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KENNCO EXPLORATIONS, (WESTERN) LIMITED

Report

on the

Geological, Geochemical and Geophysical Surveys

on the

Gnawed Mountain Group

East and west slopes of Gnawed Mountain,
Highland Valley Area

50° 120° S.W.
50° 121° S.E.

by

R. W. Stevenson

May 25th to August 31st, 1959

INDEX

ADDITIONAL DATA AND MAPS

Claim	Claim Group	Tag.No.	Distribution of Work Geolog.	Geochem.	Geophys.	Drilling	Trenching	Years work claimed	T
A.M. 13	H.V.1	278667	23.18	6.00	48.00			1	
15		278669	15.45	6.00	0.00			1	
16		278670	15.45	10.00	0.00			1	
17		278671	15.45	8.00	0.00			1	
18		278672	15.45	4.00	0.00			1	
19		278673	15.45	8.00	0.00			1	
30		275011	15.45	0.00	0.00			1	
32		275013	15.45	26.00	195.00			1	
IDE 1		244351	30.90	32.00	316.00			1	
2		213209	30.90	40.00	236.00	300.00		1	
3		244352	30.90	66.00	224.00			1	
10		244770	15.45	4.00	128.18			1	
V.M. 30		266130	7.73	2.00	0.00			1	
31		266131	7.73	0.00	0.00			1	
32		266132	7.73	0.00	0.00			1	
33		266133	15.45	6.00	0.00			1	
34		266134	15.45	8.00	0.00			1	
35		266135	15.45	0.00	0.00			1	
SNOW 1		231187	15.45	2.00	0.00			1	
2		231188	15.45	0.00	0.00			1	
TOTAL			339.92	228.00	1147.18	300.00		20	201
A.M. 12	H.V.2	278666	15.45	6.00	0.00			2	
14		278668	30.91	4.00	0.00			2	
20		275001	15.45	0.00	0.00			2	
21		275002	15.45	0.00	0.00			2	
22		275003	15.45	2.00	0.00			2	
23		275004	15.45	0.00	0.00			2	
24		275005	15.45	0.00	0.00			2	
25		275006	15.45	0.00	0.00			2	
26		275007	15.45	0.00	0.00			2	
27		275008	15.45	0.00	0.00			2	
28		275009	15.45	0.00	0.00			2	
29		275010	15.45	0.00	0.00			2	
31		275012	15.45	0.00	0.00			2	
IDE 7		244354	15.45	66.00	872.00	292.00	762.00	2	
8		244355	15.45	28.00	405.00			2	
9		244769	15.45	12.00	0.00			2	
11		244771	15.45	32.00	221.00			2	
12		244772	15.45	34.00	289.00			2	
14		244774	15.45	44.00	334.00			2	
16		244776	15.45	42.00	315.12			2	
TOTAL			324.46	270.00	2436.12	292.00	762.00	40	4084

Claim		Claim Group	Tag.No.	Distribution of Work Geolog.	Geochem.	Geophys.	Drilling	Trenching	Years work claimed	Total
A.M.	1	H.V.3	278655	15.45	18.00	175.00			2	
	2		278656	7.73	0.00	14.00			2	
	3		278657	15.45	12.00	108.00			2	
	4		278658	15.45	4.00	0.00			2	
	5		278659	15.45	16.00	90.00			2	
	8		278662	15.45	0.00	52.00			2	
	9		278663	15.45	6.00	0.00			2	
	10		278664	15.45	0.00	0.00			2	
	11		278665	7.73	2.00	0.00			2	
	33		275014	7.73	14.00	331.00			2	
	34		275015	7.73	34.00	189.00			2	
	35		275016	7.73	8.00	361.00			2	
	36		275017	7.73	98.00	329.00			2	
	41		275022	7.73	94.00	326.00			2	
	42		275023	7.73	94.00	348.00			2	
IDE	4		213210	30.91	34.00	235.00			2	
	5		244353	15.45	44.00	190.00			2	
	6		213211	15.45	42.00	175.83			2	
TOTAL				231.80	520.00	2923.83			36	3675.63
A.M.	6	H.V.4	278660	15.45	12.00	86.00			2	
	7		278661	15.45	16.00	207.00			2	
	37		275018	7.73	6.00	48.00			2	
	38		275019	7.73	4.00	0.00			2	
	39		275020	7.73	4.00	0.00			2	
	40		275021	7.73	8.00	0.00			2	
IDE	13		244773	15.45	34.00	294.00			2	
	15		244775	15.45	22.00	250.00			2	
	17		244721	7.73	30.00	438.00			2	
	18		244722	7.73	10.00	318.00			2	
	19		244777	7.73	22.00	250.00			2	
	20		244778	7.73	62.00	258.68			2	
TOTAL				123.64	230.00	2149.68			24	2503.32

INTRODUCTION

The property discussed in this report is on the east and west slopes of Gnawed Mountain, which is on the south side of the Highland Valley, about 24 miles southeast of Ashcroft, B.C. The exploration work done on the property by Kennco Explorations, (Western) Limited during the period May 25 to August 31, 1959, included geological, geochemical and induced polarization surveys.

The geological mapping was done by G. Rayner, R.W. Stevenson and G. Delane; under supervision of R.W. Stevenson. The geochemical sampling was done by R.W. Stevenson, G. Rayner, A. Drummond, G. Delane, G. Antenbring, J. Barakso; under supervision of R.W. Stevenson. Consultation on the geological survey was given by Dr. J. A. Gower; and on the geochemical survey by Dr. H. E. Hawkes and F. F. Clark. Linecutting was done by R. Roadhouse, H. McGladdery, F. Bara, G. Bara, and J. Premischook; in addition to those already mentioned above. As cutting of control lines proceeded or was completed, various members of the crew commenced the survey work as noted above.

LOCATION AND ACCESS

The property is located at latitude 50°25′ N, longitude 120°59′W. It is on the east and west slopes of Gnawed Mountain, which is on the south side of the Highland Valley, about 24 miles southeast of Ashcroft, B.C. Elevation ranges from 5000′ to 5953′ a.s.l. The topography is moderately steep in the vicinity of Gnawed Mountain and gently undulating in an area of glacial outwash on the west quarter of the claims. Most of the property is covered with open jackpine forest.

A good road extends to the Skeena Silver Mines camp, about two miles north of the west half of the property. From there a jeep road extends to about a quarter of a mile west of the peak of Gnawed Mountain. Old forestry trails extend south and southeast from the jeep road. A grid of blazed lines covers much of the property, as shown on the accompanying geological map.

FIELD PROCEDURES

Control Survey Lines: Four north-south base lines were cut about one mile apart to provide control of all subsequent work. East-west lines were also run by chain and compass to provide control of detailed work. On much of the property these lines are 800′ apart, but in areas of geological or geochemical complexity, they were run 400′ apart. In areas where chain and compass lines were not run, pace and compass traverses were used between the main base lines. Government maps were enlarged and with the aid of air photos a base map with scale of 1″ = 1000′ was completed.

Geological Survey: The entire claim group was mapped geologically. On most of the property outcrop location was controlled by the use of cut lines, usually 800' apart. In some areas where rock outcrops were scarce or well defined on air photos, the mapping was done with the aid of an assistant running pace and compass traverses between the north-south base lines. Careful attention was paid to: type and grade of mineralization, alteration, structure, as well as rock type. A study of 13 rock thin sections was also made.

Other work yielded information relevant to the geological survey. Three XRT Diamond Drill holes were completed with a total footage of 148'. Two of these (total footage 73') were on claim IDE No. 7, and one (75') was on claim IDE No. 2. The core logs are appended to this report and the drill hole locations are marked on the geological map. A large trench was dug to bedrock by bulldozer on claim IDE No. 7. It is approximately 14' x 150' long and 5' to 16' deep. Its location is marked on the geological map.

Geochemical Survey: The geochemical work consisted of an extensive soil sample survey. Two types of spacing were used in taking the samples. On a reconnaissance basis, samples were taken at 800' intervals on lines 800' apart. When further interest was suggested by anomalous soil or geophysical results, samples were taken at 100' intervals on lines which were either 400' or 800' apart. Control was usually maintained by sampling on chain and compass lines, and occasionally by pace and compass traverse between main base lines. Samples were taken from the "B" soil horizon wherever possible and analyzed for copper by hot nitric acid extraction at the University of British Columbia geochemical laboratory. The results were plotted on a map which is on the same scale as the geological map (1" = 1000').

INTERPRETATION

Geological Survey: Outcrop is fairly plentiful in the central portion of the property, where it makes up about 10% of the surface area. To the west the prevalence of terminal moraines and glacial outwash make outcrop scarcer. On the extreme northeast a small swampy area contains no outcrop.

The oldest rock type in the claim area is Skeena granodiorite. This medium grained granodiorite makes up about 80% of the outcrop. Bethsaida granodiorite comprises about 15% of the outcrop. It is a medium grained granodiorite with large, conspicuous euhedral quartz crystals. Intrusive contacts of it into the Skeena granodiorite have been noted. It is located in a zone extending northwest from the peak of Gnawed Mountain.

The Roscoe granite forms small plugs (40' to 400' in diameter) and dyke-like bodies (e.g. 4' x 200'). It only occurs on the western third of the property. It is probably a leuco quartz monzonite in composition and may be a leuco phase of a differentiated intrusive. A few dykes of quartz feldspar porphyry were noted to the northeast, and are of interest because they cut the Roscoe granite.

A fracture-type of breccia zone occurs on the northwest corner of claim IDE No. 2. A similar occurrence was noted at the bottom of a 75' drill hole (PN3) on the southeast corner of the same claim. The Bethsaida granodiorit was shattered and then cemented by quartz and fine grained tourmaline. There is no indication of increased mineralization in the immediate vicinity of the brecc

Narrow quartz veins are fairly numerous in the area about the peak of Gnawed Mountain. Aplite stringers also occur, and to a lesser extent elsewhere on the entire property. There is some regional jointing which strikes 5° to 15° east of north, and is nearly vertical.

The mineralization occurring on the property includes bornite, chalcopyrite, and minor molybdenite, pyrite and specular hematite. Chalcocite is rare tourmaline occurs in a few places, particularly breccia zones, minor amounts of epidote are widespread and malachite occurs generally where primary copper mineralization occurs. The bornite occurs chiefly in the area immediately west of the peak of Gnawed Mountain and the chalcopyrite occurs to the northwest, chiefly in a small zone in the vicinity of drill holes PN3 and PN2. In general, quartz veins are only mineralized where the wallrock also is mineralized.

Alteration is widespread, but not intense. Where it is present, the rock is sericitized, carbonatized, and albitized with relatively little biotite remaining.

Geochemical Survey: There are four geochemically anomalous areas on the property, as outlined on the soil sample result map accompanying this report. They are located: Anomaly 1 - from B.L. 0 W to the west property boundary, between L 72 N and L 104N; Anomaly 2 - an area about 1000' in diameter, centering around station 56+00W on L 128 N; Anomaly 3 - from 0' to 2400' east of B.L. 0 W, between L 40 N and L 56 N; Anomaly 4 - on the extreme northwest corner of the property.

Anomaly No. 1 The east half of this anomaly is caused by low grade copper mineralization (0.2%) observed in the underlying bedrock. Shallow overburden in this area probably contributes to some of the high values. The west half of this anomaly is presumably caused by an extension of the mineralization mentioned above.

Anomaly No. 2 This overlies a small area of chalcopyrite mineralization. The extension of this anomaly to the southeast presumably is caused by the glacial transport of mineralized debris.

Anomaly No. 3 The erratic distribution of anomalous values, and the presence of unmineralized outcrop suggest that this anomaly is caused by rock debris transported from a mineralized area to the north. It was presumably transported by ice movement, and post-glacial outwash from Gnawed Mountain.

Anomaly No. 4 This anomaly occurs in an area of terminal moraine and strong post-glacial outwash. Over much of the anomalous area, mineralized glacial debris can be seen; in moraines on the west half and in lake outwash on the east half of the area.

GEOPHYSICAL SURVEYS

Induced Polarization.

Description of the method: Induced Polarization effects occur when there is a change in the method of electrical conduction in the ground. In ordinary earth materials conduction is by ions. Sulfides, natice metals, graphite, magnetite, and other minerals with metallic lusters exhibit metallic conduction or conduction by electrons. If conduction paths through the earth involve both types of conduction and direct current is used, the metallic conductors become blocked or polarized just as the electrodes in an electrolytic cell become polarized. This effect is known as interfacial polarization, over-voltage, or double-layer charging. Polarization does not occur with alternating current and the resistance of paths involving electronic conductors is accordingly less with alternating current than with direct current.

This effect is utilized in prospecting by making standard Resistivity measurements first using direct current and then using alternating current. A decrease in apparent resistivity with the alternating current measurement is an indication of the presence of metallic conductors.

Two quantities are obtained from field measurements--the DC apparent resistivity designated ρ_{DC} and the AC apparent resistivity designated ρ_{AC}. The units of both of these quantities are ohm-feet divided by 2π. From ρ_{DC} and ρ_{AC} two additional quantities are computed. These are the Percent Frequency Effect, PFE, and the Metallic Conduction Factor, MCF.

$$PFE = \frac{\rho_{DC} - \rho_{AC}}{\rho_{AC}}$$

and

$$MCF = \frac{PFE}{\rho_{DC}} \times 10^5$$

These two quantities are studied with the DC resistivity in arriving at an interpretation. The Percent Frequency Effect must be significantly greater than (a) instrumental precision and (b) background frequency effects of the area in order to be considered as indicative of metallic conduction. In some cases only ρ_{DC} and the MCF are presented in the data. It must then be established that the values given for the MCF are based upon significant frequency effects. Anomalous values of the MCF are considered to indicate metallic conduction, which may or may not consist of economic mineralization.

Presentation of Data: The method of presenting data is illustrated on the attached drawing. The end-on electrode arrangement is used with current applied to the earth through a long wire grounded at both ends of interval "a". The receiver consists of a suitable voltmeter grounded at both ends of interval "c". In practice the intervals a, b, c, . . . etc. are equal and vary from 100 to 1000 feet, depending on the problem at hand. With the Sender across interval "a" and the Receiver across interval "c", the values of the MCF are plotted at the point "a,c" below the reference line and ρ_{DC} is plotted at point "a,c" above

the reference line. Points "a,c" are determined by the intersection of 45° diagonals drawn from the mid-points of Sender and Receiver intervals. The next reading would be taken with the same Sender position but with the receiver advanced to interval "d". The data for this arrangement are plotted at points "a,d". The Receiver is stepped outward until the observed voltage is too small for a reliable reading. The Sender is then advanced to interval "b" and the procedure with the Receiver is repeated.

The values plotted at the various points are then contoured. Percent Frequency Effects, if shown, appear as superscripts to ρ and are not contoured. The reference line on the drawing represents the line of electrodes on the ground. Electrical changes in the ground at increasingly greater distances away from the electrode line are indicated by the behavior of contours parallel to and away from the reference line. Lateral electrical changes along the line of electrodes are indicated by contours along the direction of a 45° diagonal.

As with other geophysical methods, experience is an important factor in the deduction of a valid interpretation.

Objectives of Survey. It was agreed that exploration would be confined to possible ore bodies which reached the sub-outcrop and which were two to three hundred feet in minimum horizontal dimension. For this situation 500 foot dipoles were used, with a maximum separation of 1500 feet. This configuration would effectively prospect the ground below and between grid lines 800 feet apart.

In areas of special interest because of geological, geochemical or geophysical evidence a 200 foot dipole configuration was used to investigate the ground in a more detailed manner. Normally the 200 foot dipole lines were spaced 400 feet apart.

Results of Investigation:

Ground Coverage. The area covered by the Induced Polarization survey is indicated on Plate 'A'. With 500 foot dipoles 77,000 feet of line were surveyed, and 14,400 feet of line with 200 foot dipoles.

Anomalous Zones. The anomalous regions found are indicated on Plate 'A' and on the accompanying profiles. The source regions of data values which are so weak that their existence is questionable are indicated by a broken line and a question mark. Weakly anomalous regions are indicated by a broken line. All values encountered during the survey are classified as weak.

The location and classification of anomalous regions is tabulated below.

Line	Position	Anomaly Classification
160N	115W-120W	Weak - questionable
156N	120W-125W	" "
152N	120W-125W	" "
132N	54W-62W	" "
128N	54W-60W	Weak
120N	30W-35W	Weak - questionable
112N	20W-30W	" "
104N	20W-25W	" "
99N	8E-10E	" "
96N	60-65	" "
56W	128N-130N	Weak

Interpretation of Results. No strong induced polarization responses were obtained during the course of the survey. The best anomalous zone was that defined by lines 128N, 132N and 56W. These data suggest a rather narrow zone, approximately 200 feet wide and possibly having an east-west strike.

Although the remaining anomalies are classified as weak to questionable, the fact that they line up on adjacent profiles may lend credence to their reality.

Since the induced polarization method indicates only the presence of metallic conductors nothing can be said concerning the value of the conductors without chemical assay. Although quantitative relationships between polarization and conductor content are lacking it is estimated that the anomalies in the region of line 128N could be derived from material containing on the order of one percent by volume of metallic conductors.

Self Potential Surveys

In conducting the induced polarization surveys occasional sharp breaks in earth potential were observed. Several lines were run in detail by the Self-Potential method to check the existence of the fairly large potential variations. The lines surveyed are tabulated below:-

Line	From - To	Distance
168N	65W-110W	4500
156N	65W-120W	5500
152N	102W-120W	1800
120N	74W- 96W	2200
112N	66W-102W	3600
104N	64W- 94W	3000
96N	50W- 92W	4200
	Total	24,800 feet

No self potential anomalies of significance were found. The noise level was generally in a plus or minus 20 millivolt range. Variations in this range are too small to be uniquely attributable to sulphide oxidations. Such variations may arise from local inhomogeneities in soil conditions such as pH, dissolved salts, water content, etc.

Magnetic Survey.

Magnetic profiles on lines 136N, 128N and 124N, totalling 6800 feet were run in the area of the induced polarization anomaly of line 128N. No diagnostic magnetic response was found which could be correlated with the induced polarization anomaly.

R. W. Stevenson

R. W. Stevenson

Vancouver, B. C.

September 21, 1959

KENNCO EXPLORATIONS, (WESTERN) LIMITED

1030 WEST GEORGIA STREET

VANCOUVER 5. B.C.

October 16, 1959

Statement of Qualifications

I, R. W. Stevenson, graduated from the University of Toronto in 1952, with Bachelor of Applied Science degree in Mining Geology. Since that time, I have been employed by Kennco Explorations,(Canada) Limited, as a field engineer. The work has included property evaluation, geological, geochemical and geophysical surveys, and diamond drilling; and was done in Ontario, Quebec, New Brunswick, and since April 1959 in British Columbia.

I have been registered as a Professional Engineer in the Province of Ontario since 1953. My application for registration as a Professional Engineer in the Province of British Columbia was made in September 1959 and is still under consideration by the Association.

Vancouver, B. C.

R. W. Stevenson

PROPERTY Onaped Mountain - Minex Option SHEET NO. 1 HOLE NO. [illegible]

DRILLED BY: Kenneo Explorations, (Western) Limited (xrt) STARTED: July 11, 1959 LOGGED BY: C. H. Renner

LOCATION: 127+23N; 55+59W COMPLETED: July 12, 1959 DIP: 90°

Claim IDE no. 7 ELEVATION: FINAL DEPTH 33.0

APPENDIX "F" - DRILL CORE LOGS

DEPTH	CORE RECOVERED	% REC.	DESCRIPTION
0'- 4.0			Overburden and weathered rock
4.0-33.0	24.1'	83%	Skeena granodiorite. Slightly altered, feldspars cloudy; often greenish; mafics chloritized. Some areas show slight rusty alteration. Mineralization chalcopyrite & specularite. Chalcopyrite occurs both dissem.& along fractures. Some small veinlets of secondary K-Feldspar noted. 4.0-7.2' Moderately weathered. Mafics well bleached or broken down to rusty Fe oxides. Chalcopyrite common on minor fractures and dissem. 7.2-9.7' Mafics chloritized, slightly bleached. Mineralization mainly pyrite with minor chalcopyrite. 9.7-12.3' Fairly fresh Skeena. Unmineralized. 12.3-19.5' Moderately altered Skeena with chalcopyrite dissem. and on fractures. Mafics chloritized. Feldspars cloudy. Moderately bleached appearance. 19.5-22.5' Similar to above with little or no chalcopyrite and some dissem. specularite. 22.5-24.3' Similar slightly chloritized Skeena with dissem. specularite & dissem. chalcopyrite. Chalcopyrite on fracture at 24.3' 24.3-27.1' Slightly chloritized Skeena granodiorite with no mineralization. 27.1-30.0' Slightly chloritized Skeena with chalcopyrite on fractures about 5" apart. 30.0-33.0' Chloritized & slightly altered Skeena. Mineralization pyrite & minor chalcopyrite dissem. mainly 30.0-31.2'. Also pyrite & minor chalcopyrite on fracture at 32.7' and 31.2'.

END OF HOLE AT 33.0'

PROPERTY Chewed Mountain - Minex Option SHEET NO. 1 HOLE NO. PM-2

DRILLED BY: Kennco Explorations, (Western) Limited (xrt) STARTED July 13,1959 COMPLETED: July 14,1959

LOCATION: 138+76N; 55+88W LOGGED BY: G. H. Rayner DIP: 90°

Claim IDE No. 7 ELEVATION: ——— FINAL DEPTH: 40.0'

DEPTH	CORE RECOVERED	% REC.	DESCRIPTION
0 - 9.0			Overburden and weathered rock
9.0-40.0	23.0'	74%	Skeena granodiorite. Mafics chloritized & slightly bleached. Feldspars cloudy & often greenish. Some fracturing at steep (60°±) angles. Chalcopyrite noted, dissem. & along fractures. Some dissem. specularite also noted. 9 - 13.3' Fairly fresh Skeena Granodiorite. Mafics slightly chloritized, feldspars slightly greenish No mineralization. 13.3-24.9' Bleached Skeena, remaining mafics chloritized. Dissem. chalcopyrite common. Many fine fractures dipping 45° at from 23.0' to 33.3'. Chalcopyrite on fracts. here. 24.8' a 1/4" band of chalcopyrite along a fract. dips 55°.Occasional minor specularite. 24.9-25.8' Skeena with dissem. chalcopyrite. Mafics chloritized, feldspars high in orthoclase - may be secondary. 25.8-33.0' Slightly bleached Skeena Granodiorite. Mafics chloritized,some dissem. chalcopyrite(spotty) & specularite. Also some chalcopyrite on fracts. A 3/4" band of chalcopyrite occurs at 29.5' dipping about 50° 33.0-34.8' Moderately bleached chloritized Skeena. Chalcopyrite occurs mainly or entirely on fracts. Fract. is common, intersecting core at 40-55°. A few of these fractures carry chalcopyrite. These are early,steep (45-65°) & have some mylonite. The later

DEPTH	CORE RECOVERED	% REC.	DESCRIPTION

fractures are flatter (30-45°) more common (down to 1/8" apart) and are filled with soft, white material - possibly carbonate,

34.8-40.8' Similar to above but generally lacking the mineralized fractures. One wide (1/2") band of chalcopyrite occurs at 39.6' with mylonite. With this band there is about 2" showing dissem. chalcopyrite above it. Dip of band 55°.

END OF HOLE AT 40.8'

PROPERTY Chevron Mountain - Minex Option SHEET NO. 1 HOLE NO. DH-3

DRILLED BY: Kennco Explorations (Western) Limited (agt) STARTED: Aug.3,1959 COMPLETED: Aug.7,1959 LOGGED BY: R.W. Stevenson

LOCATION: 60+75N ; 23+40W DIP: 90°

Claim IDE No.2 ELEVATION: FINAL DEPTH 75.0'

DEPTH	CORE RECOVERED	% REC.	DESCRIPTION
0 - 5.0			Overburden
5.0-75.0	63.9	85.2	Bethsaida Granodiorite - moderate bleaching of mafics. Contains hematite, bornite & very minor chalcopyrite. Some of chalcopyrite is along long fracts., suggesting a later origin 5.0-7.7' moderate weathering, with light brown limonite formed. Also a few short lengths of this to 12.0' 6.5-15.0' fairly intense bleaching of mafics also at 32.0-44.2, 53.0-75.0' 71.4-75.0 considerable fracturing, cemented with quartz, some tourmaline, and very minor chalcopyrite. 54.4 - minor bornite on fracture surface 51.0-52.0 - core ground

END OF HOLE AT 75'

AM 34 AM 33 AM 11 AM 41 AM 42 AM 36 AM 35 AM 9 AM 10 AM 39 AM 40 AM 38 AM 37 AM 7 AM 8 AM 5 FR AM 4 AM 2 AM 3 AM 1 AM 32 IDE 17 IDE 7 IDE 18 IDE 8 IDE 5 IDE 3 IDE 1 IDE 20 IDE 6 IDE 4 IDE 16 IDE 19 IDE 14 IDE 12 IDE 15 IDE 13 IDE 11 IDE 10 IDE 9 AM 13 FR AM 12 AM 14 AM 15 FR AM 16 AM 17 AM 19 AM 20 AM 22 AM 24 AM 21 AM 23 AM 25 AM 26 AM 28 AM 30 AM 29 AM 31 VM 30 VM 31 VM 32 VM 33 VM 34 VM 35 SNOW 1 SNOW 2 SNAKE LAKE ROSCOE LAKE Gnawed Mtn. Trench Float Shaft BL 110 W BL 64 W BL 67 E 128 N 80 N 64 N 56 N

— LEGEND —

6	QUARTZ VEINS
5	BRECCIA
4	QTZ FELDSPAR PORPHYRY
3	ROSCOE GRANITE
2	BETHSAIDA GRANODIORITE
1	SKEENA SILVER GRANODIORITE

- a · ALTERATION
- e · EPIDOTE
- b · BORNITE
- c · CHALCOCITE
- cp · CHALCOPYRITE
- cs · MALACHITE OR AZURITE
- mo · MOLYBDENITE
- p · PYRITE
- s · SPECULARITE
- t · TOURMALINE
- A · APLITE
- • D.D. HOLE
- JOINTING
- SHEARING
- DYKES & VEINS
- WEAK I.P. ANOMALY
- WEAK I.P. ANOMALY (QUESTIONABLE)
- I.P. SURVEY GRID

NORTHWESTERN EXPLORATIONS LIMITED

GNAWED MOUNTAIN PROJECT

GEOLOGY

PLATE "A"

DATE SEPT 17, 1959	DRAWN BY: R.S.	PLATE NO.
REVISED BY	DATE	SCALE: 1 IN = 1000 FT

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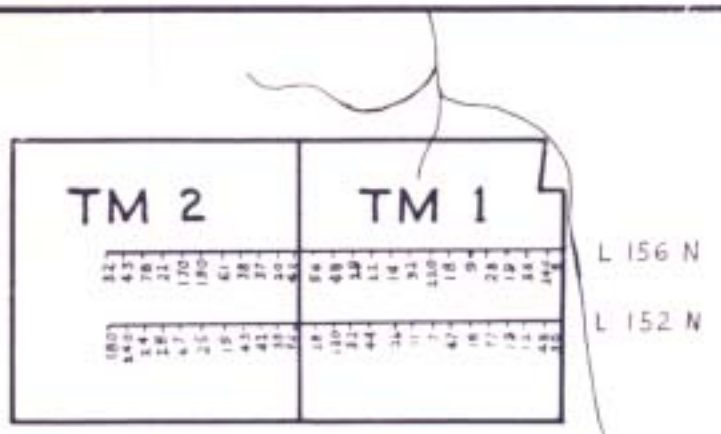
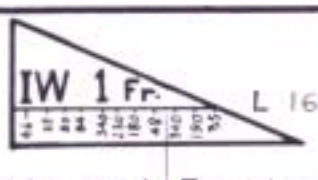


Claim Group KTI No. 2

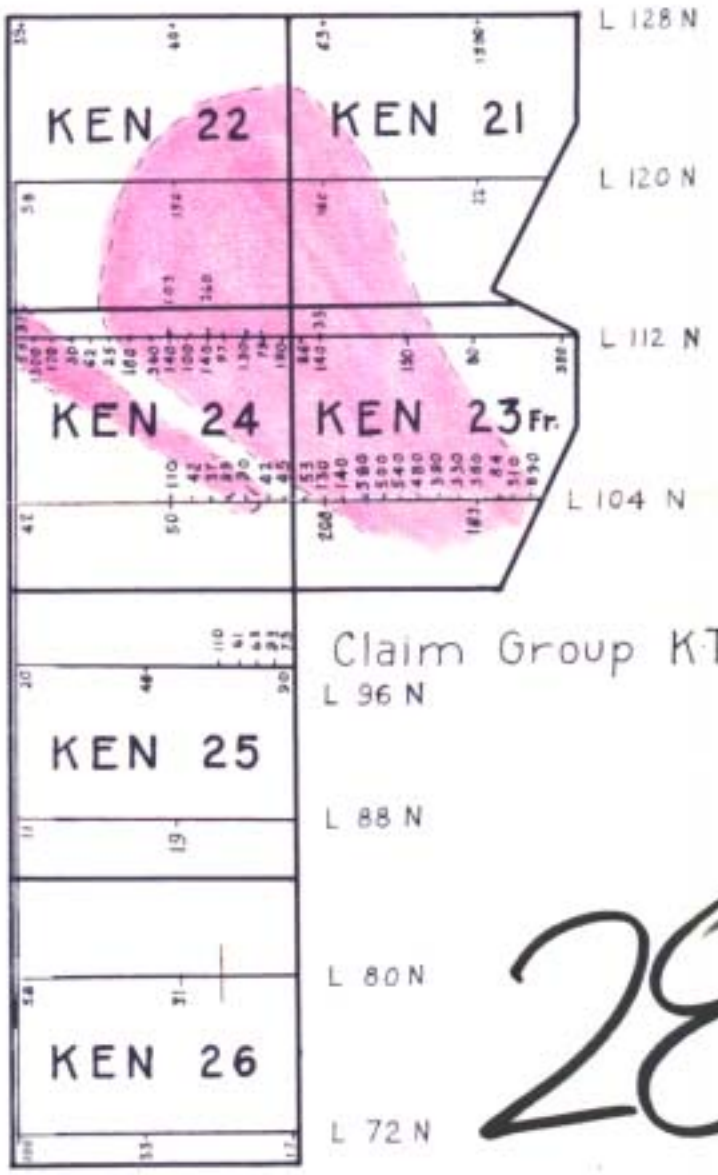


IW No. 1 Fr. Mineral Claim

B L 100 W

Road

N astr



Claim Group KTI No. 1

286

LEGEND

Total copper (p.p.m.) 110

IP Survey grid

Control Survey grid

Claim boundary

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Sheet 3

NORTHWESTERN EXPLORATIONS LIMITED

KTI Claim Groups No's 1&2

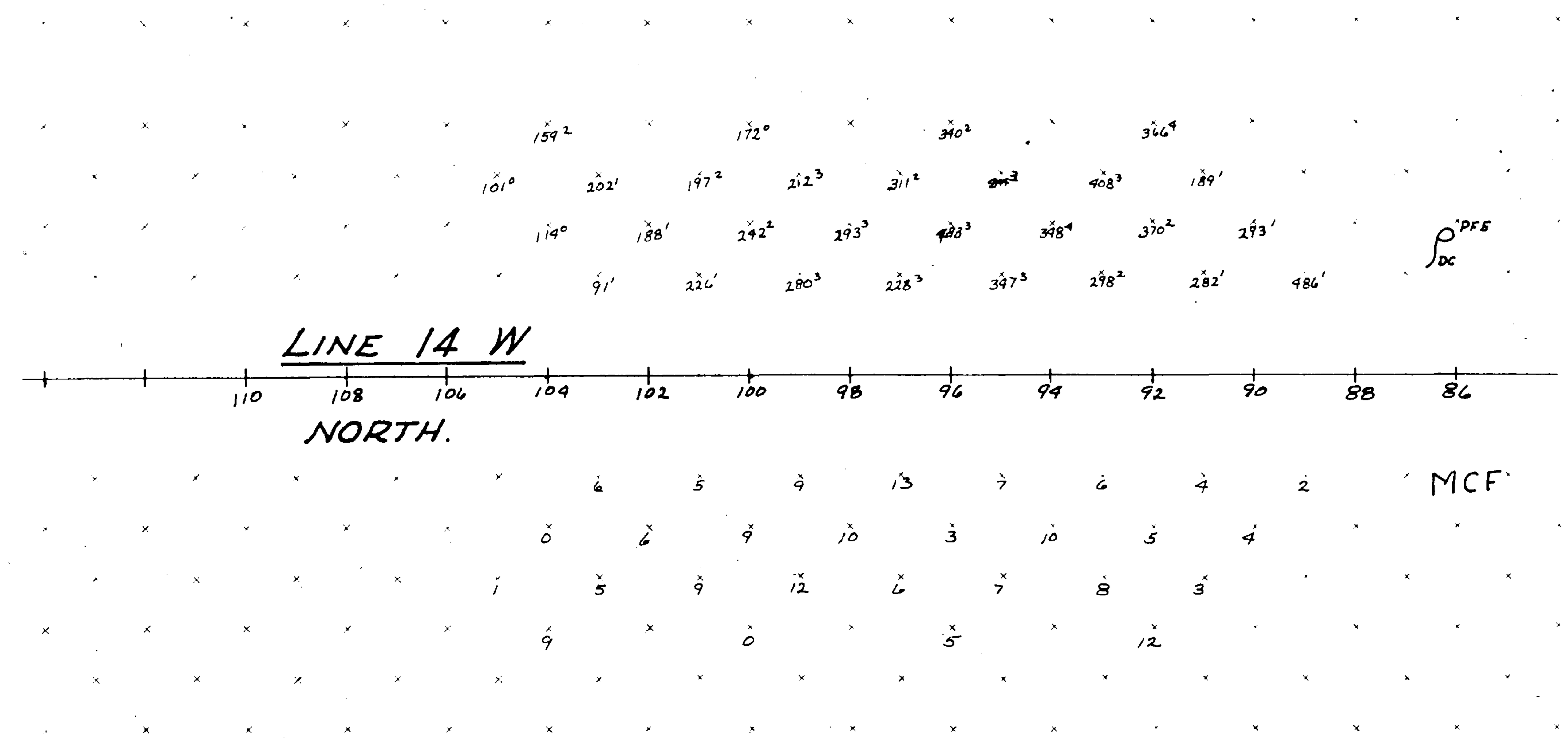
SOIL SAMPLING

Total Copper in p.p.m.

Kamloops Mining Division, B.C.

R.W. Stevens

DATE: Oct 9, 1959	DRAWN BY: R.W.S.	PLATE NO. "A"
REVISED BY	DATE	SCALE: 1" = 1000'



GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY -
INDUCED POLARIZATION SURVEY
GNAWED MTN PROPERTY
LINES: 46 E, 56 W, 14 W
SCALE: 1"=500' 1"=200' DATA BY: D.A.H. DATE: SEPT 1959
CONTOUR INTERVAL: LOGARITHMIC REVISIONS:
DRAWN BY: JJK DRAWING NO:

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #6

6 - incomplete

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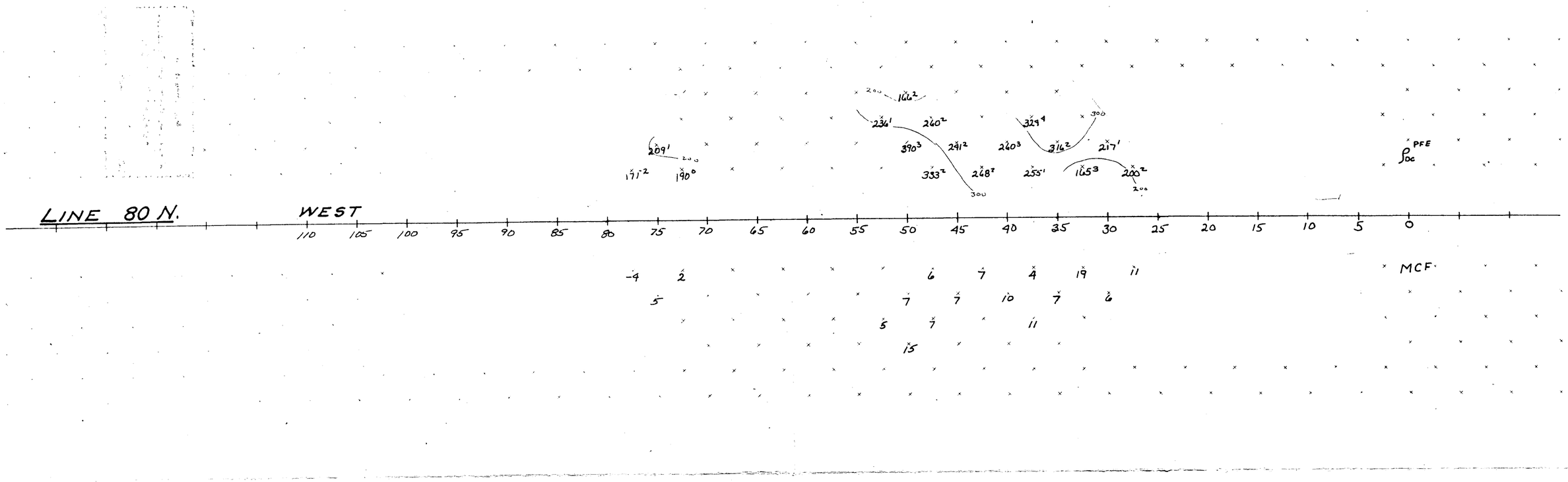

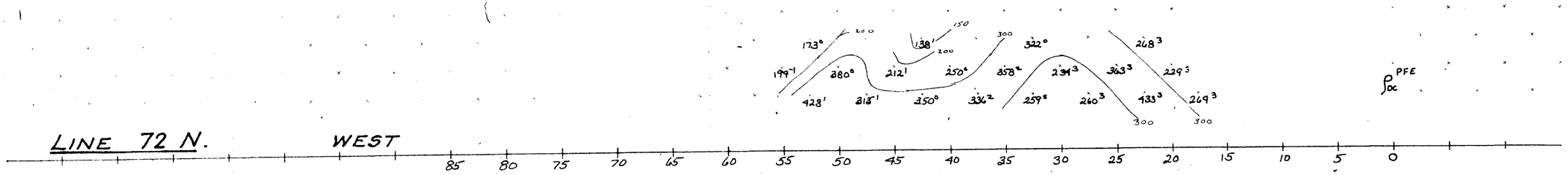

GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY

INDUCED POLARIZATION SURVEY

GNAWED MTN. PROPERTY
LINES 72 N., 80 N.

SCALE: 1" = 500' DATA BY: D.A.H. DATE: SEPT 1959
CONTOUR INTERVAL: LOGARITHMIC REVISIONS

DRAWN BY

DRAWING NO.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #7

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LINE 99 N.
WEST
EAST
MCF
LINE 80 N.
WEST
MCF
286
GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY
INDUCED POLARIZATION SURVEY
GNAWED MTN PROPERTY
LINES: 80N, 88N, 96N, 99N
SCALE: 1" = 200'
DATA BY: D.A.H.
DATE: SEPT 1959
CONTOUR INTERVAL: LOGARITHMIC
REVISIONS:
DRAWN BY:
DRAWING NO.:
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #8

LINE 96 N.
WEST.
ρ_{DC}^{PFE}
MCF
LINE 88 N.
WEST
ρ_{DC}^{PFE}
MCF
GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY
INDUCED POLARIZATION SURVEY
GNAWED MTN PROPERTY
LINES 88 N, 96 N
SCALE: 1" = 500'
DATA BY: D A H
DATE: SEPT 1959
CONTOUR INTERVAL: LOGARITHMIC
REVISIONS:
DRAWN BY: J.K
DRAWING NO:
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #9
sheet 9 incomplete.
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GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY

INDUCED POLARIZATION SURVEY
GNAWED MTN. PROPERTY -
LINES 120 N. 152 N.

SCALE: 1" = 500'
DATA BY: D.A.H.
DATE: SEPT. 1959
CONTOUR INTERVAL: LOGARITHMIC
REVISIONS:
DRAWN BY: J.K.
DRAWING NO.:

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #10

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LINE 132 N
LINE 136 N
WEST
PFE
DC
MCF
LINE 124 N
LINE 128 N
GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY
INDUCED POLARIZATION SURVEY
GNAWED MTN PROPERTY
LINES: 124 N 128N, 132N, 136 N
SCALE: 1" = 200 DATA BY: D A H DATE: SEPT 1959
CONTOUR INTERVAL: LOGARITHMIC REVISIONS:
DRAWN BY: JJK DRAWING NO.:
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 286 MAP #11
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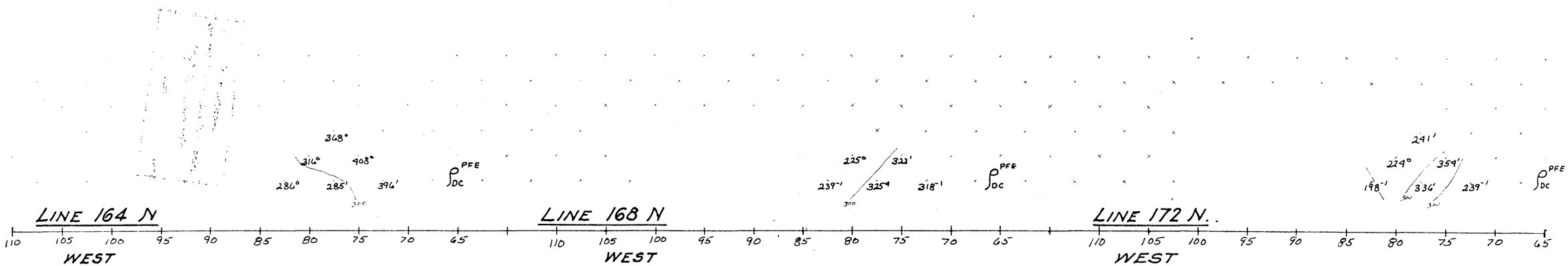

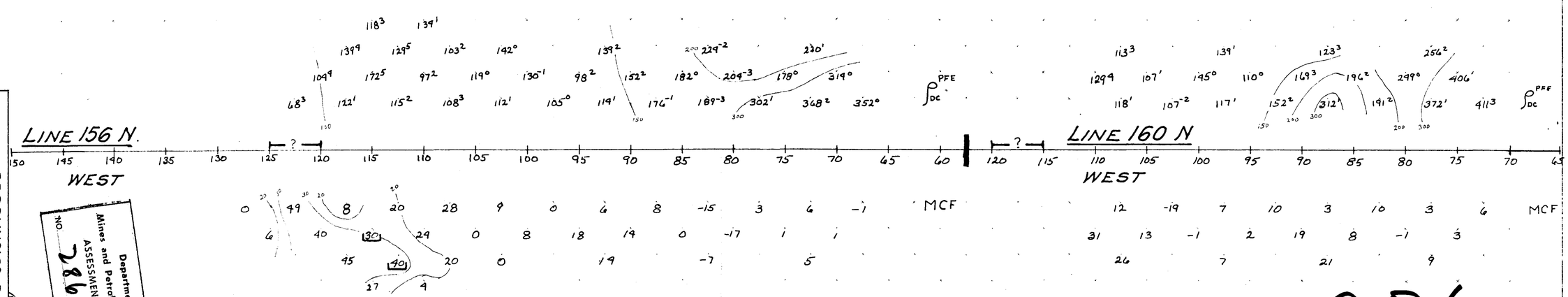

GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY

INDUCED POLARIZATION SURVEY

GNAWED MTN. PROPERTY

LINES: 156 N, 160 N, 164 N, 168 N.

SCALE: 1" = 500' DATA BY: DAH, REM. DATE: SEPT 1959

CONTOUR INTERVAL: LOGARITHMIC REVISIONS:

DRAWN BY: DJK

DRAWING NO.

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