9.5	1.3
171	5800	4375	17.4	15.6	5.3
172	5800	4387.5	30.9	30.5	10.4
173	5800	4400	36.5	24.7	4.7
174	5800	4412.5	61	36.3	2.9
175	5800	4425	29.3	16.6	-.9
176	5800	4437.5	2.8	15	8.8
177	5800	4450	-10.6	2.9	-.6
178	5800	4462.5	-24.7	2.4	3.8
179	5800	4475	-4.3	5.5	-.3
180	5800	4487.5	6.6	8.7	4.6
181	5800	4500	8.6	11.3	7.8
182	5800	4512.5	8.5	11.8	5.2
183	5800	4525	1.2	5.1	.4
184	5800	4537.5	-5.7	-2.5	-1.7
185	5800	4550	-6.6	-2.2	-.8
186	5800	4562.5	-3.3	-.9	-.6
187	5800	4575	5.7	3.5	1.7
188	5800	4587.5	10.8	5.6	1.6
189	5800	4600	6.3	3.8	.5
190	5800	4612.5	.1		
191	5800	4625	1.7		
192	5800	4637.5	2.3		
193	5800	4650	1.9		
194	5800	4662.5	.7		

195	5800	4675	1.5		
196	5800	4687.5	1.2		
197	5800	4700	1.3		
198	5800	4712.5	.6		
199	5800	4725	1.2		
200		LINE 6000W (4025N-5025N)			
201	6000	4025	-4.8	1.8	.9
202	6000	4037.5	3.4	2.6	.3
203	6000	4050	5.2	.8	2.1
204	6000	4062.5	9.4	4.1	-3.5
205	6000	4075	9.6	7.4	.2
206	6000	4087.5	11.8	7.6	2.9
207	6000	4100	1.2	2.8	-.2
208	6000	4112.5	1.5	2.4	-1.1
209	6000	4125	3.9	6.5	2.9
210	6000	4137.5	22.8	10.2	3.7
211	6000	4150	25.6	7.8	1.9
212	6000	4162.5	19.4	5.3	.1
213	6000	4175	8.2	5.2	2.1
214	6000	4187.5	5.3	-.5	-1.5
215	6000	4200	4.3	4.5	2.2
216	6000	4212.5	4.9	2.6	1.3
217	6000	4225	7.2	2.3	.2
218	6000	4237.5	5.3	4.4	1.2
219	6000	4250	2.4	4.6	1.2
220	6000	4262.5	.3	-.2	.2
221	6000	4275	3.7	2.6	.7
222	6000	4287.5	5.5	2.5	.1
223	6000	4300	.6	4.4	.5
224	6000	4312.5	7.7	.4	-1.7
225	6000	4325	5.8	2.7	.7
226	6000	4337.5	4.5	1.3	-1.6
227	6000	4350	4.6	1.7	-.1
228	6000	4362.5	4.2	.6	-.5
229	6000	4375	8.6	8.1	4.5
230	6000	4387.5	11.7	6.8	3.7
231	6000	4400	8.4	5.3	1.4
232	6000	4412.5	11.8	11.8	3.6
233	6000	4425	-18.2	-.6	-.1
234	6000	4437.5	-31.8	-6.6	-.3
235	6000	4450	-31.9	-10.9	-2.2
236	6000	4462.5	-12.4	-7.3	-.9
237	6000	4475	-4.4	6.8	2.1
238	6000	4487.5	16.7	9.8	4.3
239	6000	4500	2.3	9.5	4.4
240	6000	4512.5	9.5	7.2	4.3
241	6000	4525	-3.4	3.4	2.6
242	6000	4537.5	5.1	5.1	1.9
243	6000	4550	10.3	6.8	2.8
244	6000	4562.5	11.7	7.3	2.3
245	6000	4575	.8	7.9	5.3
246	6000	4587.5	5.1	9.4	3.5
247	6000	4600	-9.5	5.2	3.4
248	6000	4612.5	-11.8	8.5	4.9
249	6000	4625	-5.4	14.3	10.9
250	6000	4637.5	-3.4	14.2	6.3
251	6000	4650	.4	9.3	4.7
252	6000	4662.5	11.5	9.3	3.3
253	6000	4675	.6	5.1	4.4
254	6000	4687.5	6.7		
255	6000	4700	3.6		
256	6000	4712.5	3.8		
257	6000	4725	4.8		
258	6000	4737.5	6.5		
259	6000	4750	6.6		

260	6000	4762.5	0.3		
261	6000	4775	8.2		
262	6000	4787.5	5.9		
263	6000	4800	6.4		
264	6000	4812.5	2.7		
265	6000	4825	2.6		
266	6000	4837.5	3.9		
267	6000	4850	2.1		
268	6000	4862.5	2.5		
269	6000	4875	4.6		
270	6000	4887.5	1.9		
271	6000	4900	3.2		
272	6000	4912.5	-2.1		
273	6000	4925	-1.1		
274	6000	4937.5	-.6		
275	6000	4950	-1.8		
276	6000	4962.5	-1.6		
277	6000	4975	-1.7		
278	6000	4987.5	-4.6		
279	6000	5000	-3.1		
280	6000	5012.5	-.3		
281	6000	5025	-2.3		
282		LINE 6200W	(4025N-4725N)		
283	6200	4025	-.3		
284	6200	4037.5	4.7	3.4	1.1
285	6200	4050	10.3	5.3	2.2
286	6200	4062.5	10.3	2.7	.3
287	6200	4075	9.6	4.8	.2
288	6200	4087.5	7.7	1.5	-1.2
289	6200	4100	4.5	1.4	-.4
290	6200	4112.5	8.5	4.7	.7
291	6200	4125	4.7	2.2	-.5
292	6200	4137.5	1.8	2.1	.6
293	6200	4150	2.1	3.6	1.1
294	6200	4162.5	.3	1.2	-.5
295	6200	4175	1	1.7	-.1
296	6200	4187.5	3.8	3.7	.4
297	6200	4200	2.8	2	.3
298	6200	4212.5	-3.4	-.6	-.5
299	6200	4225	-.1	2.1	-.3
300	6200	4237.5	3.3	4.2	1.4
301	6200	4250	.4	.7	-.5
302	6200	4262.5	4.8	2.2	-.8
303	6200	4275	6.6	3.3	.6
304	6200	4287.5	10.3	3.8	.8
305	6200	4300	9.6	4.5	1
306	6200	4312.5	1.5	2.4	-.2
307	6200	4325	10	5.1	2.1
308	6200	4337.5	6.3	3.8	1.3
309	6200	4350	16.8	6.4	2.2
310	6200	4362.5	22.1	10.5	3.4
311	6200	4375	22.7	13.8	4.3
312	6200	4387.5	12.5	8	.1
313	6200	4400	10.6	5.9	1.2
314	6200	4412.5	11.8	5.7	.7
315	6200	4425	11.5	6.3	1.6
316	6200	4437.5	79.5	4	-.4
317	6200	4450	5.6	4.4	1.6
318	6200	4462.5	8.7	6	3.5
319	6200	4475	17.2	12.2	8.9
320	6200	4487.5	17.1	5.7	1.4
321	6200	4500	37.4	19.6	11.9
322	6200	4512.5	29.7	14.3	2.9
323	6200	4525	20.2	6.9	-.5
324	6200	4537.5	3.9	5.6	2.2
325	6200	4550	-9.4	2.3	-.5

320	6200	4502.5	-7.7	4.5	1.5
327	6200	4575	6.8	9.1	4.1
328	6200	4587.5	11.7	12.4	4.9
329	6200	4600	3.3	9.6	3.1
330	6200	4612.5	-1.4	5.8	3.4
331	6200	4625	-2.7	3.4	2.6
332	6200	4637.5	-1.2	2.7	1.2
333	6200	4650	5.7	5.6	2.7
334	6200	4662.5	7.1	5.4	1.1
335	6200	4675	7.6	6.4	2.4
336	6200	4687.5	6.5	6.7	2.3
337	6200	4700	4.1	5.4	1.5
338	6200	4712.5	4.2	5.8	1.7
339	6200	4725	1.6	5.2	-1.3
340	LINE 6400W (4025N-5025N)				
341	6400	4025	-27.1		
342	6400	4037.5	-19.4		
343	6400	4050	-8.4		
344	6400	4062.5	2.5		
345	6400	4075	7		
346	6400	4087.5	6.3		
347	6400	4100	4.9		
348	6400	4112.5	14.6		
349	6400	4125	10.3		
350	6400	4137.5	6.7		
351	6400	4150	11.7		
352	6400	4162.5	12.1		
353	6400	4175	15.4		
354	6400	4187.5	2.5		
355	6400	4200	1.5		
356	6400	4212.5	5.5		
357	6400	4225	3.6		
358	6400	4237.5	2.8		
359	6400	4250	1.5		
360	6400	4262.5	2.2		
361	6400	4275	2.3		
362	6400	4287.5	3.6		
363	6400	4300	5.8		
364	6400	4312.5	1.5		
365	6400	4325	2.5	4.1	.2
366	6400	4337.5	3.6	2.7	-1.1
367	6400	4350	6.8	3.5	-.4
368	6400	4362.5	4.8	3.8	1.1
369	6400	4375	4.5	4.2	1.4
370	6400	4387.5	5	4.5	3.1
371	6400	4400	7.2	1	-1.7
372	6400	4412.5	5.7	2.9	-.3
373	6400	4425	8.2	3.8	.1
374	6400	4437.5	7.7	4.6	.8
375	6400	4450	-4.7	3.5	1.2
376	6400	4462.5	-10.6	-1.1	.3
377	6400	4475	9	.9	-.1
378	6400	4487.5	6.1	-1.4	-.8
379	6400	4500	4.1	4.6	.7
380	6400	4512.5	1.6	3.9	1.4
381	6400	4525	12.8	10.6	2.7
382	6400	4537.5	11.1	8.7	1.9
383	6400	4550	16.8	8.2	1.1
384	6400	4562.5	11.2	6.1	1.5
385	6400	4575	10.9	3.8	-.3
386	6400	4587.5	7.4	4.1	.7
387	6400	4600	5.2	4	-.2
388	6400	4612.5	-2.2	5.8	1
389	6400	4625	7.9	3.5	.4
390	6400	4637.5	7.3	5.7	1.7
391	6400	4650	11.1	3.1	1.2

392	6400	4662.5	9.7	4	.5
393	6400	4675	10.36	4.8	.6
394	6400	4687.5	6.3	5.4	1.3
395	6400	4700	6.9	4.5	1
396	6400	4712.5	9.4	6.4	2.4
397	6400	4725	10.6	5.1	2
398	6400	4737.5	-6.8		
399	6400	4750	-1.8	3.5	.7
400	6400	4762.5	-.5	2.7	1.8
401	6400	4775	5.7	6.4	.9
402	6400	4787.5	14.8	3.3	4.2
403	6400	4800	4.4	3.5	1.2
404	6400	4812.5	2.2	4.1	1.7
405	6400	4825	3.1	2.3	1.4
406	6400	4837.5	-.2	2	1.1
407	6400	4850	1.3	1.7	.2
408	6400	4862.5	.2	1.6	.9
409	6400	4875	2.5	-.4	-.5
410	6400	4887.5	1		
411	6400	4900	-.7		
412	6400	4912.5	1.3		
413	6400	4925	-.6		
414	6400	4937.5	.7		
415	6400	4950	-.4		
416	6400	4962.5	-1.9		
417	6400	4975	-1.6		
418	6400	4987.5	1.3		
419	6400	5000	.4		
420	6400	5012.5	-2.2		
421	6400	5025	-2.4		
422		LINE 6400W (5025N-6025N)			
423	6400	5025	-2.4		
424	6400	5037.5	.8		
425	6400	5050	-.4		
426	6400	5062.5	.5		
427	6400	5075	-.7		
428	6400	5087.5	-2.2		
429	6400	5100	1.4		
430	6400	5112.5	-.2		
431	6400	5125	1.6		
432	6400	5137.5	1		
433	6400	5150	1.6		
434	6400	5162.5	1.3		
435	6400	5175	6.5	3.9	1.2
436	6400	5187.5	-4.5	.6	.4
437	6400	5200	-24.9	-10.4	-1.4
438	6400	5212.5	-27.7	-13.1	-3.2
439	6400	5225	-29.5	-18.9	-7.8
440	6400	5237.5	-9.4	-8.2	-3.2
441	6400	5250	15.9	9.2	2.6
442	6400	5262.5	16.2	12.8	3.9
443	6400	5275	12.3	10.6	5
444	6400	5287.5	12.9	6.9	3.4
445	6400	5300	11.4	8	2.9
446	6400	5312.5	12.6	6.4	2.6
447	6400	5325	3.9	4.3	2.2
448	6400	5337.5	-6.5	-2.4	-.7
449	6400	5350	-9.6	-4.4	-1.6
450	6400	5362.5	-6.6	-3	-2.3
451	6400	5375	6.4	2.7	.3
452	6400	5387.5	5.6	1.9	-.7
453	6400	5400	4.9	2.8	-.2
454	6400	5412.5	4.7	1.7	-1.1
455	6400	5425	5.5	1.8	.2
456	6400	5437.5	5.3	3.2	.3
457	6400	5450	4.2	1	-.5

458	6400	5462.5	7.4	2.4	.4
459	6400	5475	7.1	2.2	.5
460	6400	5487.5	-2.3	1.6	-.5
461	6400	5500	-24.2	-7.4	-1.8
462	6400	5512.5	-39.4	-15.9	-3.6
463	6400	5525	-39.3	-18	-4.1
464	6400	5537.5	-3.9	-4.7	-2.5
465	6400	5550	19.6	16.8	.4
466	6400	5562.5	13.6	17.5	5.4
467	6400	5575	16.3	14.9	3.8
468	6400	5587.5	15.8	12.6	1.6
469	6400	5600	13.2	12.1	3.2
470	6400	5612.5	-3.7	7.4	4.1
471	6400	5625	-1.3	7.4	4.3
472	6400	5637.5	-4.1	3.9	1.8
473	6400	5650	12.5	8.5	3.2
474	6400	5662.5	12.7	8.7	3.4
475	6400	5675	6.9	4.8	1.9
476	6400	5687.5	1	2.5	.6
477	6400	5700	13.2	8.9	2.7
478	6400	5712.5	11.3	7.6	3.1
479	6400	5725	10.7	8.1	2.4
480	6400	5737.5	9.9	5.8	1.7
481	6400	5750	11.6	5.2	1.6
482	6400	5762.5	8.1	4.8	.9
483	6400	5775	7.7	3.4	.4
484	6400	5787.5	8.8	3.5	.9
485	6400	5800	6.8	3.1	.5
486	6400	5812.5	7.5	3.5	6.3
487	6400	5825	5.7	2.6	.3
488	6400	5837.5	2.36	1.9	-.8
489	6400	5850	-4.6	-.2	.1
490	6400	5862.5	-15.7	-4.5	-1.3
491	6400	5875	-8.5	-3	-1.2
492	6400	5887.5	6.1	-1.6	-2.2
493	6400	5900	15.7	5.2	.4
494	6400	5912.5	12.7	6	.6
495	6400	5925	11.5	5.8	1.2
496	6400	5937.5	15.2	7.8	2.6
497	6400	5950	8.1	6	1.5
498	6400	5962.5	8.9	4.6	.5
499	6400	5975	5.2	4.6	1.9
500	6400	5987.5	3.1	2.3	.2
501	6400	6000	.9	2.4	.7
502	6400	6012.5	3.4	3.3	2.6
503	6400	6025	2.2	.4	-.9
504	LINE 6400W (6225N-6637.5N)				
505	6400	6200	3.8		
506	6400	6212.5	2.2		
507	6400	6225	-2.4	-.3	-.9
508	6400	6237.5	-2	.2	-.6
509	6400	6250	2.2	.9	-.8
510	6400	6262.5	4.3	1.7	-1.1
511	6400	6275	11.4	3.4	-1.4
512	6400	6287.5	13.4	6.2	-.4
513	6400	6300	8.7	5.1	.4
514	6400	6312.5	10.3	6.6	.8
515	6400	6325	10.6	4.7	.4
516	6400	6337.5	9.5	4.2	-.3
517	6400	6350	7.4	2.8	-.7
518	6400	6362.5	7.3	3.4	-.6
519	6400	6375	5.7	1.7	-.5
520	6400	6387.5	4.2	2.3	-.4
521	6400	6400	3.8	1.6	-.8
522	6400	6412.5	3.7	1.8	-.3
523	6400	6425	2.5	1.1	-.1

524	6400	6437.5	1.7	.9	-1.1
525	6400	6450	.9	-.5	-1
526	6400	6462.5	2.4	3.2	-1.5
527	6400	6475	.6	-.5	1.1
528	6400	6487.5	.1	-.3	-2.2
529	6400	6500	1	.8	-1.8
530	6400	6512.5	-1.2	-1	-1
531	6400	6525	-.6	-.5	-1.8
532	6400	6537.5	.4	.2	-2
533	6400	6550	-1.2	-1.5	-1.2
534	6400	6562.5	-.1	-.4	-3.1
535	6400	6575	-.3	-.5	-1
536	6400	6587.5	-1.2		-1.2
537	6400	6600	-1.1		
538	6400	6612.5	-.6		
539		LINE 6600W (4325N-4875N)			
540	6600	4325	3.3	2.4	-.1
541	6600	4337.5	5.5	2.6	.3
542	6600	4350	5.5	2.7	.2
543	6600	4362.5	7.6	3.9	.1
544	6600	4375	7.2	2.6	-.1
545	6600	4387.5	6.9	2.6	-.3
546	6600	4400	5.9	2.3	.7
547	6600	4412.5	3.2	2.2	.6
548	6600	4425	-.6	1.2	-.8
549	6600	4437.5	3.6	4.2	1.2
550	6600	4450	7.9	7.1	1.1
551	6600	4462.5	22.8	14.9	3.7
552	6600	4475	9.6	10.9	3.7
553	6600	4487.5	-5.3	7	4
554	6600	4500	-16.2	.4	1.7
555	6600	4512.5	-17.5	-3.4	.3
556	6600	4525	-1.4	2.8	1.3
557	6600	4537.5	3.9	6.4	4.2
558	6600	4550	4.9	10.8	6.5
559	6600	4562.5	19.1	12.4	5
560	6600	4575	17.6	11.3	3.4
561	6600	4587.5	15.7	9.4	4.1
562	6600	4600	7.3	5	1.7
563	6600	4612.5	2.4	3.2	1.4
564	6600	4625	-2.6	.3	-.1
565	6600	4637.5	8.3	4.9	2.1
566	6600	4650	14.4	9.8	3.9
567	6600	4662.5	11.5	8.8	4.6
568	6600	4675	7.7	9	4.4
569	6600	4687.5	11.5	7.5	1.5
570	6600	4700	13.4	8.2	3.4
571	6600	4712.5	7	5.8	2.3
572	6600	4725	4.5	3.3	1.7
573	6600	4737.5	8.5	4.7	2.3
574	6600	4750	4.8	3.7	1.7
575	6600	4762.5	5.2	2	-.2
576	6600	4775	6.7	4.2	.9
577	6600	4787.5	9.5	5.8	.9
578	6600	4800	7.8	7.3	2.4
579	6600	4812.5	7.7	5.1	1.6
580	6600	4825	6.7	5.6	2.7
581	6600	4837.5	8.3	5.5	2.6
582	6600	4850	5.6	3.4	1
583	6600	4862.5	3.9	2	1.3
584	6600	4875	2.1	1.6	.5
585		LINE 6800W (4025N_5025N)			
586	6800	4025	-1.2		
587	6800	4037.5	1.3		
588	6800	4050	.5		

587	6800	4002.5	2.4
590	6800	4075	-3.8
591	6800	4087.5	3.4
592	6800	4100	5.4
593	6800	4112.5	3.3
594	6800	4125	-1.4
595	6800	4137.5	1.9
596	6800	4150	2.9
597	6800	4162.5	-1.3
598	6800	4175	2.2
599	6800	4187.5	1.4
600	6800	4200	3.1
601	6800	4212.5	.7
602	6800	4225	6.6
603	6800	4237.5	1.6
604	6800	4250	.3
605	6800	4262.5	8.3
606	6800	4275	3.4
607	6800	4287.5	3.9
608	6800	4300	6.9
609	6800	4312.5	1.9
610	6800	4325	1.1
611	6800	4337.5	.8
612	6800	4350	1.5
613	6800	4362.5	5.8
614	6800	4375	5.9
615	6800	4387.5	8.3
616	6800	4400	11.8
617	6800	4412.5	16.5
618	6800	4425	8.9
619	6800	4437.5	5.5
620	6800	4450	5.9
621	6800	4462.5	7.8
622	6800	4475	11.3
623	6800	4487.5	10.3
624	6800	4500	13.5
625	6800	4512.5	3.4
626	6800	4525	15.7
627	6800	4537.5	17.9
628	6800	4550	6.8
629	6800	4562.5	9.8
630	6800	4575	6.3
631	6800	4587.5	15.1
632	6800	4600	18.8
633	6800	4612.5	21.3
634	6800	4625	18.8
635	6800	4637.5	13.1
636	6800	4650	15.3
637	6800	4662.5	14.5
638	6800	4675	14.8
639	6800	4687.5	6.3
640	6800	4700	2.6
641	6800	4712.5	7.5
642	6800	4725	6.4
643	6800	4737.5	14.6
644	6800	4750	11.1
645	6800	4762.5	6.8
646	6800	4775	5.8
647	6800	4787.5	5.4
648	6800	4800	8.1
649	6800	4812.5	12.1
650	6800	4825	11.2
651	6800	4837.5	6.6
652	6800	4850	7.5
653	6800	4862.5	7.8
654	6800	4875	11.7

655	6800	4887.5	10.6		
656	6800	4900	10.6		
657	6800	4912.5	5.8		
658	6800	4925	10.6		
659	6800	4937.5	7.4		
660	6800	4950	7.2		
661	6800	4962.5	6.7		
662	6800	4975	6		
663	6800	4987.5	4.6		
664	6800	5000	3.3		
665	6800	5012.5	2.3		
666	6800	5025	2.8		
667		LINE 6800W (4975N-5975N)			
668	6800	4975	3.6		
669	6800	4987.5	3.1		
670	6800	5000	3.6		
671	6800	5012.5	2.6		
672	6800	5025	1.4		
673	6800	5037.5	.4		
674	6800	5050	1.7		
675	6800	5062.5	-.2		
676	6800	5075	2.6		
677	6800	5087.5	1.4		
678	6800	5100	.4		
679	6800	5112.5	1.6		
680	6800	5125	1	1.4	1.8
681	6800	5137.5	1.5	2.4	2.2
682	6800	5150	1.5	.8	.3
683	6800	5162.5	1.8	.9	.2
684	6800	5175	2.5	1.3	-.5
685	6800	5187.5	.8	.2	-.5
686	6800	5200	-1.5	.8	1.3
687	6800	5212.5	-5.7	-3.9	-2.1
688	6800	5225	-9.7	-7.3	-2.8
689	6800	5237.5	-10.5	-5.4	-3.9
690	6800	5250	3.8	1.5	.4
691	6800	5262.5	8.4	6.2	4.3
692	6800	5275	4.8	5.4	1.6
693	6800	5287.5	5.8	6.1	3.4
694	6800	5300	1.5	3	1.9
695	6800	5312.5	3.2	3.7	1.7
696	6800	5325	-4.2	-2.7	-1.4
697	6800	5337.5	-14	-7.6	-2.9
698	6800	5350	-26.6	-15.1	-8.1
699	6800	5362.5	.4	1.6	1.8
700	6800	5375	15.6	11.7	12.2
701	6800	5387.5	-4.7	1.9	.8
702	6800	5400	-3.2	-8.3	-9.1
703	6800	5412.5	6.1	-1.4	-6.4
704	6800	5425	-6.3	-1.1	-.5
705	6800	5437.5	-15.8	-6.8	-.8
706	6800	5450	-23.2	-10.6	-3.6
707	6800	5462.5	-2.3	.6	1.3
708	6800	5475	-.2	2.5	1.4
709	6800	5487.5	6.9	4.9	.8
710	6800	5500	9.4	6	1.3
711	6800	5512.5	2.1	5.1	1.6
712	6800	5525	-16.5	-1.4	.6
713	6800	5537.5	-21.9	-3.6	.7
714	6800	5550	-21.8	-5.1	-.4
715	6800	5562.5	-14.6	-1.6	-1.7
716	6800	5575	-18.2	-4.7	-1.5
717	6800	5587.5	-21.7	-8.9	-3.5
718	6800	5600	-5.3	-3.2	-.6
719	6800	5612.5	.3	3.5	.8
720	6800	5625	-1.3	1.7	.6

721	6800	5637.5	-9.1	3.8	3.1
722	6800	5650	-2.6	1	1.5
723	6800	5662.5	-5.8	-.4	.5
724	6800	5675	-4.5	.9	1.1
725	6800	5687.5	-5.5	1.2	0
726	6800	5700	-6.2	-.9	-1.5
727	6800	5712.5	7.3	7.2	1.2
728	6800	5725	5.1	4.6	.8
729	6800	5737.5	2.7	5.3	1.4
730	6800	5750	3.1	7.7	4.4
731	6800	5762.5	.8	3.2	1.3
732	6800	5775	3.1	5.1	1.3
733	6800	5787.5	-5.6	.6	-.2
734	6800	5800	-7	-.8	-.3
735	6800	5812.5	-11	-1.5	1.6
736	6800	5825	-10.5	-3.8	-2.3
737	6800	5837.5	4.3	3.8	.1
738	6800	5850	-5.2	5.3	2.9
739	6800	5862.5	-13.7	3.5	4.4
740	6800	5875	-22	-2	.2
741	6800	5887.5	20.5	2.7	3.1
742	6800	5900	23.3	12.1	3.7
743	6800	5912.5	30.7	14.9	4.6
744	6800	5925	25.8	13.5	4.3
745	6800	5937.5	22.1	11.5	3.2
746	6800	5950	14.2	6.6	1.8
747	6800	5962.5	-6.7	2.6	1.7
748	6800	5975	-8.7	-.9	.8
749		LINE 7200W (4025N-5025N)			
750	7200	4025	3.3		
751	7200	4037.5	-.3		
752	7200	4050	-4.8		
753	7200	4062.5	-.2		
754	7200	4075	-2.5		
755	7200	4087.5	-3.2		
756	7200	4100	-.4		
757	7200	4112.5	2.6		
758	7200	4125	.1		
759	7200	4137.5	2.8		
760	7200	4150	-2.1		
761	7200	4162.5	-2.3		
762	7200	4175	-2.4		
763	7200	4187.5	-3.2		
764	7200	4200	-2.6		
765	7200	4212.5	-1.6		
766	7200	4225	.6		
767	7200	4237.5	1		
768	7200	4250	-1.2		
769	7200	4262.5	-1.1		
770	7200	4275	.5		
771	7200	4287.5	-1.3		
772	7200	4300	-.5		
773	7200	4312.5	1.6		
774	7200	4325	-1.3		
775	7200	4337.5	.7		
776	7200	4350	-1.1		
777	7200	4362.5	.5		
778	7200	4375	-.6		
779	7200	4387.5	-.5		
780	7200	4400	.3		
781	7200	4412.5	.9		
782	7200	4425	-1.4		
783	7200	4437.5	-.4		
784	7200	4450	1.1		
785	7200	4462.5	.6		
786	7200	4475	-1.1		

787	7200	4487.5	2.3
788	7200	4500	-.7
789	7200	4512.5	4.4
790	7200	4525	.6
791	7200	4537.5	1.6
792	7200	4550	-.1
793	7200	4562.5	2.4
794	7200	4575	2.2
795	7200	4587.5	-.7
796	7200	4600	4.4
797	7200	4612.5	1.2
798	7200	4625	3.4
799	7200	4637.5	1.7
800	7200	4650	-3.6
801	7200	4662.5	.3
802	7200	4675	2.7
803	7200	4687.5	8.1
804	7200	4700	6.9
805	7200	4712.5	6.5
806	7200	4725	7.5
807	7200	4737.5	7.6
808	7200	4750	10.2
809	7200	4762.5	12.2
810	7200	4775	10.1
811	7200	4787.5	13.9
812	7200	4800	10.8
813	7200	4812.5	12.5
814	7200	4825	15
815	7200	4837.5	6.5
816	7200	4850	9.6
817	7200	4862.5	9.7
818	7200	4875	12.5
819	7200	4887.5	14.3
820	7200	4900	9.7
821	7200	4912.5	8.8
822	7200	4925	7.4
823	7200	4937.5	6.1
824	7200	4950	6.7
825	7200	4962.5	5.7
826	7200	4975	4.1
827	7200	4987.5	3.1
828	7200	5000	2
829	7200	5012.5	5.4
830	7200	5025	5.9
831		LINE 7200W (5025N-5500N)	
832	7200	5025	-.7
833	7200	5037.5	1.7
834	7200	5050	1.3
835	7200	5062.5	3.8
836	7200	5075	3
837	7200	5087.5	2.4
838	7200	5100	1.3
839	7200	5112.5	1.6
840	7200	5125	1.9
841	7200	5137.5	.2
842	7200	5150	1.4
843	7200	5162.5	3.4
844	7200	5175	3.1
845	7200	5187.5	.4
846	7200	5200	3.1
847	7200	5212.5	.5
848	7200	5225	.9
849	7200	5237.5	1.8
850	7200	5250	3.6
851	7200	5262.5	3.5
852	7200	5275	1.0

852	7200	5275	1.0		
853	7200	5287.5	2.3		
854	7200	5300	2.5		
855	7200	5312.5	3.9		
856	7200	5325	4		
857	7200	5337.5	3.5		
858	7200	5350	1.6		
859	7200	5362.5	.8		
860	7200	5375	1.9		
861	7200	5387.5	.3		
862	7200	5400	1.5		
863	7200	5412.5	2.2		
864	7200	5425	2		
865	7200	5437.5	2		
866	7200	5450	2.3		
867	7200	5462.5	1.8		
868	7200	5475	2.5		
869	7200	5487.5	1.2		
870	7200	5500	1.4		
871		LINE 7600W (4975N-5325)			
872	7600	4975	2.1		
873	7600	4987.5	2.2		
874	7600	5000	3.1		
875	7600	5012.5	2.5		
876	7600	5025	3.1		
877	7600	5037.5	4		
878	7600	5050	4.2	1.7	.6
879	7600	5062.5	3.5	1.7	.9
880	7600	5075	6.8	2	-.2
881	7600	5087.5	10.4	3.6	.5
882	7600	5100	13.6	5.4	.8
883	7600	5112.5	14.5	4	-.6
884	7600	5125	10.5	5.9	.3
885	7600	5137.5	11.3	5.4	1
886	7600	5150	12.9	5.9	1.6
887	7600	5162.5	13.5	3.3	-.8
888	7600	5175	4.6	3.1	1.4
889	7600	5187.5	4.5	1.6	-.7
890	7600	5200	7.9	3.5	1.6
891	7600	5212.5	11.4	2.1	-.7
892	7600	5225	8.4	1.4	-2.7
893	7600	5237.5	11.1	2.6	-.8
894	7600	5250	7.3	1.7	-1.2
895	7600	5262.5	5.7	1.5	-1.1
896	7600	5275	7.5	1.8	-.9
897	7600	5287.5	8.9	2.8	.4
898	7600	5300	10.5	2.6	-.1
899	7600	5312.5	10.2	2.6	.1
900	7600	5325	10.4	2.6	.6
901		LINE 8000W (5025N-5625N)			
902	8000	5025	.7		
903	8000	5037.5	1.7		
904	8000	5050	-.2		
905	8000	5062.5	-.2		
906	8000	5075	-1.2		
907	8000	5087.5	.5		
908	8000	5100	1.3		
909	8000	5112.5	1		
910	8000	5125	1.4		
911	8000	5137.5	.2		
912	8000	5150	-.5		
913	8000	5162.5	.6		
914	8000	5175	.7		
915	8000	5187.5	-.3		
916	8000	5200	2.3		
917	8000	5212.5	2.6		

918	8000	5225	2		
919	8000	5237.5	2.7		
920	8000	5250	2.4		
921	8000	5262.5	2.7		
922	8000	5275	3.4		
923	8000	5287.5	4.9		
924	8000	5300	7.1	2.7	.2
925	8000	5312.5	9.4	3.7	.8
926	8000	5325	5.5	2.3	-.3
927	8000	5337.5	8.5	3.5	-.6
928	8000	5350	8.4	3.5	.6
929	8000	5362.5	9.2	4.9	-.3
930	8000	5375	11.1	5.6	.4
931	8000	5387.5	11.9	7.7	2.6
932	8000	5400	9.9	6.4	1.7
933	8000	5412.5	11.7	8.5	3.4
934	8000	5425	16.2	10.4	4.4
935	8000	5437.5	13.7	9.8	4.3
936	8000	5450	14.3	8.4	3.7
937	8000	5462.5	14.6	9	4
938	8000	5475	12.4	8.2	3.7
939	8000	5487.5	11.6	9.2	4.7
940	8000	5500	8.6	7.5	3.7
941	8000	5512.5	6.6	5.7	3.2
942	8000	5525	6.7	7.2	4.3
943	8000	5537.5	7.6	5.5	3.1
944	8000	5550	8.7	6.3	4.3
945	8000	5562.5	7.1	4.7	1.8
946	8000	5575	6.6	5.6	2.8
947	8000	5587.5	6.4	4.1	1.2
948	8000	5600	9.1	5.9	2.4
949	8000	5612.5	6.7	3.1	.7
950	8000	5625	5.8	3.9	1.8

APPENDIX IV

MAGNETIC SURVEY RESULTS

DATE	COORDINATES (m)		Magnetometer #1	Magnetometer #2		Total Field Intensity (gammas)	Diurnal Variation (gammas)	Corrected Total Field (gammas)
	West	North	Total Field (gammas)	Field Reading (gammas)	Correlated Reading (gammas)			
11/4/66	6200	5000	50295			50095		50095
"	6300	4950	50105			50105		50105
"	6500	4900	50086			50086		50086
"	6800	4850	50103			50103		50103
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"	7050	5000	50209			50209	-6	50203
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"	7200	4700	50086			50086	-17	50071
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"	7200	4000	50086			50086	-33	50053
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"	7000	4000	50087			50087	-38	50049
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"	6500	5000	59200	59200	2	59202
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"	6400	4700	58400	58400	4	58404
"	6400	4650	59426	59426	5	59431
"	6400	4600	58049	58049	5	58054
"	6400	4550	58132	58132	5	58137
"	6400	4500	58096	58096	5	58101
"	6400	4450	58005	58005	6	58091
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"	6400	4350	58069	58069	6	58075
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1116106	6400	4100	58105	58105	8	58113
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"	6400	4000	58090	58090	8	58098

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"	6500	4000	58535	58535	9	58544
"	6550	4000	58441	58441	9	58450
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"	6300	4000	58183	58183	11	58114
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"	6200	4000	58032	58032	12	58044
"	6150	4000	59205	59205	12	59217
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"	6050	4000	58294	58294	13	58307
"	6000	4000	58616	58616	13	58629

1116106	6000	4000	58616	58616	13	58629
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"	6000	4100	58213	58213	14	58227
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	6000	4250	58242	58242	15	58257
	6000	4300	58213	58213	15	58228
	6000	4350	58292	58292	15	58307
	6000	4400	58215	58215	16	58231

1117186	6000	4400	58153	58153	0	58153
	6000	4450	58198	58198	3	58201
	6000	4500	58204	58204	6	58210
	6000	4550	58227	58227	9	58236
	6002	4600	58222	58222	12	58234
	6000	4650			15	
	6000	4700	58215	58215	18	58233
	6000	4750	58226	58226	21	58247
	6000	4800	58240	58240	24	58264
	6000	4850	58246	58246	27	58273
	6000	4900	58178	58178	30	58200
	6000	4950	58245	58245	32	58277
	6000	5000	58266	58266	35	58301

1117186	6000a	5000	58237	58237	38	58275
	6050	5000	58233	58233	41	58334
	6100	5000	58250	58250	44	58294
	6150	5000	58213	58213	47	58260
	6200	5000	58306	58306	50	58356
	6250	5000	58247	58247	53	58300
	6300	5000	58296	58296	56	58352
	6350	5000	58225	58225	59	58284
	6400	5000	58210	58210	62	58272

1119186	6000a	5000	58229	58229	6	58229
	5950	5000	58225	58225	8	58225
	5900	5000	58238	58238	1	58238
	5850	5000	58265	58265	1	58266
	5800	5000	58244	58244	2	58246
	5750	5000	58262	58262	2	58264
	5700	5000	58287	58287	3	58290
	5650	5000	58333	58333	3	58336
	5600	5000	58200	58200	4	58204
	5550	5000	58423	58423	4	58427
	5500	5000	58037	58037	5	58042
	5450	5000	58193	58193	5	58193
	5400	5000	58167	58167	6	58173
	5400a	5000	58168	58168	6	58174

1119186	5400	5000	58167	58167	6	58173
	5400	4950	58143	58143	7	58158
	5400	4900	58211	58211	7	58218
	5400	4850	58251	58251	8	58259
	5400	4800			8	
	5400	4750	58271	58271	8	58279

1110186	5400	4700	58254	58254	0	58254
	5400	4650	58313	58313	0	58313
	5400	4600	58157	58157	-1	58156
	5400	4550	58239	58239	-1	58238
	5400	4500	58239	58239	-2	58237
	5400	4450	58172	58172	-2	58170
	5400	4400	58150	58150	-2	58148
	5400	4350	58196	58196	-3	58195
	5400	4300	58153	58153	-3	58150
	5400	4250	58139	58139	-4	58134
	5400	4200	58125	58125	-4	58121
	5400	4150	58151	58151	-5	58146
	5400	4100	58138	58138	-5	58133
	5400	4050	58121	58121	-5	58119

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	5400	4000	58127	58127	-6	58124
11\10\86	5400	4000	58127	58127	-6	58121
*	5450	4000	58144	58144	-6	58130
*	5500	4000	58155	58155	-7	58140
*	5550	4000	58157	58157	-7	58150
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*	5700	4000	58110	58110	-8	58102
*	5750	4000	58100	58100	-9	58091
*	5800	4000	58085	58085	-9	58076
*	5850	4000	58102	58102	-9	58093
*	5900	4000	58077	58077	-10	58067
*	5950	4000	58089	58089	-10	58073
*	6000	4000	58083	58083	-11	58072

11\12\86	5600	4000	58144	58144	-11	58133
*	5600	4050	58152	58152	-11	58141
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*	5600	4200	58152	58152	-13	58139
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*	5600	4300	58167	58167	-14	58153
*	5600	4350	58180	58180	-14	58174
*	5600	4400	58170	58170	-14	58164
*	5600	4450	58186	58186	-15	58172
*	5600	4500	58236	58236	-15	58221
*	5600	4550	58234	58234	-16	58218
*	5600	4600	58220	58220	-16	58204
*	5600	4650	58210	58210	-16	58194
*	5600	4700	58216	58216	-17	58193

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*	5600	4800	58282	58282	-2	58280
*	5600	4850	58216	58216	-4	58212
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*	5600	5000a	58177	58177	-11	58166
*	5600	5000	58190	58190	-13	58185

11\12\86	5800	5000	58167	58167	-15	58172
*	5800	4950	58233	58233	-17	58216
*	5800	4900	58252	58252	-19	58233
*	5800	4850	58144	58144	-21	58123
*	5800	4800	58134	58134	-24	58110
*	5800	4750	58181	58181	-26	58155
*	5800	4700	58129	58129	-28	58101
*	5800	4650	58123	58123	-30	58093
*	5800	4600	58163	58163	-32	58131
*	5800	4550	58160	58160	-34	58134
*	5800	4500	58162	58162	-36	58126
*	5800	4450	58144	58144	-39	58106
*	5800	4400	58124	58124	-41	58083
*	5800	4350	58172	58172	-43	58129
*	5800	4300	58133	58133	-45	58080
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*	5800	4200	58142	58142	-49	58093
*	5800	4150	58136	58136	-51	58085
*	5800	4100	58122	58122	-53	58069
*	5800	4050	58122	58122	-56	58066
*	5800	4000	58145	58145	-58	58087
*	5800	4000a	58090	58090	-60	58030

11\14\86	6200	4000	58109	58109	0	58109
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*	6200	4100	58112	58112	-2	58115

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*	6200	4150	58093	58093	-2	58091
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*	6200	4250	58146	58146	-4	58140
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*	6200	4350	58281	58281	-6	58275
*	6200	4400	58311	58311	-6	58300
*	6200	4450	58359	58359	-7	58351
*	6200	4500	58398	58398	-8	58392
*	6200	4550	58437	58437	-9	58430
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*	6200	4650	58538	58538	-10	58530
*	6200	4700	58576	58576	-11	58569
*	6200	4750	58621	58621	-12	58613
*	6200	4800	58661	58661	-12	58653
*	6200	4850	58701	58701	-14	58691
*	6200	4900	58749	58749	-14	58740
*	6200	4950	58791	58791	-14	58781
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11.14.86	5600	5800	58109	58109	-17	58100
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*	5600	4850	58414	58414	-20	58404
*	5600	4800	58459	58459	-21	58450
*	5600	4750	58499	58499	-21	58490
*	5600	4700	58545	58545	-22	58535
*	5600	4650	58587	58587	-23	58574
*	5600	4600	58630	58630	-24	58619
*	5600	4550	58664	58664	-25	58653
*	5600	4500	58699	58699	-25	58688
*	5600	4450	58735	58735	-26	58729
*	5600	4400	58774	58774	-27	58767
*	5600	4350	58815	58815	-28	58807
*	5600	4300	58850	58850	-29	58840
*	5600	4250	58882	58882	-29	58873
*	5600	4200	58912	58912	-30	58902
*	5600	4150	58941	58941	-31	58931
*	5600	4100	58967	58967	-32	58956
*	5600	4050	58989	58989	-33	58978
*	5600	4000	59010	59010	-33	59000
*	5600	4000	59029	59029	-34	59019
11.14.86	7000	4200	58109	58109	-35	58094
*	7000	4050	58201	58201	-36	58186
*	7000	4000	58251	58251	-37	58144
*	7000	3950	58294	58294	-37	58097
*	7000	4200	58336	58336	-38	58291
*	7000	4250	58380	58380	-39	58341
*	7000	4300	58416	58416	-40	58376
*	7000	4350	58459	58459	-41	58408
*	7000	4400	58507	58507	-41	58476
*	7000	4450	58550	58550	-42	58530
*	7000	4500	58598	58598	-43	58582
*	7000	4550	58649	58649	-44	58634
*	7000	4600	58701	58701	-45	58679
*	7000	4650	58757	58757	-45	58731
*	7000	4700	58819	58819	-46	58785
*	7000	4750	58889	58889	-47	58842
*	7000	4800	58960	58960	-48	58900
*	7000	4850	59029	59029	-49	58960
11.19.86	6400	5800	58272	58272	0	58270
*	6400	5850	58346	58346	1	58347
*	6400	5900	58387	58387	1	58388
*	6400	5950	58430	58430	1	58431

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	6400	5200	58242	58242	3	58245
	6402	5202	58269	58269	3	58271
	6402	5302	58277	58277	4	58281
	6402	5352	58301	58302	5	58307
	6402	5402	58339	58335	5	58336
	6400	5450	58358	58358	6	58356
	6400	5500	58322	58322	7	58329
	6400	5550	58276	58276	8	58284
	6402	5600	58281	58282	8	58290
	6402	5650	58310	58332	9	58339
	6402	5700	58327	58327	10	58337
	6402	5752	58313	58313	10	58316
	6420	5802	58367	58267	11	58278
	6402	5850	58182	58186	12	58192
	6402	5902	58248	58148	12	58258
	6402	5952	58227	58227	13	58240
	6402	6002	58274	58274	14	58248
11/19/86	6420	6020	58234	58234	14	58248
	6420	6022	58208	58208	14	58240
	6420	6028	58201	58201	15	58246
	6500	6020	58201	58202	16	58241
	6502	6022	58191	58191	16	58250
	6502	6222	58117	58137	17	58274
	6702	6022	58274	58274	18	58292
	6752	6022	58188	58208	19	58307
	6800	6000	58238	58238	19	58317
	6850	6000	58252	58266	20	58286
11/19/86	6820	6020	58168	58188	21	58203
	6802	6052	58178	58178	21	58198
	6900	6020	58217	58217	22	58239
	6902	6052	58228	58228	23	58256
	6902	6070	58124	58204	23	58227
	6902	6150	58124	58204	24	58258
	6902	6202	58108	58208	25	58288
	6902	6252	58217	58217	25	58241
	6902	6602	58158	58258	26	58279
	6902	6552	58144	58244	27	58271
	6902	6582	58618	58618	27	58645
	6900	6450	58144	58244	26	58272
	6902	6422	58270	58265	29	58234
	6900	6300	58252	58252	29	58281
	6800	6300	58229	58229	30	58259
	6800	6250	58242	58242	31	58273
	6920	6202	58158	58158	32	58188
	6902	6152	58198	58198	32	58268
	6902	6122	58134	58134	33	58167
	6902	6052	58114	58114	34	58148
	6902	6002	58183	58183	35	58198
11/25/86	6600	5000	58043	58043	0	58043
	6600	5852	58057	58057	0	58057
	6602	5100	58036	58036	1	58097
	6602	5152	58069	58065	1	58086
	6602	5200	58362	58063	2	58063
	6600	5250	58112	58112	2	58114
	6620	5300	58154	58154	2	58162
	6602	5352	58185	58185	3	58188
	6602	5402	58168	58168	3	58191
	6602	5452	58132	58152	4	58136
	6602	5502	58123	58223	4	58127
	6602	5552	58197	58197	5	58202
	6602	5622	58171	58171	5	58201
	6602	5652	58151	58151	5	58198
	6620	5702	58202	58202	6	58202

	5500	5750	58214	58214	6	58228
	5502	5800	58221	58220	7	58227
	5500	5800	58218	58218	7	58228
	5502	5900	58208	58208	7	58227
	5600	5900	58180	58180	8	58228
	5600	6000a	58221	58221	8	58228
11-25-86	5700	6000	58152	58150	9	58221
	5750	6000	58138	58138	9	58240
	6000	6000	58216	58216	9	58228
	6000	6000	58180	58228	10	58218
	6000	6000	58204	58204	12	58214
	6002	6000	58203	58220	11	58234
	7000	6000	58226	58228	11	58228
11-25-86	7000	6000	58118	58138	11	58231
	7000	6000	58142	58140	12	58150
	7000	5900	58154	58154	12	58156
	7000	5800	58142	58142	12	58154
	7000	5900	58159	58159	13	58172
	7000	5700	58171	58171	13	58184
	7000	5700	58181	58181	14	58186
	7000	5600	58189	58189	14	58221
	7000	5600	58218	58218	14	58221
	7002	5500	58231	58231	15	58248
	7000	5500	58207	58207	15	58221
	7000	5400	58214	58214	16	58238
	7000	5400	58204	58204	16	58227
	7000	5300	58191	58196	17	58210
	7000	5300	58196	58196	17	58210
	7000	5300	58195	58195	17	58220
	7000	5200	58203	58203	18	58201
	7000	5150	58194	58194	18	58212
	7000	5100	58179	58179	19	58198
	7000	5000	58176	58176	19	58195
	7000	5000a	58182	58182	19	58241
11-25-86	7000	5000	58161	58161	20	58181
	7000	5000	58168	58168	20	58208
	7000	5000	58203	58203	21	58228
	7000	5000	58188	58188	21	58209
	7400	5000	58188	58188	21	58220
11-25-86	7400	5000	58188	58188	21	58239
	7400	5050	58194	58194	22	58215
	7400	5140	58207	58207	22	58229
	7400	5150	58195	58196	23	58221
	7400	5200	58202	58202	23	58225
	7400	5200	58207	58207	24	58201
	7400	5300	58211	58211	24	58230
	7400	5300	58214	58214	24	58238
	7400	5420	58188	58188	25	58211
	7400	5450	58218	58218	25	58248
	7400	5500	58208	58208	26	58234
	7400	5550	58196	58196	26	58220
	7400	5600	58192	58192	26	58218
11-25-86	7600	5500	58118	58128	27	58158
	7600	5500	58138	58138	27	58157
	7600	5500	58140	58140	28	58170
	7600	5150	58142	58142	28	58170
	7600	5100	58151	58151	28	58179
	7600	5050	58151	58151	29	58180
	7600	5000	58147	58147	29	58170
11-25-86	7600	5000	58147	58147	29	58170

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7000	5050	58190	58190	38	58220
7000	5100	58156	58156	31	58187
7000	5150	58142	58142	31	58173
7000	5200	58214	58214	31	58245
7000	5250	58217	58217	32	58249
7000	5300	58222	58222	32	58254
7000	5350	58249	58249	33	58282
7000	5400	58221	58221	33	58254
7000	5450	58190	58190	33	58220
7000	5500	59245	59245	34	59275

8000	5650	58799	58799	34	58830
8000	5600	59122	59122	35	59157
8000	5650	58120	58120	35	58147
8000	5500	59120	59120	35	59157
8000	5450	58121	58121	36	58157
8000	5400	58099	58099	36	58135
8000	5350	58065	58065	37	58122
8000	5300	58110	58110	37	58147
8000	5250	58129	58129	38	58167
8000	5200	58119	58119	38	58151
8000	5150	58110	58110	38	58148
8000	5100	58110	58110	39	58149
8000	5050	58100	58100	39	58168
8000	5000	58117	58117	40	58157

9000	5000	58117	58117	40	58157
9000	5000	58110	58110	40	58153
9000	5000	58125	58125	41	58166
9000	5000	58119	58119	41	58151
9000	5000	58141	58141	41	58165
9000	5000	58144	58144	42	58168
9000	5000	58110	58110	42	58151
9000	5000	58106	58106	42	58149
9000	5000	58117	58117	42	58168
9000	5000	58119	58119	44	58163
9000	5000	58121	58121	44	58165
9000	5000	58116	58116	45	58161

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9400	6000	58110	58110	2	58210
9500	6000	58144	58144	-1	58140
9500	6000	58108	58108	-2	58106
9600	6000	58091	58091	-3	58058

9800	6000	58091	58091	-3	58068
9800	6000	58002	58002	-3	58029
9800	5900	58020	58020	-4	58019
9800	5800	58015	58015	-5	58010
9800	5700	58024	58024	-6	58018
9800	5700	58050	58050	-7	58023
9800	5700	58016	58016	-8	58008
9800	5600	57999	57999	-9	57991
9800	5600	58002	58002	-9	57993
9800	5500	58016	58016	-10	58006
9800	5500	58002	58002	-11	57991
9800	5400	58038	58038	-12	58018
9800	5400	58017	58017	-13	58004
9800	5300	58022	58022	-14	58008
9800	5300	58058	58058	-14	58024
9800	5200	58011	58011	-15	58006
9800	5200	57998	57998	-16	57992
9800	5100	58026	58026	-17	58009
9800	5100	58035	58035	-18	58017
9800	5000	58036	58036	-19	58017
9800	5000	58058	58058	-20	58038

11A30AB6	8650	5000	50007	50007	-21	50066
*	8600	5000	50006	50006	-22	50064
*	8550	5000	50110	50110	-23	50007

M9

12A5AB6	7200	6000	50252	50252	0	50252
*	7200	6050	50279	50279	0	50279
*	7200	6100	50230	50230	0	50230
*	7200	6150	50194	50194	1	50195
*	7200	6200	50215	50215	1	50216
*	7220	6250	50209	50209	1	50210
*	7200	6300	50224	50224	1	50225
*	7200	6350	50209	50209	1	50240
*	7200	6400	50210	50210	1	50222
*	7100	6450	50144	50144	1	50246
*	7200	6500	50243	50243	2	50240
*	7200	6550	50231	50231	2	50230
*	7200	6600	50225	50225	2	50227
*	7200	6650	50215	50215	3	50218
*	7200	6700	50214	50214	3	50217
*	7200	6750	50220	50220	3	50231
*	7200	6800	50199	50199	3	50202
*	7200	6850	50233	50233	3	50236
*	7200	6900	50274	50274	4	50276
*	7200	6950	50204	50204	4	50200
*	7200	7000	50205	50205	4	50209
12A5AB6	7200	7000	50205	50205	4	50209
*	7250	7000	50235	50235	4	50239
*	7300	7000	50214	50214	4	50218
*	7350	7000	50104	50104	5	50109
*	7400	7000	50176	50176	5	50183
12A5AB6	7400	7000	50176	50176	5	50183
*	7400	6950	50179	50179	5	50184
*	7400	6900	50101	50101	5	50106
*	7400	6850	50197	50197	6	50203
*	7400	6800	50205	50205	6	50211
*	7400	6750	50100	50100	6	50194
*	7400	6700	50172	50172	6	50178
*	7400	6650	50100	50100	6	50106
*	7400	6600	50104	50104	7	50191
*	7400	6550	50179	50179	7	50106
*	7400	6500	50102	50102	7	50109
*	7400	6450	50102	50102	7	50109
*	7400	6400	50107	50107	7	50194
*	7400	6350	50170	50170	8	50106
*	7400	6300	50107	50107	8	50195
*	7400	6250	50207	50207	6	50215
*	7400	6200	50220	50220	6	50220
*	7400	6150	50190	50190	6	50190
*	7400	6100	50100	50100	9	50109
*	7400	6050	50174	50174	9	50103
*	7400	6000	50160	50160	9	50169
12A5AB6	7400	6000	50160	50160	9	50169
*	7050	6000	50230	50230	9	50259
*	7000	6000	50230	50230	9	50247
*	7250	6000	50242	50242	10	50252
*	7200	6000	50242	50242	10	50252

12A7AB6	6400	6000	50231	50231	0	50251
*	6400	6050	50226	50226	1	50221
*	6400	6100	50220	50220	1	50221
*	6400	6150	50230	50230	2	50232
*	6400	6200	50201	50201	3	50204

*	6400	6250	58232	58232	4	58236	
*	6400	6300	58225	58225	4	58229	
*	6400	6350	58218	58218	5	58223	
*	6400	6400	58219	58219	6	58225	
*	6400	6450	58215	58215	7	58222	
*	6400	6500	58211	58211	7	58218	
*	6400	6550	58213	58223	8	58231	
*	6400	6600	58221	58221	9	58230	
*	6400	6650	58128	58128	10	58138	
*	6400	6700	58234	58234	10	58244	
*	6400	6750	58236	58206	11	58217	
*	6400	6800	58235	58206	12	58218	
*	6400	6850	58206	58208	12	58221	
*	6400	6900	58128	58228	13	58241	
*	6400	6950	58221	58221	14	58235	
*	6400	7000	58175	58175	15	58190	
1217186	6400	7000	58175	58175	15	58190	
*	6450	7000	58261	58261	16	58277	
*	6500	7000	58281	58281	16	58297	
*	6550	7000	58135	58135	17	58212	
*	6620	7000	58206	58228	18	58246	
1217186	6600	7000	58228	58228	18	58246	
*	6600	6950	58205	58205	19	58224	
*	6600	6900	58213	58219	19	58238	
*	6600	6850	58224	58224	20	58244	
*	6600	6800	58521	58521	21	58542	
*	6600	6750	58237	58237	21	58256	
*	6600	6700	58194	58194	22	58216	
*	6600	6650	58217	58217	23	58240	
*	6600	6600	58316	58316	24	58348	
*	6600	6550	58226	58226	24	58258	
*	6600	6500	58215	58215	25	58240	
*	6600	6450	58177	58177	26	58203	
*	6600	6400	57998	57998	27	58025	
*	6600	6350	58214	58214	27	58241	
*	6600	6300	58237	58237	28	58265	
*	6600	6250	58251	58251	29	58268	
*	6600	6200	58143	58143	30	58175	
*	6600	6150	58185	58185	32	58215	
*	6600	6100	58152	58152	31	58181	
*	6600	6050	58188	58188	32	58212	
*	6600	6000	58151	58151	33	58184	
1217186	6800	6000	58203	58209	33	58242	
*	6800	6050	58206	58206	34	58242	
*	6800	6100	58234	58234	35	58269	
*	6800	6150	58226	58226	36	58264	
*	6800	6200	58213	58213	36	58249	
*	6800	6250	58195	58195	37	58232	
*	6800	6300	58215	58215	38	58253	
*	6800	6350	58238	58238	39	58269	
*	6800	6400	58354	58354	40	58354	
1217186	6400	3000	-100	58365	58365	2	58365
*	6400	3050	-80	58405	58405	1	58405
*	6400	3100	-10	58475	58475	1	58475
*	6400	3150	0	58485	58485	2	58487
*	6400	3200	-20	58465	58465	3	58468
*	6400	3250	-5	58480	58480	4	58484
*	6400	3300	-15	58470	58470	4	58474
*	6400	3350	-20	58465	58465	5	58470
*	6400	3400	-100	58395	58395	6	58391
*	6400	3450	-90	58395	58395	7	58402
*	6400	3500	-30	58395	58395	7	58402

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M (11)

	6400	3600	-700	58395	58395	9	58404
*	6400	3600	-90	58395	58395	9	58404
*	6400	3650	-80	58405	58405	10	58415
*	6400	3700	-80	58405	58405	10	58415
*	6400	3750	-40	58445	58445	11	58456
*	6400	3800	-70	58415	58415	12	58427
*	6400	3850	-110	58375	58375	13	58388
*	6400	3900	-80	58405	58405	13	58418
*	6400	3950	-60	58425	58425	14	58439
*	6400	4000	-100	58385	58385	15	58402
1217136	6400	4000	-100	58385	58385	15	58402
*	6450	4000	-60	58425	58425	16	58441
*	6500	4000	20	58505	58505	16	58521
*	6550	4000	-100	58295	58295	17	58312
*	6600	4000	-140	58345	58345	18	58363
1217138	6600	4200	-140	58345	58345	18	58363
*	6620	3950	-80	58405	58405	19	58424
*	6600	3900	-50	58435	58435	19	58454
*	6660	3850	50	58535	58535	20	58555
*	6600	3800	-80	58405	58405	21	58426
*	6620	3750	-80	58405	58405	22	58427
*	6600	3700	-80	58405	58405	22	58427
*	6660	3650	-80	58405	58405	23	58428
*	6620	3600	-50	58395	58395	24	58419
*	6600	3550	-80	58405	58405	25	58430
*	6630	3500	-160	58325	58325	25	58350
*	6600	3450	-220	58265	58265	26	58231
*	6600	3400	-120	58365	58365	27	58392
*	6620	3350	-110	58375	58375	28	58403
*	6600	3300	-100	58385	58385	28	58413
*	6600	3250	-160	58325	58325	29	58354
*	6630	3200	-150	58335	58335	30	58365
*	6600	3150	-90	58395	58395	31	58426
*	6600	3100	-160	58325	58325	31	58356
*	6600	3050	-150	58335	58335	32	58367
*	6620	3000	-140	58345	58345	33	58378
1217136	6620	3000	-140	58345	58345	33	58378
*	6550	3000	-220	58265	58265	34	58239
*	6500	3000	-160	58325	58325	34	58359
*	6450	3000	-150	58335	58335	35	58370
*	6400	3000	-140	58345	58345	36	58381
1217136	6600	3000	-140	58345	58345	36	58381
*	6650	3000	-180	58305	58305	37	58342
*	6700	3000	-140	58345	58345	38	58382
*	6750	3000	-140	58345	58345	39	58384
*	6800	3000	-140	58345	58345	40	58385
1218136	6000	6450	58301	58301	0	58301	
*	6000	6500	58220	58220	1	58229	
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*	6000	6600	58274	58274	2	58276	
*	6000	6650	58237	58237	3	58240	
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*	6000	6750	58274	58274	4	58278	
*	6000	6800	58180	58180	4	58184	
*	6000	6850	58194	58194	5	58199	
*	6000	6900	58180	58180	6	58184	
*	6000	6950	58205	58205	6	58211	
*	6000	7000	58194	58194	7	58201	
1218136	6650	7000	58183	58183	8	58191	
*	6720	7000	58202	58202	8	58210	

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*	6750	7000	58196	58196	9	58205
*	6822	7000	58198	58198	10	58208
*	6852	7000	58197	58197	12	58207
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*	6950	7200	58195	58195	10	58207
*	7000	7000	58203	58203	12	58215
*	7050	7000	58193	58193	13	58206
*	7100	7000	58178	58178	13	58191
*	7150	7000	58195	58195	14	58209
1213186	7200	7000	58175	58175	15	58188
*	7000	6950	58232	58232	15	58247
*	7000	6900	58235	58235	16	58251
*	7002	6850	58162	58165	17	58232
*	7202	6800	58121	58121	17	58138
*	7000	6750	58921	58921	18	58933
*	7020	6700	58232	58232	19	58251
*	7000	6650	58230	58230	19	58249
*	7200	6600	58224	58224	20	58244
*	7202	6550	58242	58243	20	58252
*	7002	6502	58241	58241	21	58162
*	7000	6450	58243	58243	22	58165
*	7050	6400	58255	58255	22	58277
*	7100	6350	58251	58251	23	58274
*	7000	6300	58248	58248	24	58272
*	7202	6250	58265	58265	24	58389
*	7202	6200	58257	58257	25	58282
*	7000	6150	58261	58261	26	58287
*	7000	6100	58259	58259	26	58385
*	7000	6050	58259	58259	27	58328
*	7000	6000	58287	58287	28	58315
1213186	7000	6000	58287	58287	28	58315
*	7050	6000	58275	58275	28	58303
*	7100	6000	58232	58232	29	58261
*	7150	6000	58233	58233	29	58262
*	7200	6000	58238	58238	30	58268
1213186	7400	6000	58221	58221	31	58252
*	7450	6000	58212	58210	31	58243
*	7500	6000	58238	58238	32	58278
*	7550	6000	58191	58191	33	58224
*	7600	6000	58207	58207	33	58248
*	7650	6000	58167	58167	34	58221
*	7700	6000	58204	58204	35	58239
*	7750	6000	58207	58207	35	58242
*	7800	6000	58075	58075	36	58111
1213186	7300	6000	58075	58075	36	58111
*	7300	5950	58176	58176	36	58212
*	7300	5900	58167	58167	37	58204
*	7500	5850	58160	58160	38	58201
*	7800	5800	58161	58161	39	58199
*	7800	5750	58282	58282	39	58241
*	7600	5700	58147	58147	40	58187
1213186	6600	3000	-140	58345	0	58345
*	6800	3250	-40	58445	1	58446
*	6800	3120	-20	58465	2	58467
*	6800	3150	-10	58475	3	58478
*	6800	2200	-20	58465	3	58468
*	6800	3250	-50	58435	4	58433
*	6800	3300	-60	58485	5	58410
*	6800	3350	-30	58395	6	58401
*	6800	3400	-110	58375	7	58382
*	6800	3450	-90	58395	8	58403

M 13

	6800	3550		-170	58315	58315	10	58325
	6800	3600		-120	58365	58365	10	58375
	6800	3650		-90	58395	58395	11	58406
	6800	3700		-110	58375	58375	12	58397
	6800	3750		-90	58395	58395	13	58408
	6800	3800		-90	58395	58395	14	58409
	6800	3850		-160	58325	58325	15	58340
	6800	3900		-100	58385	58385	16	58401
	6800	3950		-90	58395	58395	17	58412
	6800	4000		-60	58425	58425	17	58442
1219186	6800	4000		-60	58425	58425	17	58442
	6850	4000		-170	58315	58315	18	58333
	6900	4000		-130	58355	58355	19	58374
	6950	4000		-70	58415	58415	20	58435
	7000	4000		-100	58385	58385	21	58326
1219186	7000	4000		-100	58385	58385	21	58326
	7000	3950		-100	58385	58385	22	58327
	7000	3900		-220	58265	58265	23	58288
	7000	3850		-200	58285	58285	23	58309
	7000	3800		-210	58275	58275	24	58299
	7000	3750		-140	58345	58345	25	58376
	7000	3700		-160	58385	58385	26	58391
	7000	3650		-170	58315	58315	27	58340
	7000	3600		-190	58305	58305	28	58333
	7000	3550		-170	58315	58315	29	58344
	7000	3500		-200	58265	58265	30	58315
	7000	3450		-240	58145	58145	33	58275
	7000	3400		-310	58175	58175	31	58286
	7000	3350		-150	58305	58305	32	58367
	7000	3300		-100	58415	58415	33	58438
	7000	3250		-80	58405	58405	34	58439
	7000	3200		0	58465	58465	35	58520
	7000	3150		-20	58465	58465	36	58501
	7000	3100		-60	58425	58425	37	58462
	7000	3050		-80	58405	58405	38	58443
	7000	3000		-110	58375	58375	39	58414
1219186	6950	3000		-110	58375	58375	40	58415
1219186	7600	6000	58207			58207	0	58207
	7600	6050	58197			58197	-2	58195
	7600	6100	58208			58208	-5	58203
	7600	6150	58237			58237	-7	58230
	7600	6200	58239			58239	-9	58238
	7600	6250	58265			58265	-11	58254
	7600	6300	58278			58278	-14	58256
	7600	6350	58268			58268	-16	58244
	7600	6400	58265			58265	-18	58247
	7600	6450	58256			58256	-21	58235
	7600	6500	58262			58262	-23	58239
	7600	6550	58230			58230	-25	58205
	7600	6600	58232			58232	-27	58205
	7600	6650	58235			58235	-30	58205
	7600	6700	58253			58253	-32	58221
	7600	6750	58247			58247	-34	58213
	7600	6800	58247			58247	-36	58211
	7600	6850	58275			58275	-39	58236
	7600	6900	58419			58419	-41	58378
	7600	6950	58276			58276	-43	58230
	7600	7000	58266			58266	-46	58220
1219186	7450	7000	58249			58249	-48	58201
	7500	7000	58252			58252	-50	58202

	7500	7000	58237		58237	-57	58185	
	7600	7000	58266		58266	-58	58211	
	7650	7000	58268		58268	-57	58211	
	7700	7000	58536		58536	-53	58477	
	7750	7000	58544		58544	-62	58482	
	7800	7000	58564		58564	-64	58500	
12\9\86	7800	7000	58564		58564	-64	58500	
	7802	6950	58245		58245	-68	58150	
	7805	6900	58237		58237	-68	58150	
	7808	6850	58251		58251	-71	58183	
	7810	6800	58222		58222	-75	58147	
	7815	6750	58222		58222	-75	58145	
	7820	6700	58206		58206	-78	58128	
	7825	6650	58245		58245	-80	58165	
	7830	6600	58232		58232	-81	58150	
	7835	6550	58222		58222	-84	58139	
	7840	6500	58241		58241	-84	58154	
	7845	6450	58217		58217	-85	58128	
	7850	6400	58223		58223	-91	58132	
	7855	6350	58228		58228	-94	58134	
	7860	6300	58233		58233	-96	58137	
	7865	6250	58203		58203	-98	58125	
	7870	6200	58203		58203	-100	58123	
	7875	6150	58191		58191	-100	58089	
	7880	6100	58197		58197	-105	58092	
	7885	6050	58222		58222	-107	58095	
	7890	6000	58188		58188	-109	58079	
12\9\86	7800	6000	58188		58188	-109	58079	
	7850	6000	58173		58173	-112	58061	
	7900	6000	58168		58168	-114	58054	
	7950	6000	58163		58163	-116	58047	
	8000	6000	58167		58167	-119	58048	
12\9\86	8000	6000	58167		58167	-119	58048	
	8020	5950	58147		58147	-122	58025	
	8040	5900	58137		58137	-125	58022	
	8060	5850	58155		58155	-128	58027	
	8080	5800	58165		58165	-138	58035	
12\9\86	6400	3800		-220	58265	58265	0	58265
	6400	2950		-178	58315	58315	-2	58313
	6400	2900		-190	58295	58295	-4	58291
	6400	2850		-200	58285	58285	-6	58279
	6400	2800		-220	58265	58265	-8	58257
	6400	2750		-170	58355	58355	-10	58345
	6400	2700		-120	58365	58365	-12	58353
	6400	2650		-150	58335	58335	-14	58321
	6400	2600		-160	58325	58325	-16	58309
	6400	2550		-160	58325	58325	-18	58287
	6400	2500		-90	58395	58395	-20	58375
	6400	2450		-100	58355	58355	-22	58353
	6400	2400		-100	58355	58355	-24	58331
	6400	2350		-150	58325	58325	-26	58309
	6400	2300		-130	58355	58355	-28	58287
	6420	2250		-80	58405	58405	-30	58275
	6440	2200		-120	58365	58365	-32	58253
	6460	2150		-170	58315	58315	-35	58231
	6480	2100		-190	58295	58295	-38	58209
	6480	2050		-140	58345	58345	-37	58208
	6480	2000		-180	58325	58325	-39	58266
12\9\86	6400	2000		-180	58325	58325	-39	58266
	6450	2000		-160	58325	58325	-41	58284
	6500	2000		-120	58365	58365	-43	58322

M 14

*	6530	2000	-130	58255	58255	-45	58310
*	6600	2000	-200	58285	58285	-47	58236
1203186	6600	2000	-200	58285	58285	-47	58238
*	6600	2050	-160	58325	58325	-49	58276
*	6600	2100	-130	58305	58305	-51	58254
*	6600	2150	-200	58285	58285	-53	58202
*	6600	2200	-190	58295	58295	-55	58240
*	6600	2250	-260	58225	58225	-57	58160
*	6600	2300	-250	58235	58235	-59	58176
*	6600	2350	-240	58245	58245	-61	58184
*	6600	2400	-260	58205	58205	-63	58142
*	6600	2450	-300	58185	58185	-65	58120
*	6600	2500	-290	58195	58195	-67	58128
*	6600	2550	-310	58175	58175	-69	58106
*	6600	2600	-300	58185	58185	-71	58114
*	6600	2650	-340	58145	58145	-73	58072
*	6600	2700	-310	58175	58175	-75	58108
*	6600	2750	-350	58135	58135	-77	58056
*	6600	2800	-330	58155	58155	-79	58176
*	6600	2850	-310	58175	58175	-81	58094
*	6600	2900	-340	58145	58145	-83	58052
*	6600	2950	-290	58195	58195	-85	58118
*	6600	3000	-170	58315	58315	-87	58228

M 15

1203186	6800	3000	-180	58305	58305	-89	58216
*	6800	2950	-240	58245	58245	-91	58154
*	6800	2900	-220	58265	58265	-93	58172
*	6800	2850	-200	58285	58285	-95	58190
*	6800	2800	-270	58215	58215	-97	58118
*	6800	2750	-320	58165	58165	-99	58067
*	6800	2700	-280	58205	58205	-101	58104
*	6800	2650	-250	58255	58255	-103	58152
*	6800	2600	-320	58165	58165	-105	58060
*	6800	2550	-270	58215	58215	-107	58108
*	6800	2500	-240	58245	58245	-109	58136
*	6800	2450	-320	58165	58165	-111	58054
*	6800	2400	-270	58215	58215	-113	58102
*	6800	2350	-250	58235	58235	-115	58098
*	6800	2300	-360	58125	58125	-117	58008
*	6800	2250	-340	58145	58145	-119	58026
*	6800	2200	-280	58205	58205	-121	58084
*	6800	2150	-290	58195	58195	-123	58072
*	6800	2100	-320	58165	58165	-125	58040
*	6800	2050	-320	58165	58165	-127	58038
*	6800	2000	-310	58175	58175	-130	58045

1203186	7850	7800	58275	58275	0	58279
*	7900	7800	58298	58298	2	58308
*	7950	7800	58296	58296	5	58331
*	8000	7800	58263	58263	7	58298

1203186	8000	7800	58283	58283	7	58290
*	8000	8350	58264	58264	10	58274
*	8000	6900	58253	58253	12	58265
*	8000	6850	58252	58252	14	58266
*	8000	6800	58214	58214	17	58231
*	8000	6750	58259	58259	19	58278
*	8000	6700	58272	58272	22	58294
*	8000	6650	58243	58243	24	58267
*	8000	6600	58247	58247	26	58273
*	8000	6550	58247	58247	29	58276
*	8000	6500	58241	58241	31	58272
*	8000	6450	58241	58241	34	58275
*	8000	6400	58255	58255	36	58275
*	8000	6350	58227	58227	36	58265

8000	6300	58190	58190	41	58201		
8002	6250	58153	58153	43	58196		
8000	6200	58200	58200	46	58254		
8000	6150	58211	58211	48	58259		
8000	6100	58192	58192	50	58242		
8000	6050	58136	58136	53	58249		
12110186	6050	7000	58209	58209	55	58314	
	6100	7000	58263	58263	58	58321	
	6150	7000	58248	58248	60	58300	
	6200	7000	58247	58247	62	58307	
12110186	6202	7000	58247	58247	62	58309	
	6222	6950	58209	58209	65	58300	
	6200	6900	58253	58253	67	58320	
	6201	6950	58243	58243	70	58310	
	6120	6900	58261	58261	72	58300	
	6120	6750	58207	58207	74	58311	
	6110	6700	58173	58173	77	58300	
	6100	6650	58207	58207	79	58306	
	6100	6600	58202	58202	82	58304	
	6100	6550	58205	58205	84	58309	
	6100	6500	58216	58216	86	58304	
	6100	6450	58221	58221	89	58310	
	6100	6400	58221	58221	91	58310	
	6100	6350	58200	58200	94	58294	
	6100	6300	58200	58200	96	58299	
	6100	6250	58195	58195	99	58295	
	6120	6200	58196	58196	101	58299	
	6200	6150	58176	58176	103	58275	
	6200	6100	58167	58167	106	58270	
	6220	6050	58183	58183	108	58291	
	6100	6000	58206	58206	110	58310	
12110186	6100	6000	58200	58200	110	58310	
	6150	6000	58207	58207	113	58320	
	6100	6000	58207	58207	115	58322	
	6050	6000	58216	58216	118	58336	
	6000	6000	58221	58221	120	58341	
12110186	6400	3000	-200	58205	58205	0	58205
	6350	3000	-340	58145	58145	2	58147
	6300	3000	-340	58145	58145	3	58150
	6250	3000	-300	58185	58185	7	58150
	6200	3000	-200	58205	58205	9	58214
	6150	3000	-340	58145	58145	12	58157
	6100	3000	-370	58115	58115	14	58129
	6050	3000	-320	58165	58165	16	58181
	6000	3000	-270	58215	58215	16	58200
12110186	6000	3000	-270	58215	58215	18	58233
	6000	3050	-520	57965	57965	21	57986
	6000	3100	-500	57905	57905	23	57920
	6000	3150	-550	57935	57935	25	57960
	6000	3200	-510	57975	57975	28	58000
	6000	3250	-430	58005	58005	30	58085
	6000	3300	-550	57935	57935	32	57967
	6000	3350	-650	57835	57835	35	57870
	6000	3400	-530	57955	57955	37	57931
	6000	3450	-600	57885	57885	39	57924
	6000	3500	-500	57955	57955	42	57937
	6000	3550	-510	57975	57975	44	58019
	6000	3600	-520	57965	57965	46	58011
	6000	3650	-520	57965	57965	49	58014
	6000	3700	-530	57955	57955	51	58026
	6000	3750	-470	58015	58015	53	58069

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*	6000	3800	-400	58005	58005	55	58000
*	6000	3850	-150	58305	58305	58	58363
*	6000	3900	-100	58205	58205	60	58345
*	6000	3950	-250	58235	58235	62	58297
*	6000	4000	-140	58345	58345	65	58410
							0
12\10\86	6000	4000	-140	58345	58345	65	58410
*	6000	4000	-210	58265	58265	67	58320
*	6100	4000	-170	58215	58215	69	58304
*	6100	4000	-130	58295	58295	72	58367
*	6200	4000	-200	58205	58205	74	58359
							0
12\10\86	6200	4000	-200	58205	58205	74	58359
*	6200	3950	-170	58215	58215	76	58391
*	6200	3900	-140	58145	58145	79	58224
*	6200	3850	-350	58105	58105	81	58216
*	6200	3800	-300	58155	58155	83	58238
*	6200	3750	-350	58105	58105	85	58220
*	6200	3700	-360	58125	58125	88	58210
*	6200	3650	-330	58095	58095	90	58185
*	6200	3600	-310	58175	58175	92	58207
*	6200	3550	-320	58105	58105	95	58260
*	6200	3500	-310	58175	58175	97	58270
*	6200	3450	-260	58225	58225	99	58324
*	6200	3400	-200	58205	58205	102	58307
*	6200	3350	-340	58145	58145	104	58249
*	6200	3300	-300	58105	58105	106	58291
*	6200	3250	-320	58155	58155	109	58264
*	6200	3200	-320	58165	58165	111	58276
*	6200	3150	-350	58135	58135	113	58248
*	6200	3100	-300	58105	58105	116	58221
*	6200	3050	-370	58115	58115	118	58233
*	6200	3000	-350	58135	58135	120	58255

M (17)

12\11\86	8200	7000	58169		58169	0	58169
*	8150	7000	58152		58152	-2	58150
*	8100	7000	58105		58105	-5	58102
*	8050	7000	58160		58160	-5	58158
*	8400	7000	58150		58150	-7	58151
12\11\86	8400	7000	58150		58150	-7	58151
*	8400	6950	58135		58135	-8	58127
*	8400	6900	58162		58162	-10	58170
*	8400	6850	58151		58151	-12	58133
*	8400	6800	58147		58147	-14	58130
*	8400	6750	58155		58155	-15	58140
*	8400	6700	58123		58123	-17	58106
*	8400	6650	58120		58120	-19	58101
*	8400	6600	58129		58129	-20	58109
*	8400	6550	58120		58120	-22	58098
*	8400	6500	58107		58107	-24	58083
*	8400	6450	58119		58119	-25	58094
*	8400	6400	58137		58137	-27	58110
*	8400	6350	58104		58104	-29	58075
*	8400	6300	58103		58103	-31	58072
*	8400	6250	58121		58121	-32	58090
*	8400	6200	58111		58111	-34	58077
*	8400	6150	58119		58119	-36	58093
*	8400	6100	58129		58129	-37	58092
*	8400	6050	58143		58143	-39	58104
*	8400	6000	58128		58128	-41	58087
12\11\86	8400	6000	58128		58128	-41	58087
*	8350	6000	58124		58124	-42	58082
*	8300	6000	58074		58074	-44	58030
*	8250	6000	58106		58106	-46	58054

	8200	6000	58120			58120	-47	58073
12/11/86	8200	6000	58120			58120	-47	58073
"	8200	5950	58133			58133	-49	58030
"	8200	5900	58129			58129	-51	58278
"	8200	5850	58152			58152	-53	58233
"	8200	5800	58118			58118	-54	58064
12/11/86	8450	7000	58177			58177	-56	58121
"	8500	7000	58205			58205	-58	58147
"	8550	7000	58195			58195	-59	58136
"	8600	7000	58148			58148	-61	58067
12/11/86	8600	7000	58148			58148	-61	58067
"	8600	6950	58145			58145	-63	58062
"	8600	6900	58182			58182	-64	58116
"	8600	6850	58148			58148	-66	58074
"	8600	6800	58124			58124	-68	58056
"	8600	6750	58138			58138	-69	58050
"	8600	6700	58139			58139	-71	58068
"	8600	6650	58143			58143	-73	58076
"	8600	6600	58181			58181	-75	58067
"	8600	6550	58145			58145	-76	58033
"	8600	6500	58117			58117	-78	58039
"	8600	6450	58091			58091	-80	58011
"	8600	6400	58102			58102	-81	58021
"	8600	6350	58111			58111	-83	58029
"	8600	6300	58126			58126	-85	58041
"	8600	6250	58106			58106	-86	58028
"	8600	6200	58128			58128	-88	58035
"	8600	6150	58110			58110	-90	58033
"	8600	6100	58111			58111	-92	58019
"	8600	6050	58114			58114	-93	58021
"	8600	6000	58113			58113	-95	58024
12/11/86	8600	6000	58113			58113	-95	58024
"	8550	6000	58144			58144	-97	58047
"	8500	6000	58141			58141	-98	58043
"	8450	6000	58142			58142	-100	58042
12/11/86	7800	3000		-260	58225	58225	0	58225
"	7800	2950		-230	58255	58255	-1	58254
"	7800	2900		-200	58285	58285	-3	58282
"	7800	2850		-170	58275	58275	-4	58271
"	7800	2800		-220	58265	58265	-6	58259
"	7800	2750		-430	58055	58055	-7	58048
"	7800	2700		-320	58165	58165	-8	58157
"	7800	2650		-220	58265	58265	-10	58255
"	7600	2600		-360	58125	58125	-11	58114
"	7200	2550		-320	58155	58155	-13	58142
"	7000	2500		-250	58135	58135	-14	58121
"	7000	2450		-310	58175	58175	-15	58169
"	7000	2400		-230	58255	58255	-17	58238
"	7000	2350		-300	58185	58185	-18	58167
"	7000	2300		-300	58185	58185	-19	58166
"	7000	2250		-250	58205	58205	-21	58164
"	7000	2200		-330	58155	58155	-22	58133
"	7000	2150		-320	58165	58165	-24	58141
"	7000	2100		-320	58165	58165	-25	58140
"	7000	2050		-340	58145	58145	-26	58119
12/11/86	7050	2000		-120	58365	58365	-28	58337
"	7100	2000		-140	58345	58345	-29	58316
"	7150	2000		-260	58205	58205	-30	58175
"	7200	2000		-100	58285	58285	-32	58173

M(18)

12/11/86	7200	2000	-200	50205	50205	-32	50173
"	7200	2050	-270	50215	50215	-33	50192
"	7200	2100	-250	50235	50235	-34	50221
"	7200	2150	-300	50255	50255	-36	50219
"	7200	2200	-270	50215	50215	-37	50170
"	7200	2250	-310	50175	50175	-39	50130
"	7200	2300	-320	50165	50165	-40	50125
"	7200	2350	-360	50225	50225	-41	50164
"	7200	2400	-350	50135	50135	-43	50092
"	7200	2450	-360	50125	50125	-44	50031
"	7200	2500	-240	50245	50245	-46	50149
"	7200	2550	-300	50135	50135	-47	50063
"	7200	2600	-260	50205	50205	-46	50157
"	7200	2650	-300	50135	50135	-50	50205
"	7200	2700	-300	50135	50155	-51	50104
"	7200	2750	-350	50105	50105	-50	50052
"	7200	2800	-370	50115	50115	-54	50061
"	7200	2850	-300	50305	50305	-55	50250
"	7200	2900	-300	50185	50185	-57	50120
"	7200	2950	-300	50155	50155	-58	50097
"	7200	3000	-320	50165	50165	-60	50106

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12/11/86	7400	2000	-150	50355	50355	-61	50294
"	7400	2050	-200	50125	50125	-62	50263
"	7400	2100	-230	50205	50205	-64	50141
"	7400	2150	-290	50195	50195	-65	50130
"	7400	2200	-180	50305	50305	-66	50239
"	7400	2250	-290	50195	50195	-66	50127
"	7400	2300	-350	50205	50205	-69	50136
"	7400	2650	-340	50145	50145	-71	50074
"	7400	2600	-400	50005	50005	-72	50013
"	7400	2550	-260	50205	50205	-72	50132
"	7400	2500	-150	50325	50325	-75	50152
"	7400	2450	-250	50235	50235	-76	50159
"	7400	2400	-290	50205	50205	-78	50127
"	7400	2350	-390	50155	50155	-79	50076
"	7400	2300	-200	50265	50265	-80	50105
"	7400	2250	-350	50135	50135	-82	50053
"	7400	2200	-490	50055	50055	-83	57972
"	7400	2150	-350	50135	50135	-85	50050
"	7400	2100	-360	50125	50125	-86	50039
"	7400	2050	-640	50145	50145	-87	50050
"	7400	2000	-350	50135	50135	-89	50106

12/11/86	7400	2000	-290	50195	50195	-89	50106
"	7450	2000	-300	50105	50105	-90	50095
"	7500	2000	-100	50305	50305	-91	50094
"	7550	2000	-180	50305	50305	-93	50212

12/11/86	7350	3000	-100	50305	50305	-94	50191
"	7500	3000	-30	50395	50395	-96	50293
"	7200	3000	-190	50295	50295	-97	50190
"	7100	3000	-50	50435	50435	-98	50337
"	7150	3000	-70	50415	50415	-100	50315

12/12/86	8400	3000	50132		50132	0	50132
"	8400	3050	50130		50130	2	50132
"	8400	3100	50125		50125	4	50129
"	8400	3150	50136		50136	5	50141
"	8400	3200	50124		50124	7	50131
"	8400	3250	50087		50087	9	50096
"	8400	3300	50123		50123	11	50134
"	8400	3350	50122		50122	13	50135
"	8400	3400	50100		50100	15	50115
"	8400	3450	50125		50125	16	50141
"	8400	3500	50159		50159	18	50177
"	8400	3550	50159		50159	18	50177

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*	8400	3600	58160	58160	22	58182
*	8400	3650	58164	58164	24	58188
*	8400	3700	58127	58127	26	58153
*	8400	3750	58140	58140	27	58167
*	8400	3800	58130	58130	29	58159
*	8400	3850	58086	58086	31	58117
*	8400	3900	58121	58121	33	58154
*	8400	3950	58124	58124	35	58159
*	8400	4000	58122	58122	37	58159
12/12/86	8400	4000	58122	58122	37	58159
*	8400	4050	58155	58155	38	58159
*	8400	4100	58139	58139	40	58173
*	8400	4150	58140	58140	42	58182
*	8400	4200	58142	58142	44	58186
*	8400	4250	58134	58134	46	58168
*	8400	4300	58141	58141	48	58189
*	8400	4350	58150	58150	49	58199
*	8400	4400	58146	58146	51	58197
*	8400	4450	58122	58122	53	58175
*	8400	4500	58153	58153	55	58208
*	8400	4550	58161	58161	57	58218
*	8400	4600	58134	58134	59	58193
*	8400	4650	58143	58143	60	58203
*	8400	4700	58143	58143	62	58205
*	8400	4750	58134	58134	64	58156
*	8400	4800	58141	58141	66	58207
*	8400	4850	58119	58119	68	58167
*	8400	4900	58132	58132	70	58202
*	8400	4950	58132	58132	71	58203
*	8400	5000	58126	58126	73	58193
12/12/86	8400	5000	58126	58126	73	58193
*	8250	5000	58157	58157	75	58202
*	8300	5000	58088	58088	77	58165
*	8250	5000	58128	58128	79	58199
*	8200	5000	58112	58112	81	58193
12/12/86	8000	5000	58112	58112	81	58193
*	8100	5050	58163	58163	82	58245
*	8200	5100	58121	58121	84	58205
*	8200	5150	58182	58182	86	58188
*	8200	5200	58161	58161	88	58249
*	8200	5250	58163	58163	90	58253
*	8200	5300	58136	58136	92	58228
*	8200	5350	58180	58180	93	58193
*	8200	5400	58088	58088	95	58183
*	8100	5450	58078	58078	97	58175
*	8200	5500	58068	58068	99	58187
*	8200	5550	58096	58096	101	58197
*	8200	5600	58099	58099	102	58201
*	8200	5650	58091	58091	104	58195
*	8200	5700	58148	58148	106	58246
*	8100	5750	58080	58080	108	58183
*	8100	5800	58182	58182	110	58212
12/12/86	7600	3000	-260	58225	0	58225
*	7600	2950	-360	58125	1	58126
*	7600	2900	-400	58065	2	58088
*	7600	2850	110	58595	4	58599
*	7600	2800	-360	58125	5	58130
*	7600	2750	-330	58155	6	58161
*	7600	2700	-450	58035	8	58043
*	7600	2650	-360	58105	9	58114
*	7600	2600	-250	58235	10	58245

	7600	2550	-300	58185	58185	12	58197
*	7600	2500	-310	58175	58175	13	58188
*	7600	2450	-350	58135	58135	14	58149
*	7600	2400	-340	58145	58145	15	58160
*	7600	2350	-300	58105	58105	17	58122
*	7600	2300	-330	58155	58155	18	58173
*	7600	2250	-370	58115	58115	19	58134
*	7600	2200	-350	58135	58135	21	58156
*	7600	2150	-320	58105	58105	22	58187
*	7600	2100	-300	58185	58185	23	58208
*	7600	2050	-340	58145	58145	25	58170
*	7600	2000	-370	58105	58105	26	58141
12\12\86	7600	2000	070	58115	58115	26	58141
*	7650	2000	-510	58155	58155	27	58152
*	7700	2000	-350	58135	58135	28	58163
*	7750	2000	-320	58165	58165	30	58195
*	7800	2000	-360	58125	58125	31	58156
12\12\86	7800	2000	-360	58125	58125	31	58156
*	7600	2050	-360	58125	58125	32	58157
*	7600	2100	-350	58135	58135	34	58169
*	7600	2150	-360	58125	58125	35	58158
*	7600	2200	-60	58425	58425	36	58461
*	7600	2250	-400	58085	58085	37	58122
*	7600	2300	-370	58115	58115	39	58154
*	7600	2350	-360	58105	58105	40	58145
*	7600	2400	-300	58165	58165	41	58146
*	7600	2450	-360	58125	58125	43	58168
*	7600	2500	-360	58125	58125	44	58169
*	7600	2550	-270	58215	58215	45	58260
*	7600	2600	-300	58185	58185	46	58231
*	7800	2650	-460	58025	58025	49	58073
*	7600	2700	-390	58095	58095	49	58144
*	7600	2750	-300	58105	58105	50	58155
*	7600	2800	-220	58265	58265	52	58317
*	7800	2850	-180	58305	58305	53	58359
*	7600	2900	-380	58185	58185	54	58159
*	7800	2950	-400	58095	58095	55	58140
*	7600	3000	-380	58105	58105	57	58162
12\12\86	7800	3000	-380	58105	58105	57	58162
*	7850	3000	-380	58105	58105	58	58163
*	7900	3000	-400	58095	58095	59	58144
*	7950	3000	-350	58135	58135	61	58196
*	8000	3000	-330	58155	58155	62	58217
12\12\86	8000	3000	-330	58155	58155	62	58217
*	8000	2950	-320	58165	58165	63	58228
*	8000	2900	-390	58095	58095	65	58168
*	8000	2850	-300	58105	58105	66	58171
*	8000	2800	-360	58105	58105	67	58172
*	8000	2750	-400	58095	58095	68	58153
*	8000	2700	-340	58145	58145	70	58215
*	8000	2650	-360	58125	58125	71	58196
*	8000	2600	-300	58105	58105	72	58177
*	8000	2550	-430	58055	58055	74	58129
*	8000	2500	-400	58095	58095	75	58160
*	8000	2450	-470	58015	58015	76	58091
*	8000	2400	-420	58065	58065	77	58142
*	8000	2350	-460	58025	58025	79	58104
*	8000	2300	-490	57995	57995	80	58075
*	8000	2250	-450	58035	58035	81	58116
*	8000	2200	-420	58065	58065	83	58148
*	8000	2150	-460	58025	58025	84	58129
*	8000	2100	-390	58095	58095	85	58180

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	8000	2650	-470	58175	58175	80	58201
	8000	2000	-410	58065	58065	80	58150
12112186	8000	2000	-402	58065	58065	80	58155
	8050	2000	-380	58105	58105	89	58194
	8100	2000	-370	58115	58115	90	58205
	8150	2000	-350	58135	58135	92	58227
	8200	2000	-200	58285	58295	95	58378
12112186	8200	2000	-200	58285	58285	95	58378
	8250	2050	-360	58125	58125	94	58319
	8300	2100	-270	58215	58215	95	58310
	8350	2150	-190	58195	58195	97	58292
	8400	2200	-190	58195	58195	98	58290
	8450	2250	-180	58305	58305	99	58404
	8500	2300	-200	58285	58285	101	58566
	8550	2350	-310	58175	58175	102	58277
	8600	2400	-320	58165	58165	103	58266
12112186	7600	3200	-360	58105	58105	104	58209
	7650	3200	-530	58155	58155	106	58261
	7700	3200	-370	58115	58115	107	58222
	7650	3200	-280	58205	58205	108	58313
	7600	3000	-350	58135	58135	110	58245

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