

GEOPHYSICAL REPORT
ON A
MAGNETIC AND GEOCHEMICAL SURVEY
NOW CLAIM GROUP
OWEN LAKE AREA, OMINECA M.D., B.C.

NOW CLAIM GROUP : 24 km South Southwest of
Houston, B.C.
: 54° 126° SW
: N.T.S. 93L/2E

WRITTEN FOR : Mecca Minerals Ltd.
1102-207 West Hastings Street,
Vancouver, B.C., V6B 1H7

BY : Customer Mining Services Ltd.
1102-207 West Hastings Street,
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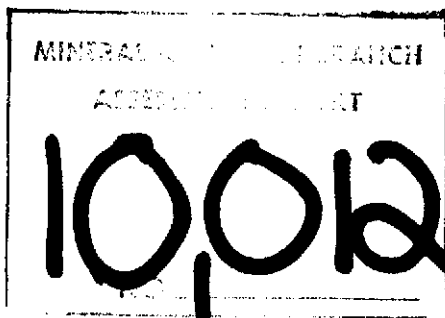
DATE : December 31st, 1981



**CUSTOMER MINING
SERVICES LTD.
VANCOUVER, B.C.**

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Part 2	1: 1500	1 (Now 2)
Claim Location and Geology	1: 5000	1 (Now 3)
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Lead Assays	1: 2000	1 (Now 6)

SUMMARY

During the fall of 1981 a combined magnetometer and geochemical survey was completed on the Now (1-4) claims by Customer Mining Services of Vancouver, B.C. The Now (1-4) claims lie about 40 kilometers southwest of Houston, British Columbia, approximately 2.5 kilometers northeast of Owen Lake. The property is owned 100 percent by Mecca Minerals Ltd. of Vancouver, B.C. The claims can be reached by driving the 43 kilometer gravel road to Owen Lake, and then taking a 4 x 4 access trail (about 3 kilometers) to the claims. The property is found in the physiographic division known as the Nechako Plateau. The topography is generally rolling with forest covering most of the ground. The purpose of the present survey was to extend the geological knowledge of the Now claims and to aid in the location of future trenching and/or drilling targets.

Previous work on the property consists of soil sampling, magnetometer and electromagnetic surveys and a trenching program.

The property is mainly underlain by the Tip Top Hill volcanics - brown to maroon porphyritic andesite, thought to be Upper Cretaceous or Paleocene in age. Mineralization has been found in several of the trenches completed in the 1973 work program and/or subsequent trenching.

The magnetometer readings were taken every 30 meters on 30 meter separated east-west lines. Approximately 60 kilometers of grid line was established, while magnetometer readings were taken over 36 kilometers of this grid. The magnetometer data was diurnally corrected, statistically analyzed, plotted and contoured. Soil samples were taken 30 meters apart on east-west lines separated 120 meters apart. These samples were assayed for copper, lead, zinc and silver.

CONCLUSIONS

1. The 1981 magnetometer survey has revealed several linear magnetic highs and lows that correspond to existing and proposed trenches. Several of these trenches contain sulphide mineralization. Other magnetic highs and lows found in the 1981 survey could be reflecting other areas of sulphide mineralization.
2. The geochemical soil sampling program for 1981 and subsequent analysis of selected samples indicate weak, moderate and highly anomalous lows and highs occur in the area investigated. The area selected was the land regional rock geochemistry done by the B.C. Department of Mines (Dr. Church) showed significant closure. The anomalous areas do not appear to be extensive. In some instances they occur "on top of each other" as to lows and highs for copper, lead and zinc. The spotty nature of some of the geochemistry

may be due to the irregular overburden conditions, especially for the less mobile lead and silver ions. However, at the time the samples were taken the ground ("B" Horizon) was frozen in places. This too could explain the spotty nature of the results and more particularly the actual samples adequate for assay. It is highly likely the entire area measured into the 30 meter grid will be re-sampled using an augur in the spring of 1982 when the ground has thawed, provided funds are available.

RECOMMENDATIONS

Further magnetometer and soil sampling could be completed on the remaining portion of the established survey-grid not covered in the present survey. There is approximately 24 kilometers of grid-line which could be surveyed and sampled. Snow and winter conditions forced an ending to the present work program before this 24 kilometers of line could be completed. Geological mapping could also be carried out, with outcrops and Dr. Church's geochemical rock closures becoming tied into the 1981 grid-system.

However, these recommendations, as well as the work program discussed in this report, are all part of a multi-phased work-program outlined by Dr. Kikuchi (1981).

GEOPHYSICAL REPORT
ON A
MAGNETIC AND GEOCHEMICAL SURVEY
NOW CLAIM GROUP
OWEN LAKE AREA, OMINECA M.D., B.C.

INTRODUCTION AND GENERAL REMARKS

This report discusses the survey method, data compilation and interpretation of results from magnetometer and geochemical surveys carried out over the Now claims located near Houston, B.C. All work carried out on the claims and discussed in this report was completed between September 15th and October 31st, 1981 by Customer Mining Services Ltd. of Vancouver, B.C. The work program was under the direction of James Parker, supervised by James Rutherford and followed those recommendations outlined by Dr. Kikuchi (1981). Approximately 60 kilometers of survey grid was established on the property, while the geophysical and geochemical covered about two thirds of this area.

The purpose of the magnetometer and geochemical surveys was to locate areas of possible sulphide mineralization and to aid in the geological knowledge of the property.

PROPERTY AND OWNERSHIP

The Now property includes the following four contiguous mineral claims:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>
Now 1	2283	4 (2 x 2)
Now 2	2284	6 (2 x 3)
Now 3	2285	6 (2 x 3)
Now 4	2286	4 (2 x 2)

The property is owned 100 percent by Mecca Minerals Limited of Vancouver, British Columbia.

LOCATION AND ACCESS

The Now claims are located 40 kilometers southwest of Houston, British Columbia. They lie about 3.5 kilometers north of Bradina's Silver Queen Mine site. The claims can be reached by turning off Highway 16 at a point 3.2 kilometers west of Houston and then driving the 43 kilometers of gravel road to Owen Lake. From this point a 4 x 4 access trail, approximately 2.8 kilometers long, provides direct access to the claims.

The geographical location of the claim post central to the group (C.C.P.) is latitude $54^{\circ} 07'$, longitude $126^{\circ} 44'$.

TOPOGRAPHY

The Now claims lie in the physiographic division known as the Nechako Plateau, between the Skeena and Fraser River systems. The topography is generally rolling, as slopes gently increase from Owen Lake, (elevation 750 meters), to Tip Top Hill, (elevation 1220 meters).

The property is well forested except for meadows on south facing slopes. Bedrock exposure is very poor, probably less than 10 percent of the total area and there are very few outcrops to be encountered.

HISTORY OF PREVIOUS WORK

Mineralization was discovered in the area in 1912, and prospecting activity has gone on in the area ever since. In 1965 serious large scale exploration was begun, leading to the production of Bradina Resources' Silver Queen Mine. This mine, no longer in operation, was located approximately 3 kilometers south of the Now claims.

Preliminary rock, soil and stream sampling was completed by Maharaja Minerals Ltd. on the property in 1972. The results of this program recommended that extensive geological, geochemical mapping and trenching be completed.

In 1973 Strato Geological completed a geological, EM and magnetometer survey over the property. Customer Mining

Services Ltd. of Vancouver built a road to the property and dug 14 trenches totalling 450 meters in length.

In the fall of 1973 two diamond drill holes were attempted on the property, but to quote McAndrew (1976):

"There was considerable futility to the 1973 drilling program since the contractor could not achieve the objectives and the contract had to be terminated."

Selected results of past work programs on the property have been outlined on Claim location and Geology Map Now 3.

GEOLOGY

General

In 1973 Dr. B.N. Church of the British Columbia Department of Mines published several geological maps of the Owen Lake area. His map titled "Geology of the Buck Creek Area" shows the Now claims underlain by Tip Topp Hill volcanic rocks except for a small area of Okusyelda Porphyry in the southwest corner of the property. This intrusive is porphyritic or microporphyritic with 20 to 50 percent plagioclase phenocrysts and minor quartz biotite and hornblende in a finely granular quartz felspathic matrix. McAndrew (1974) correlates these intrusives with nearby pyroclastic rocks that underlie the Tip Top Hill volcanics in the Owen Lake area. He places the age of these intrusives at greater than 56.2 ± 3 million years.

The most common volcanic rock type making up the Tip Topp Hill volcanics is a brown to maroon porphyritic andesite.

Local

The following discussion of the geology of the Now claims comes from McAndrew's 1974 report on the property.

"Some of the andesite flows noted on the claims are fine to medium grained and lack the porphyritic texture described above. There are numerous areas on the claims where flows of trachyte, latite and rhyolite have been observed alone or interbedded with each other or andesite.

The trachyte is buff to brown, fine to medium grained and locally porphyritic, phyrritic and limonitic. Latite is present in both flow and brecciated form. Latite breccia is present in and around Trench 8 and in Trench 12. The presence of this breccia is interpreted as due to explosive volcanic activity (eruptive vents) close to a centre of volcanism. The rhyolite is white to grey and aphanitic, with minute grey grains visible to the naked eye.

In addition to the Okusyelda Hill intrusions mapped by Dr. Church geologists have located an area of orthoclase gabbro in Trench 5. The orthoclase gabbro is a waxy brown, coarse grained, strongly magnetic intrusive.

In all cases significant mineralization occurs in fractured, sheared, or highly shattered and brecciated structural zones. The main lead-zinc-silver-copper mineralization found in Trenches 6 and 7 occupy fractures striking north and north 40° east with some minor mineralization occurring in fractures striking north west. This fracturing may be subsidiary to a major fault, of which the stream lineament to the north may be a surface expression. Lead-zinc-silver mineralization found in Trenches 4 and 13 occur in highly shattered and brecciated zones 3 meters to 5 meters wide, both striking north west."

Geology Map No. 13A, at the end of the report, details Dr. Church's geological findings for the Owen Lake area.

INSTRUMENTATION AND THEORY

The magnetometer survey was carried out using a portable vertical component, Model 22 fluxgate magnetometer, manufactured by Saber Electronic Instruments Ltd. of Burnaby, B.C. This instrument uses a digital dial read-out with a range of 100,000 gammas. Specifications on this magnetometer can be found in detail in Appendix I.

Magnetite and pyrrhotite are the only commonly occurring strongly magnetic minerals. Magnetic surveys can be used to locate the presence of these two minerals. Different rock types have differing background amounts of magnetite, pyrrhotite or both, therefore magnetic data can also be used to map geologic lithology and structure.

SURVEY PROCEDURE

A grid system was established on the properties with stations every 30 meters. North-south running lines were established over the property for a total of about 60 kilometers of grid line. Magnetometer readings were taken over approximately 36 kilometers of the grid system. The diurnal shift was monitored in the field by the closed loop method using a series of base stations.

Soil samples were taken at selected stations used in the magnetometer survey. The samples, taken from the "B" Horizon, were placed in kraft paper bags, marked and sealed. They were then analysed by Acme Analytical Laboratories Ltd. of Vancouver, B.C., for copper, lead, zinc and silver.

Soil samples were dried at 60° C and sieved to -80 mesh. Samples were then digested in a hot dilute aqua regia and then diluted to 10 ml. with demineralized water. The amount of zinc, lead or copper in each sample was determined in the acid solution by Atomic Absorption. Acme Analytical's geochemical methodology is presented in Appendix II. The complete assay results, listed in Part Per Million (p.p.m.) are presented in Appendix III.

COMPILATION OF DATA

Data taken from lines north of line 34N, and between 10 west and 30 east have been plotted on Map Now 1. Data from lines 15 north to 34 north and between 0 east and 30 east have been plotted on Map Now 2. The data has been plotted on these maps at a scale of 1 cm. = 15 meters. To simplify matters 54,000 gammas have been subtracted from each raw data point before being plotted. The magnetic values were grouped together in equal arithmetic intervals and cumulative frequency distribution established. The statistical

parameters taken from this distribution and used for map construction are as follows:

- 2100 gammas Anomalous High Threshold Value
- 1800 gammas Sub-Anomalous High Threshold Value
- 1500 gammas Mean Background Value
- 1200 gammas Sub-Anomalous Low Threshold Value
- 900 gammas Anomalous Low Threshold Value

Assay results for copper, zinc and lead have been presented on maps Now 4, Now 5 and Now 6. Silver assays were too low to warrant graphic presentation.

Map Now 4, which contains the copper assays, has been plotted such that 1 cm. = 20 meters. The contour interval is 10 p.p.m., with any assay result under 10 p.p.m. acting as background.

Map Now 5, which contains the zinc assays, has been plotted such that 1 cm. = 20 meters. The contour interval is 100 p.p.m., with any assay result under 100 p.p.m. acting as background.

Map Now 6, which contains the lead assays, has been plotted such that 1 cm. = 20 meters. The contour interval is 10 p.p.m., with any assay result under 10 p.p.m. acting as background.

DISCUSSION OF RESULTS

Magnetometer Survey

The largest anomalous magnetic high was located extending roughly from 15 east-30 north to 30 east-25 north. This anomalous zone corresponds with the location of proposed Trench 19, outlined in the trenching programs of McAndrew 1974 and Kikuchi 1981. Trench 19 was proposed because the 1973 geophysical survey had found an extreme magnetic high, as well as a strong EM tilt angle crossover and a strong EM vertical component high in the vicinity. The 1973 geophysical results appear to correspond with the 1981 geophysical results in this location. The 1981 survey makes Trench 19 an even more appealing trench target.

Another large anomalous high was located in the southeast corner of the survey area, extending approximately 275 meters from station 22 east-20 north to station 28 east-15 north. A smaller, but still anomalous high, was found between station 17 east-43 north and station 19 east-41 north.

The largest anomalous magnetic low extends southeast from station 18 east-46 north to station 24 east-43 north. The location of this magnetic low corresponds with Trench 8. This trench was dug in 1973 near an outcrop carrying disseminated malachite. Two anomalous lows occur in the northwest corner of the survey area, centered at station

48 north-10 west and 48 north-6 west. Trenches 6 and 7 are both found within the boundary of these two magnetic lows. The two trenches had been dug to open up lead-silver-zinc-copper mineralization reported to exist in the area.

Since these three trenches, with known mineralization, correspond to magnetic lows, future trenching programs on the Now claims should consider other areas of magnetic lows in choosing trenching targets. An anomalous magnetic low was found centered at 29 east-52 north. Numerous sub-anomalous zones were found throughout the survey area.

Geochemical Survey

Soil samples showing overlaps for lows of copper, lead and zinc occur at stations 30 north-20 east and 38 north-18 east. A magnetic high was located at 30 north-15 east indicating a possible "copper soil low - magnetic high" correlation at that point.

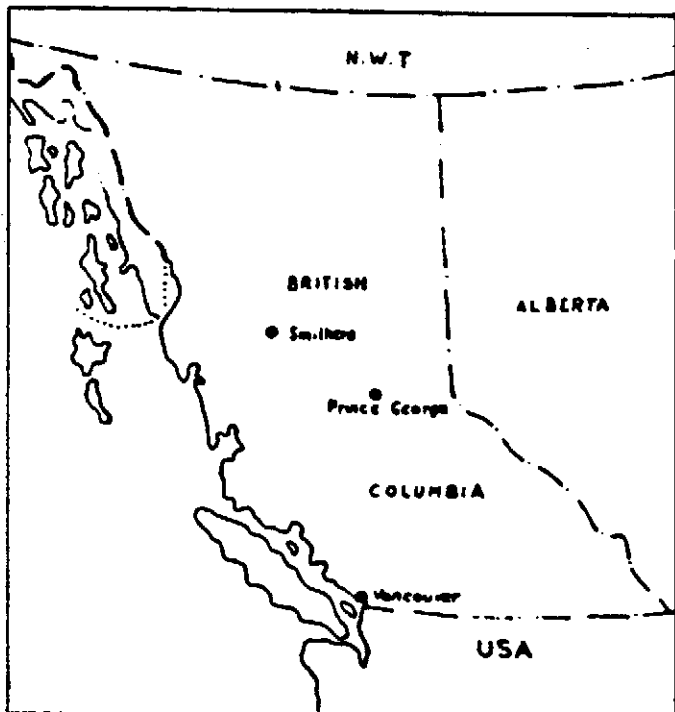
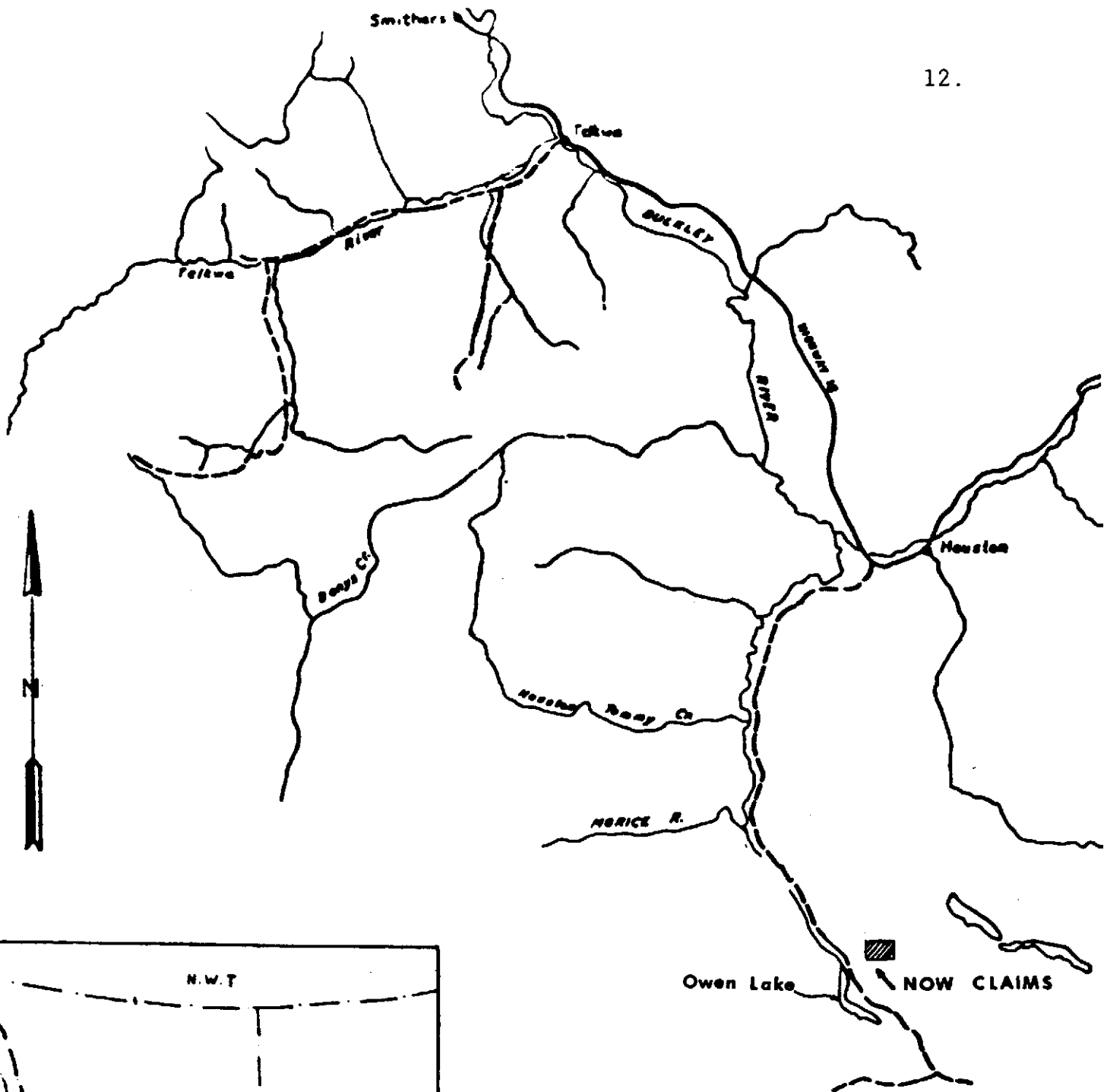
Overlap highs for copper, lead and zinc appeared approximately at 30 north-6 west and 54 north-16 east which may or may not correlate with a magnetic high found in the vicinity of station 43 north-17 east.

The strongest anomalous high (510 p.p.m.) for zinc occurred at station 54 north-16 east. Another high for zinc came in at station 38 north-11 east. Zinc lows appear as spotty and are not extensive.

Lead geochemical results indicate strong highs exist at stations 54 north-17 east and 42 north-7 west. Lead lows are found to be spotty and not extensive.

One strong copper high was indicated at station 30 north-6 west. Other copper closure zones were low or moderate. The lows observed are not extensive and are spotty.

Follow-up trenching conducted on geochemical anomalies found in past exploration programs in the Now claim area have demonstrated "a ratio of success particularly encouraging" - McAndrew, 1974. Notwithstanding the known limitations of the method of survey the results appear to warrant closer investigation by other prospecting methods -- trenching, drilling and/or other geotechnical surveys or any combination of the same.



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OMINECA MINING DIVISION

MINERAL CLAIM LOCATION MAP: 93L



GEOLOGY OF THE OWEN LAKE, PARROTT LAKES,
GOOSLY LAKE AREA
OMINECA MINING DIVISION B.C.

GEOLOGY BY N. CHURCH 1973

BEDDED ROCKS

MIOCENE

POPLAR BUTTES VOLCANICS,
COLUMNAR OLIVINE BASALT.

EOCENE

BUCK CREEK VOLCANICS,
INTERCALATED BASALTIC ANDESITE
(locally feldspathic) AND / APHANITIC
ANDESITE AND DACITE.

GOOSLY LAKE VOLCANICS, MAINLY
BIOTITE - PYROXENE - PLAGIOCLASE
TRACHYANDESITE LAVAS / AND
THICK SILLS OR LAVA FLOWS AND
SMALL STOCKS OF SIMILAR ROCK.

PALEOCENE OR UPPER CRETACEOUS

TIP TOP HILL VOLCANICS, MAINLY
BIOTITE - HORNBLENDE ANDESITE AND
ANDESITIC DACITE LAVAS AND
PYROCLASTIC ROCKS.

EARLY AND MIDDLE MESOZOIC

ACID AND INTERMEDIATE LAVAS AND
PYROCLASTIC ROCKS, SOME ARGILLITE,
SANDSTONE, AND CONGLOMERATE.

IGNEOUS INTRUSIONS

SYENOMONZONITE - ALKALIC GABBRO
STOCKS

GOOSLY BIOTITE GRANITIC STOCK

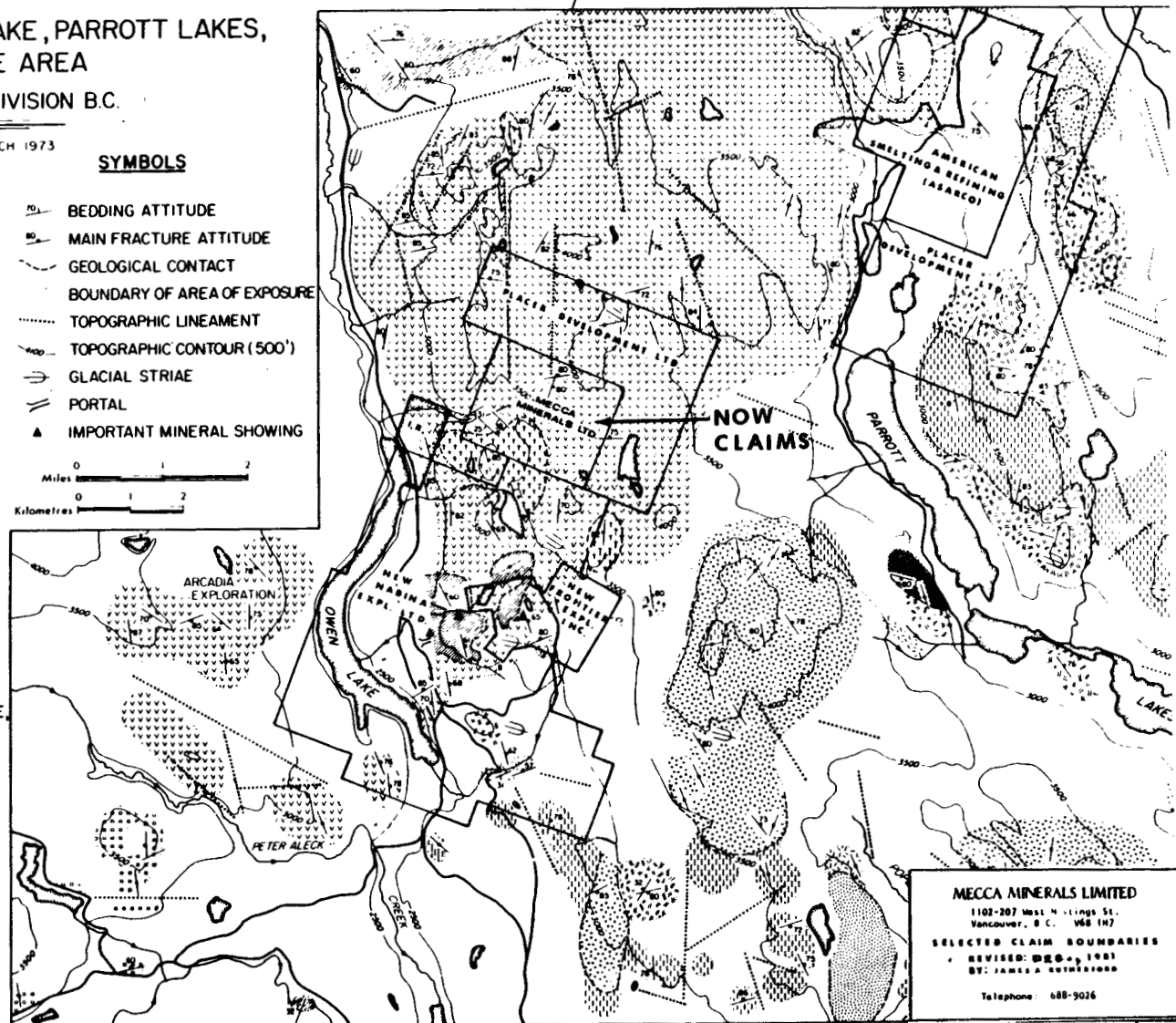
DUCK LAKE BIOTITE - PLAGIOCLASE
PORPHYRY STOCK

MINE HILL MICRODIORITE SILLS AND
DYKES.

OKUSYELDA HILL BIOTITE - QUARTZ
PORPHYRY.

SYMBOLS

- BEDDING ATTITUDE
- MAIN FRACTURE ATTITUDE
- GEOLOGICAL CONTACT
- BOUNDARY OF AREA OF EXPOSURE
- TOPOGRAPHIC LINEAMENT
- TOPOGRAPHIC CONTOUR (500')
- GLACIAL STRIAE
- PORTAL
- IMPORTANT MINERAL SHOWING



MECCA MINERALS LIMITED
1102-207 West Hastings St.
Vancouver, B.C. V6B 1H7
SELECTED CLAIM BOUNDARIES
REVISED: DEB-1981
BY: JAMES A. RUTHERFORD
Telephone: 688-9026

SELECTED BIBLIOGRAPHY

Church, B.N., Annual Reports for the year 1969 of the B.C. Department of Mines and Petroleum Resources.

McAndrew, J.M. & Barakso, J.J., Preliminary Report on the Winn Claims. (1972).

British Columbia Department of Mines and Petroleum Resources, Preliminary Map # 13A Geology of the Owen Lake, Parrott Lakes, Goosly Lake area. 1973. Geology by B.N. Church.

Strato Geological, Report on Geophysical and Geochemical Exploration Program on the Winn Claim Group. 1973

McAndrew, J.M., 1973-74 Field Exploration Report, Maharaja Minerals Ltd. (N.P.L.) 1974.

McAndrew, J.M., Memorandum: Diamond Drilling; Old Tom, Crater "Chimney" Area, Winn Group, Dominion Basin. 1976

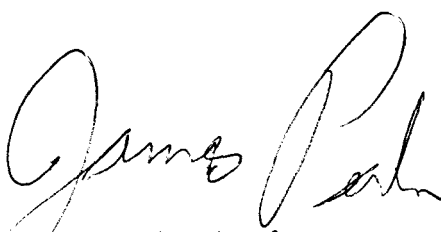
Kikuchi, T., Report and Recommendations on the Now (1-4) Claims Owen Lake Area, Omineca M.D., B.C. 1981.

STATEMENT OF QUALIFICATIONS

I, James D.A. Parker of the Municipality of Surrey, B.C., hereby certify that:-

1. I am a University Student employed part time by Customer Mining Services Limited, with offices at 1102-207 West Hastings Street, Vancouver, B.C., V6B 1H7. I reside at 9469 - 127 A Street, Surrey, B.C., V3P 5X8.
2. I am working towards a B.A. degree (major: Psychology and English) at Simon Fraser University, and am in my last semester.
3. I have worked two field seasons on Smithers area properties under the direction of James A. Rutherford in the capacity of field manager.
4. As at date I have ^{no} direct or indirect interest in the securities of Mecca Minerals Limited.

DATED at Vancouver, British Columbia, this 31st day of December 1981.



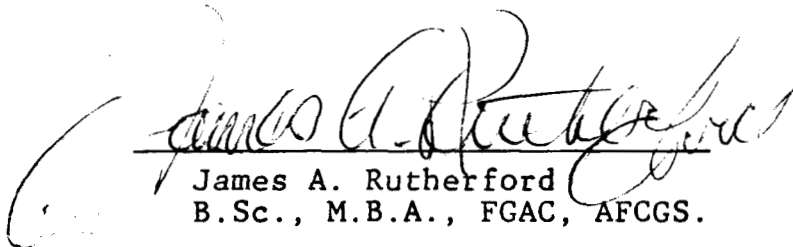
James D.A. Parker

CERTIFICATE

I, JAMES A. RUTHERFORD, of the City of Vancouver, British Columbia, the author of this report, hereby certify that:-

1. I am President and Manager of Customer Mining Services Limited, with offices at 1102-207 West Hastings Street, Vancouver, B.C., V6B 1H7.
2. I hold a B.Sc. degree (major geology) from the University of Alberta - 1955.
3. I hold an M.B.A. degree (major business administration) from the University of Western Ontario - 1957.
4. I am a Fellow of the Geological Association of Canada.
5. I am not a Registered Engineer in the Province of British Columbia or of any province.
6. I have worked professionally and as a businessman in the mining and/or oil business for over 30 years.
7. As at date I have direct and indirect interest through Customer Mining Services Limited in the securities of Mecca Minerals constituting a position of "shareholder of control".
8. This report is based on personal field examination and examination of the data obtained as a result of the survey.

DATED at Vancouver, British Columbia, this 31st day of December 1981.



James A. Rutherford
B.Sc., M.B.A., FGAC, AFCGS.

STATEMENT OF QUALIFICATIONS

I, Toru Kikuchi of the City of Vancouver, B.C., hereby certify that:-

1. I am a graduate of the Hokkaido University, Japan (B.Sc., Geology and Minerology, 1946) and of the Tohoku University, Japan (Ph.D., Economic Geology, 1963).
2. I am a "GIJUTSUSHI" (a qualification for a consulting engineer authorized by the Japanese Government) and a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
3. I have been practising my profession continuously for the past thirty-five years, and am an independent Consulting Geologist with my office at 1374 Park Drive, Vancouver, B.C., V6P 2K6.
4. I have no direct or indirect interest in the property, nor do I anticipate receiving any such interest, nor in the securities of Mecca Minerals Limited.
5. I inspected a portion of the work while the program was being carried out. I have read this report and personally endorse the facts and concepts contained in the text.



Toru Kikuchi, P.Eng.

Vancouver, B.C.
December 31st 1981.

AFFIDAVIT OF EXPENSES

The magnetic and geochemical survey carried out on the Now Claims, Owen Lake Area, Omineca, M.D., B.C. September 15 to October 31 1981 was done to the value of the following set in below. Geological investigations were carried out sporadically in the summer of 1981 in conjunction with other work in the general area.

FIELD:

3-man crew, (crew varied from 2 to 8 people with a conservative average of 3 struck) 45 days at \$300.00 per day	\$ 13,500.00
Supervision	1,000.00
Instrument rental	450.00
Board and room	4,050.00
Survey supplies and assaying	850.00
Mobilization and demobilization (air fares and return to Vancouver)	1,000.00
	<u>\$ 20,850.00</u>

REPORT:

Drafting and printing (binding)	\$ 650.00
Report typing and compilation	350.00
	<u>\$ 1,000.00</u>
Grand Total	<u>\$ 21,850.00</u>

Respectfully submitted,
Customer Mining Services Ltd,


James A. Rutherford
President

geophysical industrial instruments and services

SABRE MODEL 22 PORTABLE MAGNETOMETER

The model 22 magnetometer is an accurate and rugged instrument that is simple to operate yet fulfills all the requirements of a first class geophysical exploration instrument.

Specifications

- Principle of Operation: Neutralized fluxgate.
- Type of Readout: Meter to indicate null and precision digital dial to indicate value of earth's vertical field directly in gammas.
- Range: 0 to 100,000 gammas (without the use of complicated latitude controls or range switches)
- Sensitivity: 20 gammas per division on digital dial. Constant and linear throughout the entire range.
- Operating Temperature Range: -30°C to $+85^{\circ}\text{C}$.
- Temperature Drift: Less than 2 gammas per degree throughout the entire operating range.
- Fluxgate Suspension System: Oil-damped gimbal, self-levelling.
- Dimensions: Magnetometer: 9 inches high x 7-1/4 in. wide x 4 in. deep.
Battery Case: 4-3/4 in. x 4-3/4 in. x 1-1/2 in.
- Weight: Magnetometer 4 lbs.
Battery Case 2 lbs. (complete with batteries)
- Field Cases: Magnetometer and battery case are both housed in heavy saddle leather cases with convenient carrying straps.
- Batteries: 4 Eveready No. 246 transistor batteries (9 volt), with service life of approx. 2 months depending on use.

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1981

SAMPLE PREPARATION

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis for Ag*, Bi*, Cd*, Co, Cu, Fe, Mn, Mo, Ni, Pb, Sb*, V, Zn

0.5 gram samples are digested hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water.

All the above elements are determined in the acid solution by Atomic Absorption.

* denotes background correction.

Geochemical Analysis for Au

10.0 gram samples that have been ignited overnight at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb graphite AA.)

Geochemical Analysis for Au, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt, and Rh are determined in the solution by Atomic Absorption.

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml.

As is determined in the solution by Graphite Furnace Atomic Absorption.



To: Mecca Minerals
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1 of 5

APPENDIX III

File No. 81-1934

Type of Samples Soils

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

S	AMPLE No.	Cu	Pb	Zn	Ag							
1	30N	3E	17	11	111	.1						1
		4	18	15	285	.1						2
		5	12	13	102	.1						3
		6	16	14	268	.1						4
		7	17	13	195	.1						5
		8	18	12	190	.1						6
		9	15	11	105	.1						7
		11	8	11	57	.1						8
		14	5	9	66	.1						9
		17	5	11	77	.1						10
		19	4	10	98	.1						11
		20	4	8	55	.1						12
		21	7	8	63	.1						13
		22	7	10	89	.1						14
		23	13	13	80	.1						15
		27	8	9	90	.1						16
		28	10	10	91	.1						17
	30N	29E	6	10	79	.1						18
												19
	30N	1W	13	9	176	.1						20
		2	6	8	181	.1						21
		3	11	10	172	.1						22
		4	5	10	73	.1						23
		5	11	11	151	.1						24
		6	40	13	191	.6						25
		7	13	25	181	.1						26
		8	26	14	160	.1						27
		9	7	10	108	.1						28
	30N	10W	17	10	107	.1						29
												30
	34N	0W	10	5	40	.1						31
		1	6	9	74	.1						32
		2	7	9	60	.1						33
		3	8	12	69	.1						34
		4	16	13	90	.1						35
		5	11	11	80	.1						36
		6	8	10	106	.1						37
		7	8	10	67	.1						38
	34N	8W	9	9	107	.1						39
												40

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All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Dec. 16, 1981

DATE REPORTS MAILED Dec. 23, 1981

ASSAYER

D. Toy
DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER



To: Mecca Minerals

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B. C. V6A 1R6

phone: 253 - 3158

2 of 5

APPENDIX III

File No. 81-1934

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

2

SAMPLE No.		Cu	Pb	Zn	Ag							
38N	1E	12	8	113	.1							1
	2	12	6	164	.1							2
	3	20	8	171	.1							3
	4	10	10	88	.1							4
	5	11	20	140	.1							5
	6	9	6	74	.1							6
	7	5	9	66	.1							7
	8	9	8	78	.1							8
	9	10	6	114	.1							9
	10	18	7	262	.1							10
	11	6	10	351	.1							11
	12	5	12	224	.1							12
	13	9	8	101	.1							13
	14	10	11	222	.1							14
	14A	10	8	219	.1							15
	15	11	7	125	.1							16
	16	7	6	88	.1							17
	17	7	6	59	.1							18
	18	7	4	53	.1							19
	19	8	7	99	.1							20
	20	18	7	251	.1							21
	21	9	10	255	.1							22
	23	7	9	133	.1							23
	25	24	7	198	.1							24
	28	7	6	93	.1							25
	29	11	4	44	.1							26
38N	32E	16	5	42	.1							27
												28
38N	OW	15	9	70	.1							29
	7	7	5	67	.1							30
	8	4	5	39	.1							31
38N	9W	12	5	91	.1							32
												33
42N	1E	12	9	63	.1							34
	2	6	10	91	.1							35
	14	4	6	70	.1							36
	15	6	7	72	.1							37
	17	7	5	97	.1							38
42N	22E	26	10	198	.1							39
												40

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DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Dec. 16, 1981

DATE REPORTS MAILED Dec. 23, 1981

ASSAYER

Dean Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER



To: Mecca Minerals

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Assaying & Trace Analysis

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3 of 5

APPENDIX III

File No. 81-1934

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

3

SAMPLE No.		Cu	Pb*	Zn	Ag							
42N	27 E	18	9	64	.1							1
42N	28 E	7	11	78	.1							2
												3
42N	0 W	18	9	50	.1							4
	1	15	5	44	.1							5
	2	24	7	50	.3							6
	3	13	11	52	.1							7
	4	25	14	67	.3							8
	5	24	16	135	.3							9
	7	9	24	105	.1							10
	8	17	59	155	.2							11
42N	9 W	13	41	135	.1							12
												13
46N	2 E	12	12	50	.1							14
	3	8	13	52	.1							15
	4	12	12	80	.1							16
	5	8	13	85	.1							17
	6	10	12	63	.1							18
	9	10	11	50	.1							19
	10	8	9	26	.1							20
	11	8	13	54	.1							21
	15	8	11	73	.1							22
	16	8	9	40	.1							23
	17	7	11	97	.1							24
	18	15	19	215	.1							25
	19	26	12	99	.3							26
46N	29 E	18	9	44	.3							27
												28
46N	2 W	15	12	50	.1							29
	7	10	10	70	.1							30
46N	9 W	11	11	100	.1							31
												32
50N	1 E	10	13	80	.1							33
	2	9	12	50	.1							34
	4	20	18	130	.1							35
	5	8	15	95	.1							36
	6	8	9	40	.1							37
	7	10	10	85	.1							38
	10	10	10	70	.1							39
50N	11 E	15	10	100	.1							40

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All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Dec. 16, 1981

DATE REPORTS MAILED Dec. 23, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER



To: Mecca Minerals

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

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4 of 5

APPENDIX III

File No. 81-1934

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.		Cu	Pb	Zn	Ag							
50N	12E	11	14	90	.1							1
	13	14	12	90	.1							2
	16	10	12	156	.1							3
	18	7	10	75	.1							4
	19	6	12	85	.1							5
	20	10	11	140	.1							6
	24	8	9	46	.1							7
	25	4	10	30	.1							8
	26	6	12	60	.1							9
	27	8	10	60	.1							10
	28	8	9	73	.1							11
50N	29E	10	8	55	.1							12
												13
50N	0W	10	9	90	.1							14
	0A	18	14	90	.1							15
	1	8	11	84	.1							16
	3	15	18	196	.1							17
	4	8	13	85	.1							18
	5	10	14	137	.1							19
	6	8	9	46	.1							20
	7	9	13	85	.1							21
	8	6	9	60	.1							22
	9	7	10	48	.1							23
50N	10W	7	10	64	.1							24
												25
54N	1E	8	13	67	.1							26
	2	8	14	77	.1							27
	3	8	13	60	.1							28
	4	6	12	78	.1							29
	5	10	15	180	.1							30
	6	5	40	260	.1							31
	7	6	17	60	.1							32
	8	5	13	84	.1							33
	9	8	13	54	.1							34
	10	7	10	89	.1							35
	11	7	9	70	.1							36
	15	7	28	178	.1							37
54N	16E	26	75	510	.1							38
												39
												40

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DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Dec. 9, 1981

DATE REPORTS MAILED Dec. 23, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER



To: Mecca Minerals

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B. C. V6A 1R6

phone: 253 - 3158

5 of 5

APPENDIX III

File No. 81-1934

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

5	SAMPLE No.	Cu	Pb*	Zn	Ag								
	54N 19 E	7	16	85	.2								1
	24	18	12	120	.1								2
	25	18	12	80	.1								3
	27	9	13	100	.1								4
	28	8	11	135	.1								5
	54N 29 E	8	12	140	.2								6
													7
	54N 0 W	11	11	75	.3								8
	1	9	13	80	.1								9
	2	30	15	130	.2								10
	3	21	9	45	.3								11
	7	8	15	95	.1								12
	8	7	14	42	.1								13
	54N 9 W	8	19	75	.1								14
													15
													16
													17
													18
													19
													20
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													38
													39
													40

All reports are the confidential property of clients
All results are in PPM.

DIGESTION:.....

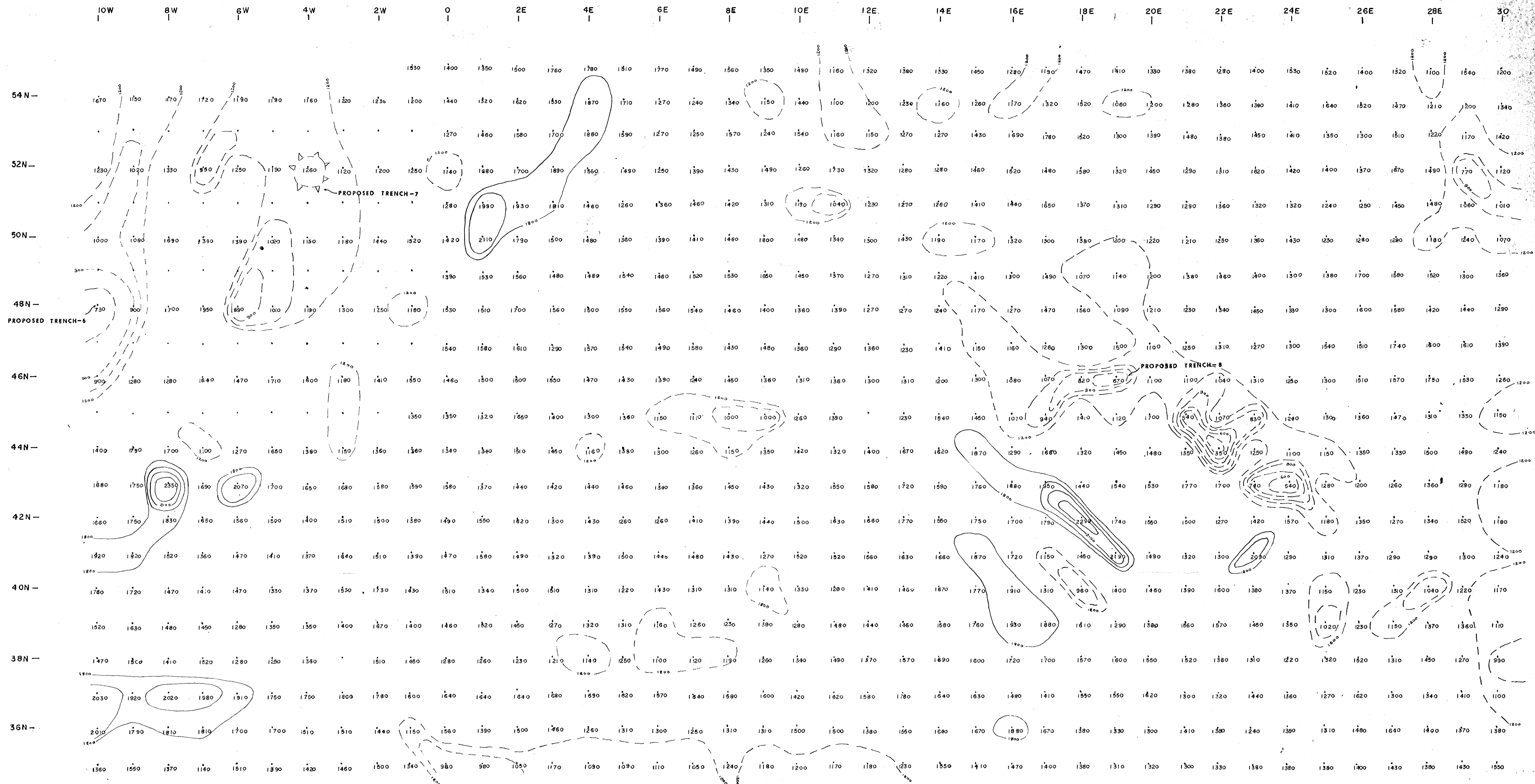
DETERMINATION:.....

DATE SAMPLES RECEIVED Dec. 16, 1981

DATE REPORTS MAILED Dec. 23, 1981

ASSAYER *D. Toye*

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

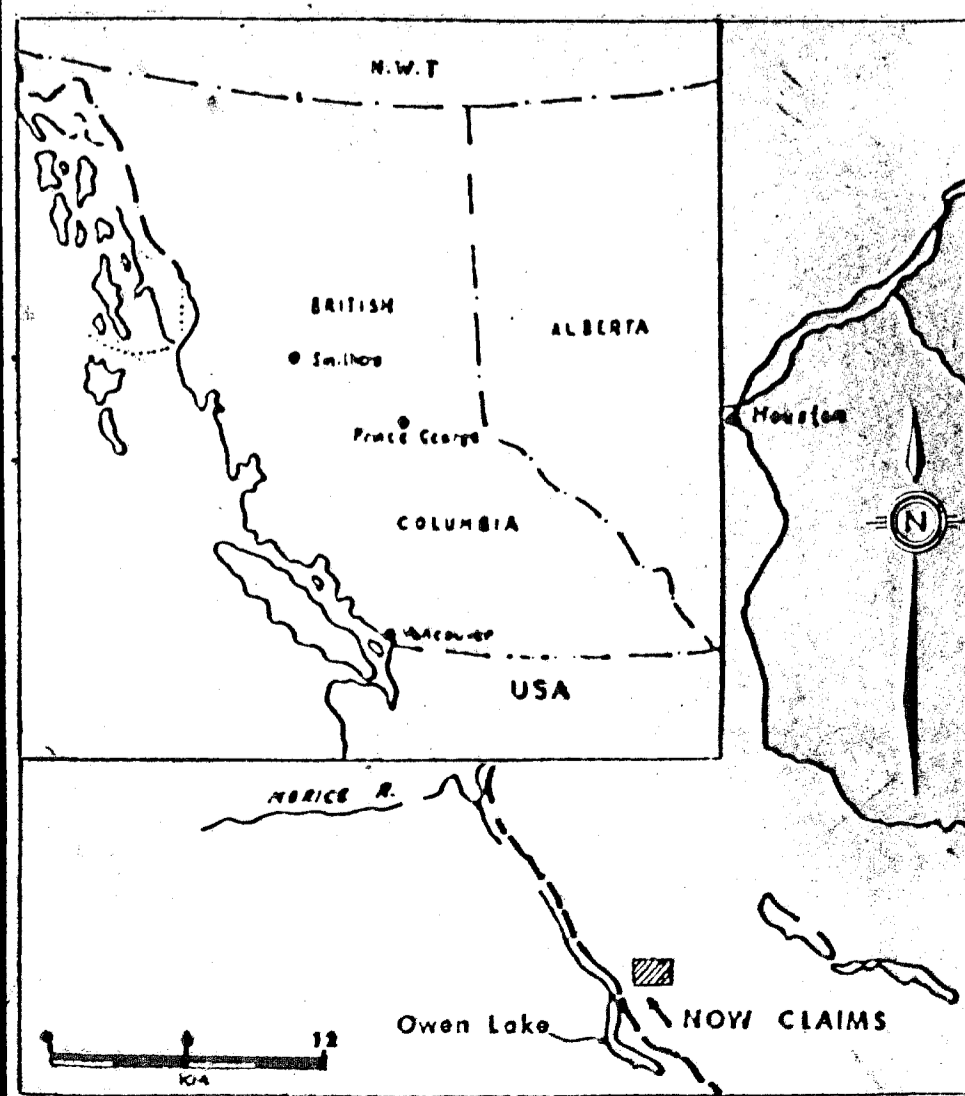


CONTOURS

CONTOUR INTERVAL: 150 GAMMAS
 1800 GAMMAS AND HIGHER ———
 1200 GAMMAS AND LOWER - - - - -
 INSTRUMENT: SABRE MODEL 22 FLUXGATE MAGNETOMETER

PARAMETERS

2100 GAMMAS ANOMALOUS HIGH THRESHOLD VALUE
 1800 GAMMAS SUB ANOMALOUS HIGH THRESHOLD
 1500 GAMMAS NEAR BACKGROUND VALUE
 1200 GAMMAS SUB ANOMALOUS LOW THRESHOLD VALUE
 900 GAMMAS ANOMALOUS LOW THRESHOLD VALUE
 BACKGROUND CONTOUR OF 2400 GAMMAS NOT DRAWN I.N.
 54 000 GAMMAS SUBTRACTED FROM EACH VALUE
 I. E. 3000 READS 57 000 GAMMAS



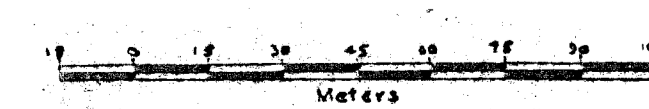
MINERAL RIGHTS BRANCH
 ASSESSMENT REPORT
10,012

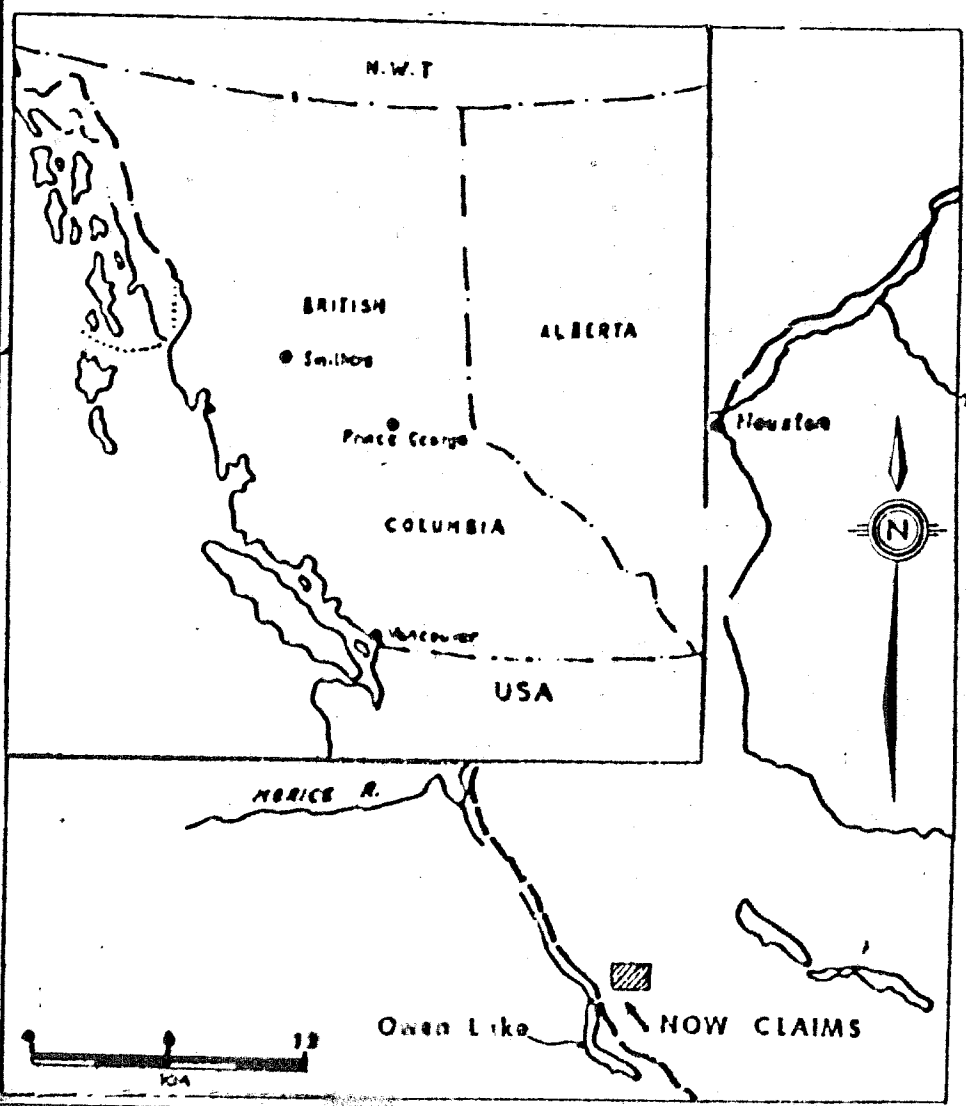
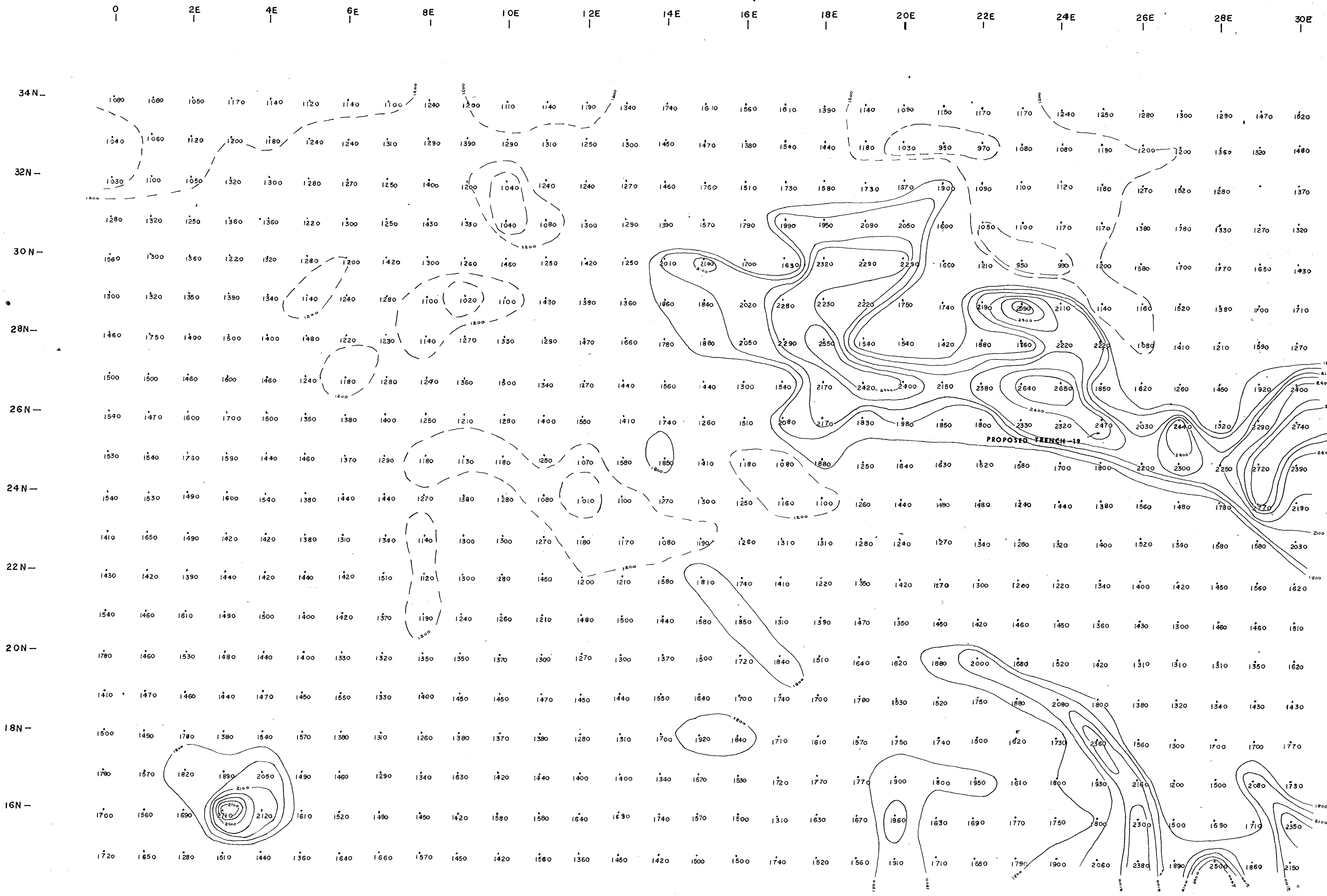
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MECCA MINERALS LTD.
 1102 207 W. HASTINGS ST.
 VANCOUVER B.C. V6B 1H7
 NOW CLAIMS - OWEN LAKE, B.C.

MAGNETOMETER SURVEY
MAP NOW 1
 DATA AND CONTOURS - (Part 1)

DRAWN BY: E. L. I. DATE: DEC. 1981. CHK. BY: [Signature] SCALE: 1 CM = 15 METERS





CONTOURS

CONTOUR INTERVAL: 150 GAMMAS
 1800 GAMMAS AND HIGHER ———
 1200 GAMMAS AND LOWER - - - - -
 INSTRUMENT: SABRE MODEL 22 FLUXGATE MAGNETOMETER

PARAMETERS

2100 GAMMAS ANOMALOUS HIGH THRESHOLD VALUE
 1800 GAMMAS SUB ANOMALOUS HIGH THRESHOLD
 1500 GAMMAS NEAR BACKGROUND VALUE
 1200 GAMMAS SUB ANOMALOUS LOW THRESHOLD VALUE
 900 GAMMAS ANOMALOUS LOW THRESHOLD VALUE
 BACKGROUND CONTOUR OF 2400 GAMMAS NOT DRAWN IN.
 54 000 GAMMAS SUBTRACTED FROM EACH VALUE
 I. e. 3000 READS 27 000 GAMMAS

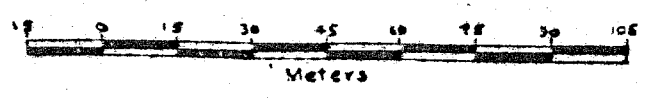
MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
10,012

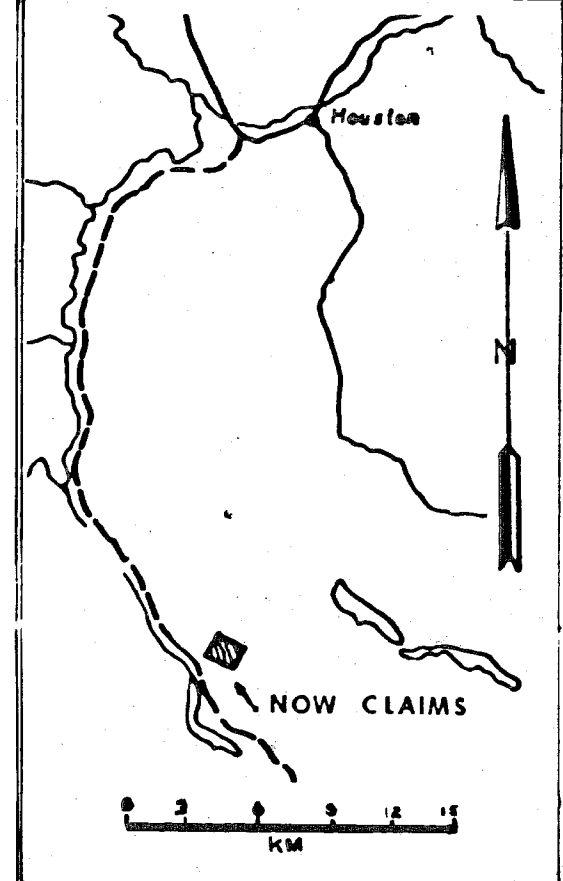
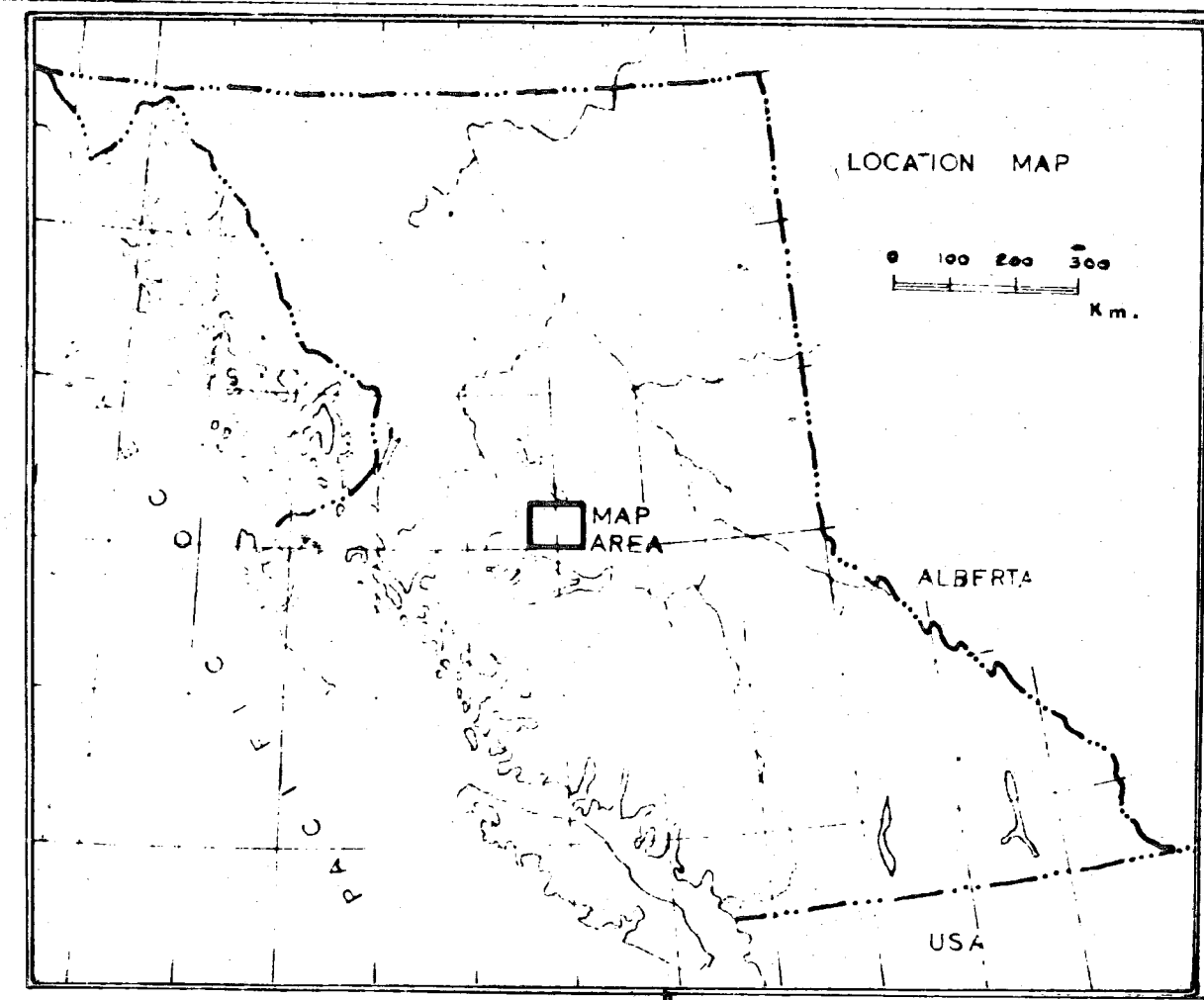
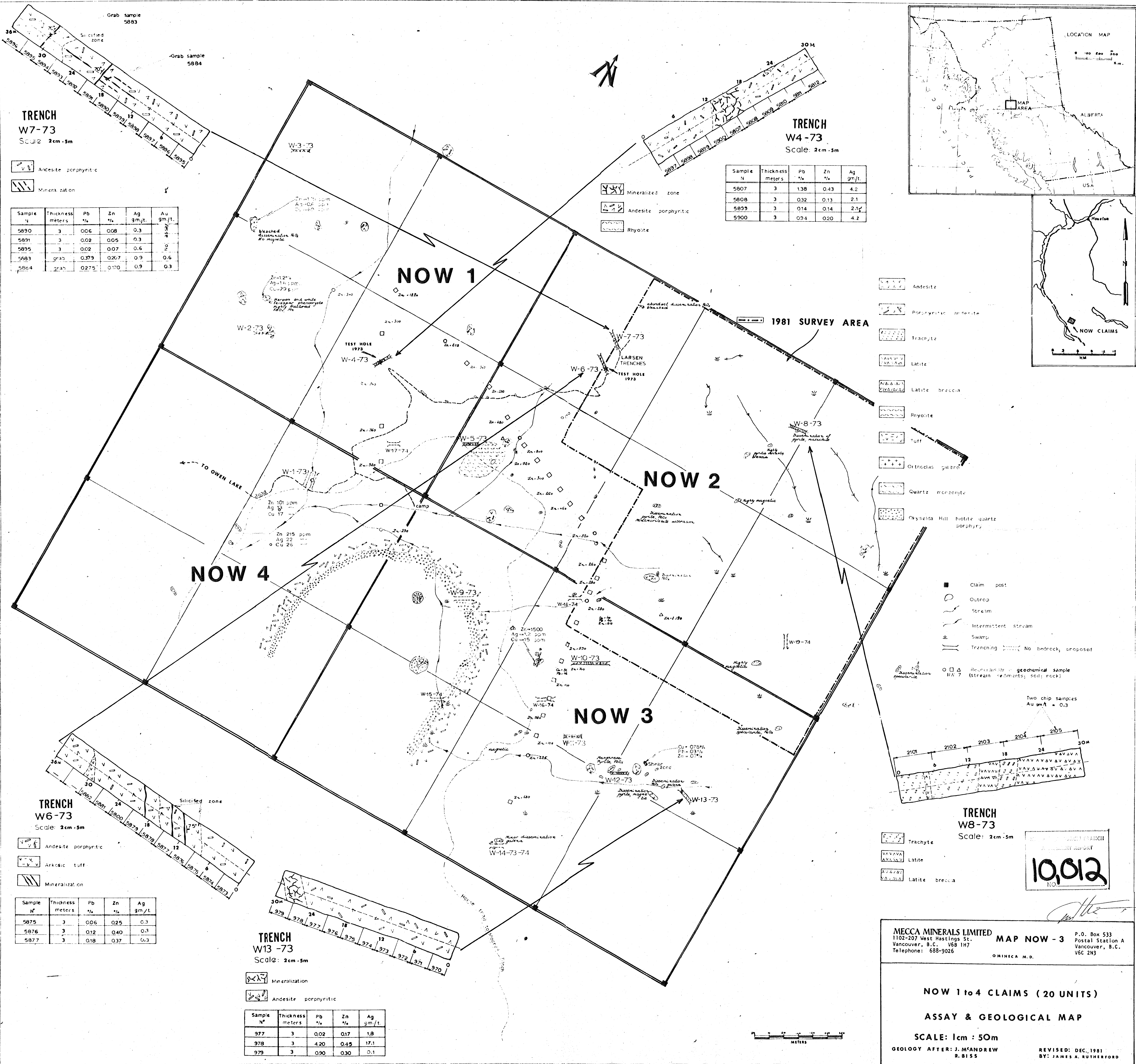
[Signature]

MECCA MINERALS LTD.
 1102 207 W. HASTINGS ST.
 VANCOUVER B.C. V6B 1H7
NOW CLAIMS - OWEN LAKE, B.C.

MAGNETOMETER SURVEY
MAP NOW 2
DATA AND CONTOURS - (Part 2)

DRAWN BY	DATE	CHK. BY	SCALE
E. LI	DEC. 1981	<i>[Signature]</i>	1 CM = 15 METERS





TRENCH W7-73
Scale: 2cm : 5m

- Andesite porphyritic
- Mineralization

Sample #	Thickness meters	Pb %	Zn %	Ag gm/t.	Au gm/t.
5890	3	0.06	0.08	0.3	0.2
5891	3	0.02	0.05	0.3	0.2
5895	3	0.02	0.07	0.6	0.2
5883	grab	0.373	0.207	0.9	0.6
5884	grab	0.275	0.170	0.9	0.3

TRENCH W4-73
Scale: 2cm : 5m

Sample #	Thickness meters	Pb %	Zn %	Ag gm/t.
5807	3	1.38	0.43	4.2
5808	3	0.32	0.13	2.1
5893	3	0.14	0.14	2.1
5900	3	0.94	0.20	4.2

- Mineralized zone
- Andesite porphyritic
- Rhyolite

- Andesite
- Porphyritic andesite
- Trachyte
- Latite
- Latite breccia
- Rhyolite
- Tuff
- Orthoclase gabbro
- Quartz monzonite
- Oxyseida Hill biotite quartz porphyry
- Claim post
- Outcrop
- Stream
- Intermittent stream
- Swamp
- Tranching (No bedrock, proposed)
- Geochemical sample (stream sediments, soil, rock)
- Two chip samples (Au gm/t = 0.3)

TRENCH W6-73
Scale: 2cm : 5m

- Andesite porphyritic
- Arkosic tuff
- Mineralization

Sample #	Thickness meters	Pb %	Zn %	Ag gm/t.
5875	3	0.06	0.25	0.3
5876	3	0.12	0.40	0.3
5877	3	0.18	0.37	0.3

TRENCH W13-73
Scale: 2cm : 5m

- Mineralization
- Andesite porphyritic

Sample #	Thickness meters	Pb %	Zn %	Ag gm/t.
977	3	0.02	0.17	1.8
978	3	4.20	0.45	17.1
979	3	0.90	0.30	0.1

TRENCH W8-73
Scale: 2cm : 5m

- Trachyte
- Latite
- Latite breccia

MECCA MINERALS LIMITED
 GEOLOGICAL RESEARCH
 A CONSULTING REPORT
10,012
 NO.

MECCA MINERALS LIMITED
 1102-207 West Hastings St.
 Vancouver, B.C. V6B 1H7
 Telephone: 688-9026

MAP NOW - 3

P.O. Box 533
 Postal Station A
 Vancouver, B.C.
 V6C 2N3

OMINECA M.D.

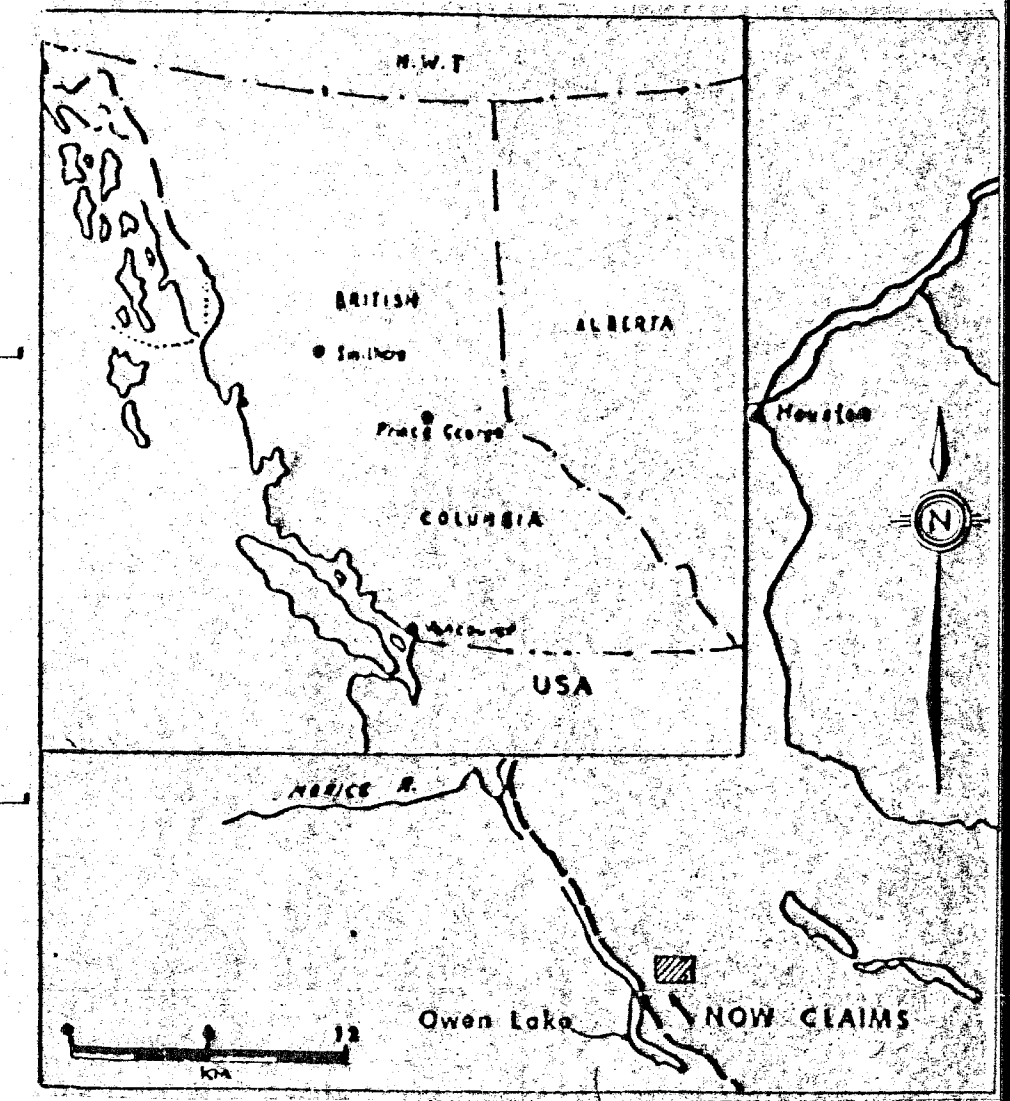
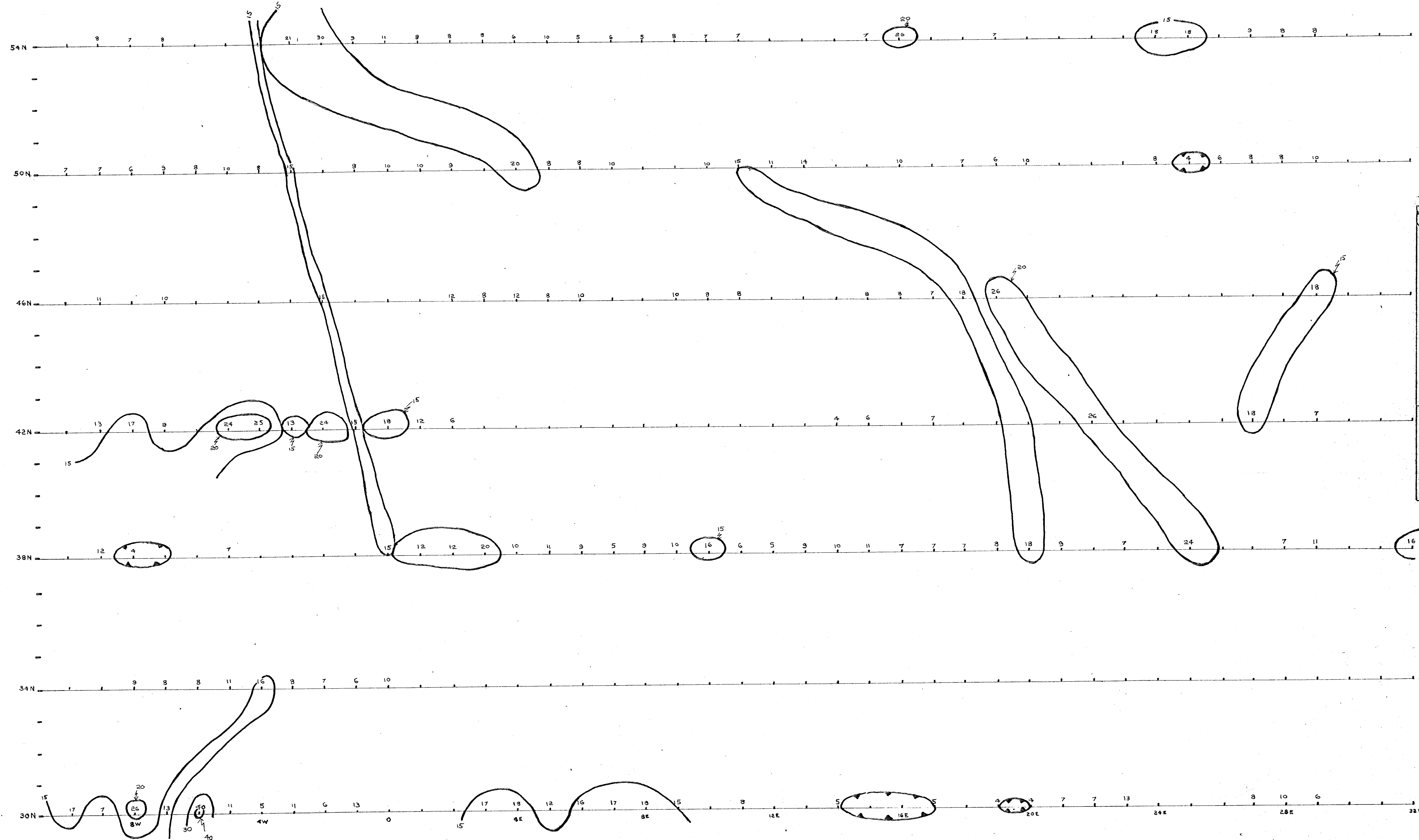
NOW 1 to 4 CLAIMS (20 UNITS)

ASSAY & GEOLOGICAL MAP

SCALE: 1cm : 50m

GEOLOGY AFTER: J. M'ANDREW
R. BISS

REVISED: DEC, 1981
BY: JAMES A. RUTHERFORD



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,012
NO.

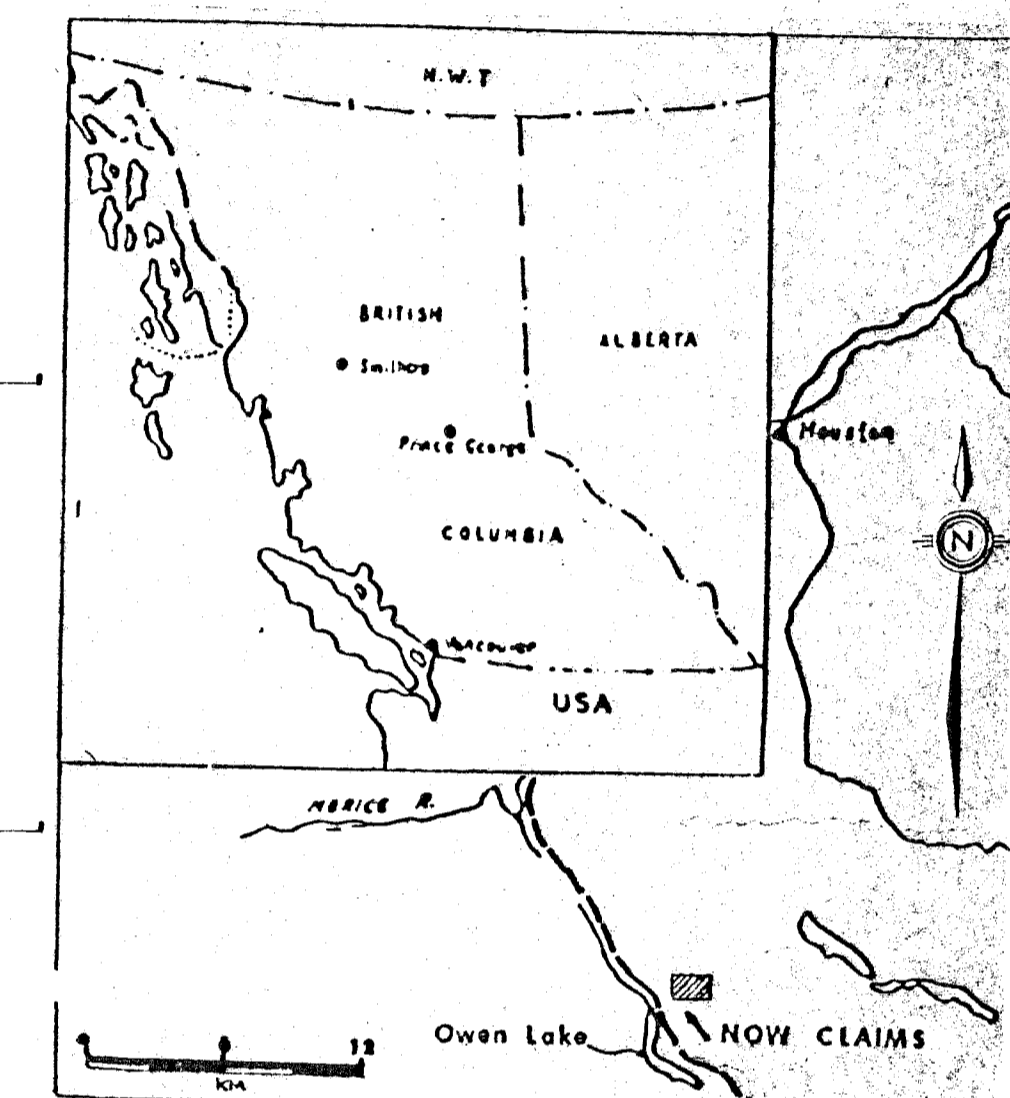
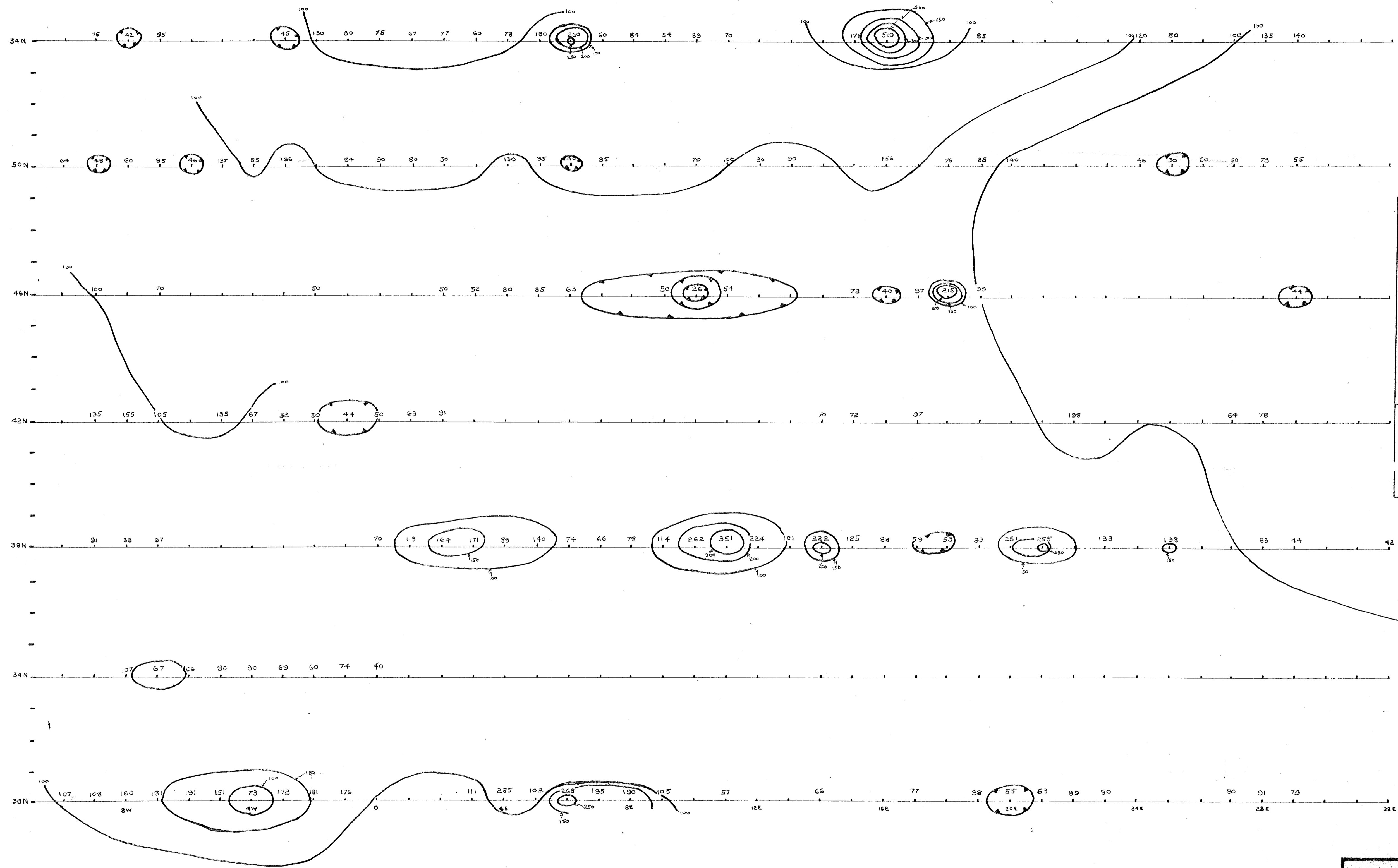
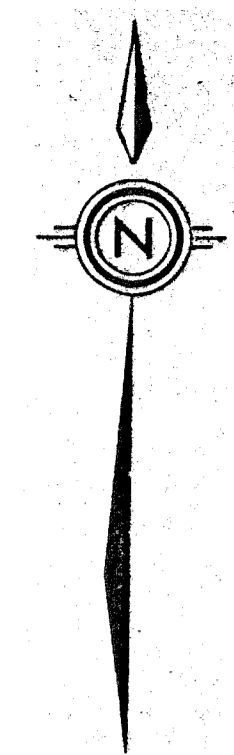
50
GRID STATION - in ppm.
00
00 ppm. CONTOUR



MECCA MINERALS LTD.
1102 207 W. HASTINGS ST.
VANCOUVER B.C. V6B 1H7
NOW CLAIMS - OWEN LAKE, B.C.

GEOCHEMICAL SURVEY
MAP NOW 4
COPPER
DATA AND CONTOURS

DRAWN BY E. LI	DATE DEC., 1981	CHK. BY <i>[Signature]</i>	SCALE: 1 CM = 20 METERS
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MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10012
N

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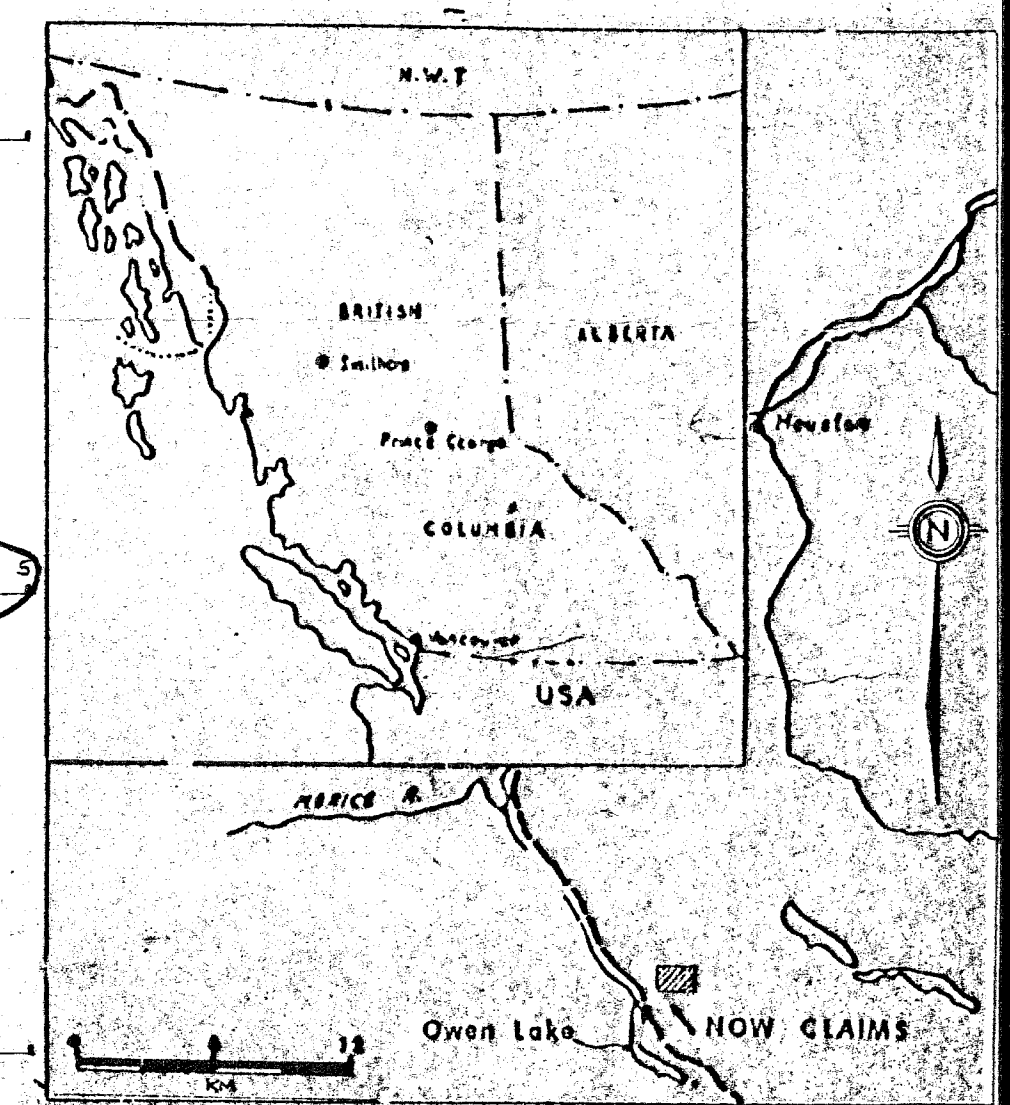
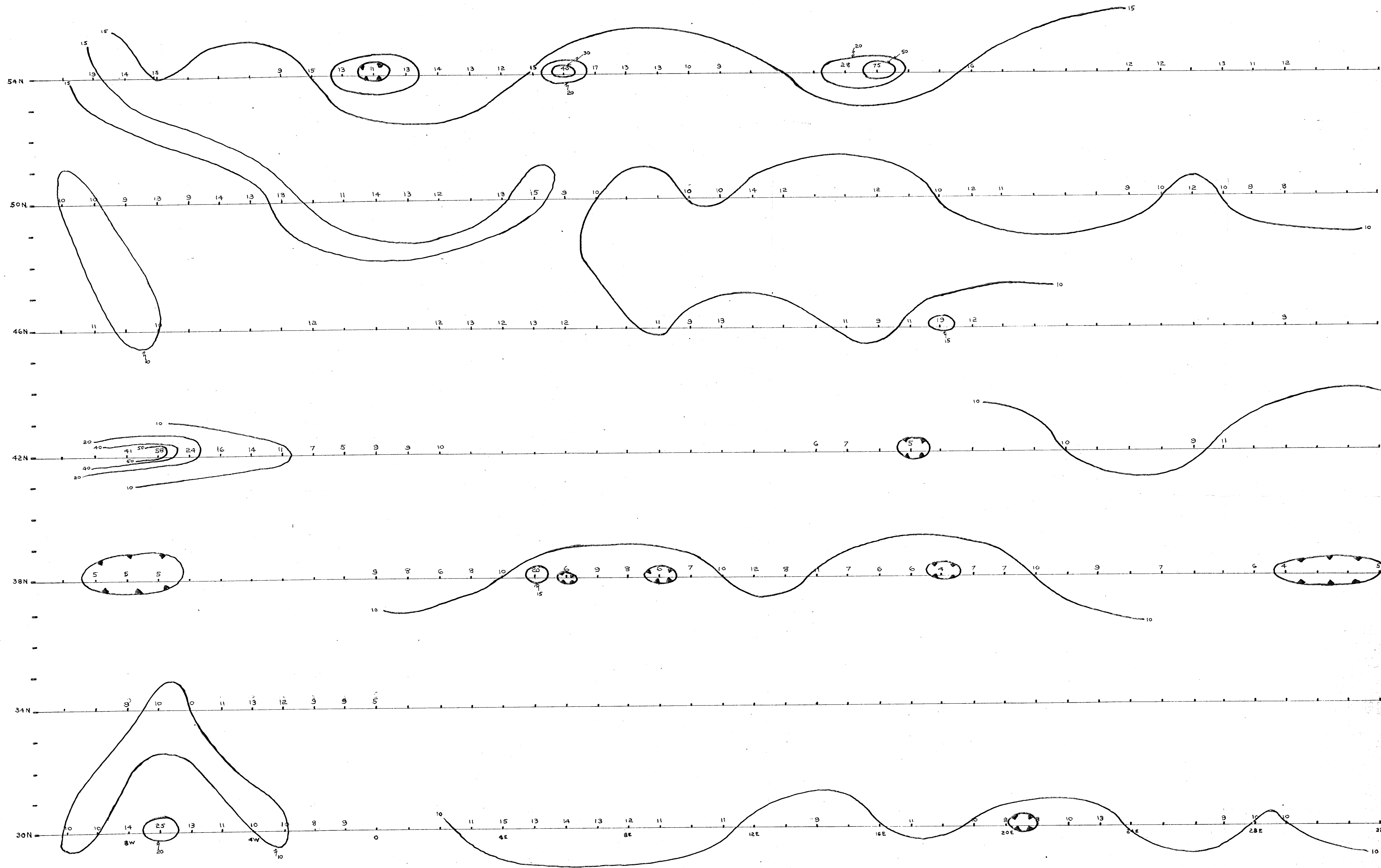
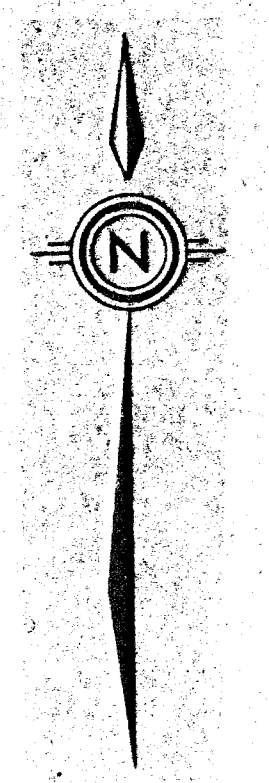
MECCA MINERALS LTD.
1102 207 W. HASTINGS ST.
VANCOUVER B.C. V6B 1H7
NOW CLAIMS - OWEN LAKE, B.C.

GEOCHEMICAL SURVEY
MAP NOW 5
ZINC
DATA AND CONTOURS

DRAWN BY E. L.I.	DATE DEC. 1981	CHK. BY <i>[Signature]</i>	SCALE: 1 CM = 20 METERS
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— 00 — GRID STATION - in p.p.m.
— 00 — 00 p.p.m. CONTOUR





MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10012

GRID STATION - 1 in 0.p.m.
00 p.p.m. CONTOUR.



MECCA MINERALS LTD.
1102, 207 W. HASTINGS ST.
VANCOUVER B.C. V6B 1H7
NOW CLAIMS - OWEN LAKE, B.C.

GEOCHEMICAL SURVEY
MAP NOW 6
LEAD
DATA AND CONTOURS

DRAWN BY E. L.I.	DATE DEC, 1981	CHK. BY <i>[Signature]</i>	SCALE 1 CM = 20 METERS
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