

Magnetometer Report

MULTIPLE MINING DEVELOPMENT LTD.

82E04E

Osoyoos Mining Division

49° 119° S.W.

March - May, 1969

FRANKLIN L. C. PRICE
PROFESSIONAL MINING ENGINEER

318 THE BURRARD BUILDING • VANCOUVER 5, CANADA • TELEPHONE 685-6733 • AREA CODE 604 • CABLE PRICEO VANCOUVER

2027

May 22, 1969

Multiple Mining Development Ltd.,
4316 - 53 Street,
Red Deer, Alberta.

Dear Sir:

At your request, I have completed a magnetometer survey along the southern portion of your claim group, known as the "Osoyoos" group, south of the Richter Pass Highway east of Keremeos. My report on the magnetometer readings are enclosed.

The geological portion of this report is taken from the report of Mr. R.E. Renshaw, and I acknowledge his assistance.

Respectfully submitted,


Franklin Price.

flcp/e
encl.

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2027** MAP

INTRODUCTION:

The Osoyoos group of mineral claims has been a copper prospect for many years. It is reported that several trenches were completed in the early thirties. These are located on the claims now known as "Joe".

A geochemical survey was done in 1967 over a portion of the claims and anomalous copper areas were located. During the summer of 1968, several lines of soil samples were taken and later appraised on an Atomic Absorption Spectrophotometer to check the 1967 reconnaissance programme. The anomalous ground area was confirmed.

This report includes the findings of a magnetometer survey carried out over the southern portion of the claim block.

LOCATION AND ACCESS:

The claims are located 6 miles northwest from Osoyoos, B. C. and 3/4 mile north of the International border. Their approximate geographical position is 49-00 north latitude and 119-35 west longitude.

Access to the claims is from the paved Southern Trans-provincial Highway 3 about 6 miles north from Osoyoos and thence by good gravel, all-weather logging and ranch roads which lead to all parts of the claims.

Little or no money will be required to build access roads through the claims.

Topography is not extreme. It ranges from 900 feet at Osoyoos Lake some 6 miles to the east to a maximum of 4500 feet on the higher portions of the claims. The average elevation is about 3500 feet. The hillsides are gentle rolling, modified by glaciation, and have a few gullies formed by arid erosional conditions. A thin mantle of glacial debris covers almost 90% of the claims and outcrops are limited in extent, mainly on the higher portions of the claims.

TIMBER, WATER AND POWER:

Timber

Timber is relatively scarce on the claims and most of the commercial fir and pine has been logged. However, sawn timbers and lumber can be purchased locally from numerous sawmills in the vicinity.

Water

No permanent flowing streams are present on the claims. However, there are numerous small lakes which can supply ample water for diamond drilling, and domestic use.

Power

No hydro-electric power source is available on the claims. The closest source is at Osoyoos, B.C. At least 6 miles of transmission line would be required to connect with that source.

PROPERTY:

This report covers the following mineral claims, all of which are located in the Osoyoos Mining Division of British Columbia.

<u>Claim</u>	<u>Tag Numbers</u>	<u>Record Numbers</u>	<u>Expiration Date</u>
Pen 1 - 24	686823-686846	14985-15008	May 25, 1969
Pal 1 - 12	686879-686890	15009-15020	" "
Axe 1 - 12	704317-704328	15021-15032	" "
Hen 1 - 16	686847-686862	15033-15048	" "
Old 1 - 16	686863-686878	15049-15064	" "
Joe 1 - 16	704301-704316	15065-15080	" "

The records of the mining office in Penticton, B.C. have not been checked, as we understand that the company has retained counsel to assure the claims are in proper legal standing at this date.

GEOLOGY:

The area has been partially mapped by the Geological Survey of Canada, , 38 Daly, "North American Cordillera, 49th parallel, 1912", and by a Preliminary Map by Little, Kettle River, West Half. In addition, an airborne magnetometer survey of the 49th parallel has been flown by the Geological Survey of Canada.

In general, the northeast and southwest section of the claims is underlain by granitic rocks of the Nelson Intrusives of Jura-Cretaceous age. The central portion is underlain by quartzite, phillite, argillite, and greenstone of the Kobau group of Carboniferous age.

The following formations are present:

Mesozoic

Jura-Cretaceous

Nelson Intrusives

Quartz diorite, granodiorite

Syenite, Nepheline Syenite

Paleozoic

Carboniferous

Kobau Group

Quartzite, phillite

Argillite, Greenstone

The Kobau group is a highly altered series of sediments and greenstones which form a roof pendant between two stocks or bosses of granitic rocks.

Folding and metamorphism has obliterated structures, but

in a general way they appear to have a northwesterly strike and a southwesterly dip.

Alteration in the quartzite and phillite consists largely of recrystallization of the silica along with the introduction of some carbonate.

Alteration in the argillite consists mainly of minor silicification and some carbonate.

In general the quartzite, phillite, and argillite are buff weathering and highly fractured.

The greenstones show the most alteration. Chlorite, epidote, carbonate, and feldspar are common. In some of the bands enough feldspar has been formed to give a porphyritic texture to the rock. Other bands merely exhibit a recrystallization to form a medium grained dioritic texture.

The quartz diorite is commonly light coloured, medium grained and rich in feldspar and plagioclase. Minor quartz, biotite, and hornblende form the balance of the minerals. A few narrow bands of biotite gneiss are present parallel to the regional structure of the area.

The syenite is a light coloured, medium grained rock rich in feldspar and a fairly high ferromagnesian content. Certain phases of the syenite grade into nepheline syenite which may contain as high as

20% nepheline, 15% to 20% ferromagnesian minerals as pyroxene and biotite and the balance orthoclase and microcline.

Low grade copper mineralization has been found in all rock types except the syenite and nepheline syenite. Malachite staining has been found in three old pits on Joe 5 and 7 associated with regional northwesterly shearing in the sediments. No apparent walls are present. A typical assay from these sheared and altered sediments is: silver, 0.50 oz/ton; copper, 0.373% and 0.04% molybdenum.

Fine grained chalcocite has been found in the quartz diorite in the northeastern and southwestern section of the claims.

A few almost barren quartz veins of the tension type are present in the quartz diorite and also in the sediments.

The general type of mineralization is typical of low grade porphyry copper deposits prevalent in, or associated with Jurassic-Cretaceous intrusions and Carboniferous or Triassic rocks of British Columbia.

MAGNETOMETER SURVEY:

A magnetometer survey was made of the southern portion of the claim block. The base line and some crosslines had been made in 1967. These lines were used and then additional lines were cut and mapped on the "Axe" group of 12 claims and along the "Joe" group. The grid that was used for this survey was done from crosslines running east-west every 400 feet. Magnetometer readings were taken at 100 foot stations along these lines.

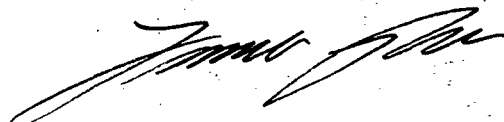
The machine used was a radar magnetometer and the work was carried out under my supervision. The instrument man in charge was Mr. Claus Richter, who has been doing field work of this type for three years. Calculations were made by Richter and a typical sheet of the office work is attached.

The final results of each station were later charted on a map that has been made part of this report. Readings taken have been calculated and reported in gammas.

CERTIFICATE OF QUALIFICATION

I, Franklin Langworthy Carr Price, do hereby certify that:

1. I am a practising mining engineer with offices at 318 Burrard Building, 1030 West Georgia Street, Vancouver 5, British Columbia.
2. I am a graduate of the New Mexico School of Mines, and have been granted the degree of Bachelor of Science in Mining Engineering.
3. I have been practising my profession as a Mining Engineer for 20 years.
4. I am a member of the Association of Professional Engineers of British Columbia, Certificate Number 4576.
5. I hold licence number 0209800 in the State of Washington as a Professional Engineer.
6. I personally visited the property many times last year, the last time being on April 26, 1969.
7. I have no interest, direct or indirect, in the properties or securities of Multiple Mining Development Ltd.



Vancouver, B.C.
May 22, 1969

MAGNETOMETER CALCULATION SHEET

C - 1835

PROPERTY: _____

DATE: April 12

LINE: 12-5-E

29/min

ELEVATION -

33

STATION	READ	VALUE	TIME	DIUR	V + D	VI - O	REMARKS	FEET
Base A	1138	30270.8	0	—	—	—		29.50
Base B	1146	30483.6	28	—	—	28649		3075
12-5-32	1146	30483.6	30	4	30488	28653		3070
31	1152	30643.2	35	8	30651	28816		3060
30	1154	30695.4	34	12	30708	28873		3040
-29	1147	30510.2	35	14	30524	28689		3035
-28	1146	30483.6	36	16	30499	28664		3030
-27	1145	30457.0	38	20	30477	28642		3025
-26	1150	30590.0	40	24	30614	28779		3030
-25	1145	30457.0	41	26	30483	28648		3040
-24	1155	30723.0	43	30	30733	28918		3045
-23	1151	30616.6	45	34	30651	28816		3055
22	1149	30563.4	47	38	30601	28766		3060
21	1148	30536.8	49	42	30579	28744		3065
20	1141	30350.6	51	46	30397	28562		3075
19	1146	30483.6	53	50	30534	28699		3090
18	1147	30510.2	55	54	30564	28729		3110
17	1149	30563.4	57	58	30621	28786		3150
16	1126	29951.6	60	64	30016	28181		3180
15	1169	31095.4	61	66	31161	29326		3215
14	1152	30643.2	64	72	30715	28880		3205
13	1157	30776.2	67	78	30844	29009		3245
12	1157	30776.2	69	82	30858	29023		3285
11	1150	30590.0	71	86	30676	28841		3295
10	1146	30483.6	74	92	30576	28741		3320
9	1151	30616.6	76	96	30713	28878		3335
8	1178	31334.8	79	102	31433	29598		3335
7	1160	31015.6	81	106	31122	29287		3335
6	1171	31148.6	83	120	31269	29434		3335
5	1189	31627.4	85	124	31451	29916		3345
4	1153	31467.8	87	128	31596	29761		3350
3	1160	30856.0	90	134	30990	29155		3335
2	1157	30776.2	93	140	30916	29081		3360
1	1157	30776.2	96	146	30922	29087		3370

2027

FRANKLIN L. C. PRICE
PROFESSIONAL MINING ENGINEER

318 THE BURRARD BUILDING • VANCOUVER 5, CANADA • TELEPHONE 685-6733 • AREA CODE 604 • CABLE PRICEO VANCOUVER

September 18, 1969

Multiple Mining Development Ltd.,
4316 - 53rd Street,
Red Deer, Alberta.

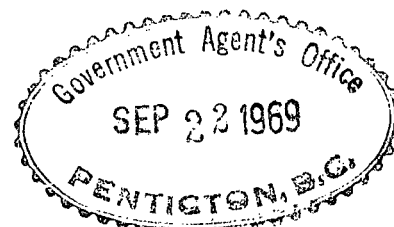
Dear Sir:

At your request, we are pleased to further advise you regarding the interpretation of the magnetometer work on your claims near Osoyoos, as originally outlined in our letter of June 10, 1969. Please consider this an addendum to our report of May 22, 1969.

The magnetometer survey work completed on the southern portion of your claim group indicates that the magnetics are quiet, with no responses of any mineral interest. The purpose of the magnetometer survey was to map and measure the vertical variation of the ground surface to the nearest 50 gamma reading; and from that to locate any faults, shears, rock contacts, or other favourable zones that would or could be mineralized with copper bearing minerals. Low grade copper mineralization has been located and sampled on the surface. This geophysical method could assist you in future planning of phase two of your exploration. The results were disappointing.

The magnetics in this area are somewhat quiet, with no apparent highs and no apparent lows. Also, there are no regional breaks through the area which would indicate a change of rock type or a faulted zone. The few interesting spots are the lows more so than the highs. The isolated highs at crossline 16 west and 88 south and also the high at 4 west and 28 south are made up of one reading highs. These cannot be classified as anything anomalous.

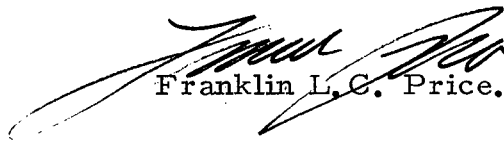
The lows seem to be more consistent and centres near the base line at 48 south and carry across for 7 stations and with a few interpretations in the low 3000 gammas extend east as far as 24 E and south into the 52 S line near the base. The low does not show up on the 40 or 44 line, but again comes in on the 36 line at 8 W, giving a N 25 W trend, which is correct for the area. This low is interesting, but it is difficult to interpret because of its break on the 44 line. It is my thinking that more information can be derived from geochemistry work than from magnetometer work.



Multiple Mining Development Ltd.

September 18, 1969

Yours very truly,


Franklin L. C. Price.

flcp/e

LINE 20 W

POST 1

LINE 44 S

D.D.H. No. 1

PEN 16

POST 2

PEN 18

2027

Frank Price

*Assess. Report # 2027
Map # 4*

FRANKLIN PRICE
PROFESSIONAL MINING ENGINEER

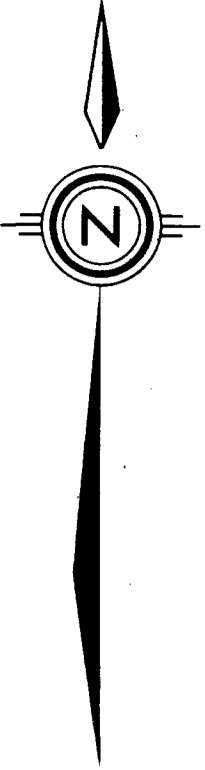
MULTIPLE MINING LTD.

Red Deer, Alberta

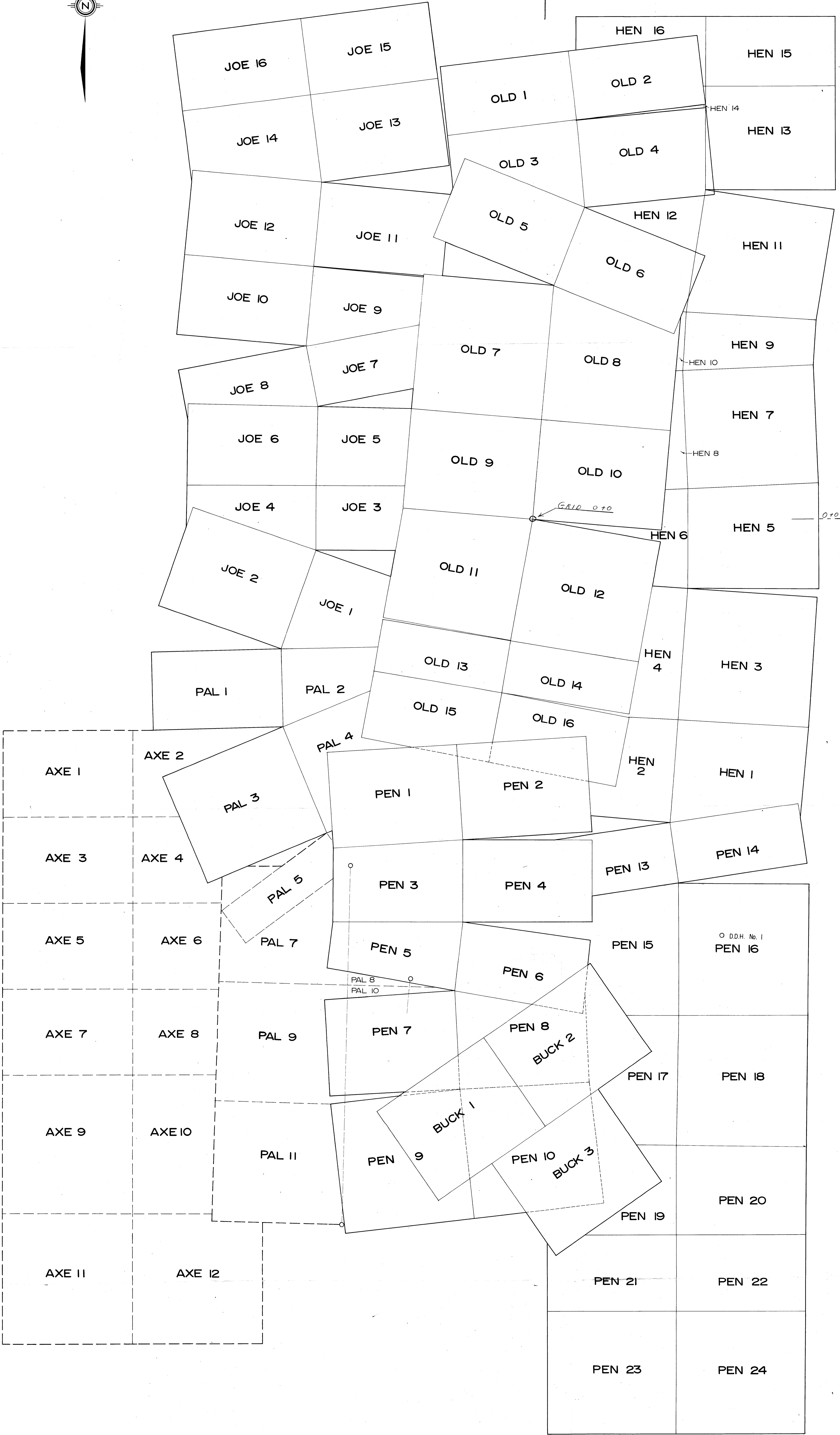
DRILL LOCATION
OSOYOOS PROJECT

SCALE: 1" = 400 Feet

JUNE, 1969



0+0 E



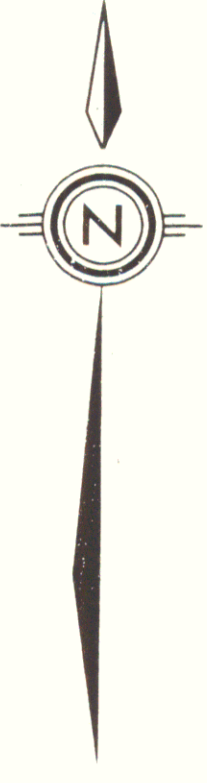
2027

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2027 MAP #1

FRANKLIN PRICE
PROFESSIONAL MINING ENGINEER
MULTIPLE MINING LTD.
RED DEER, ALBERTA
OSOYOOS PROJECT
CLAIM MAP

SCALE
0 100 200 300 400 500 FEET

--- DEPICTS CLAIMS WHERE CLAIM POSTS ARE NOT FOUND.



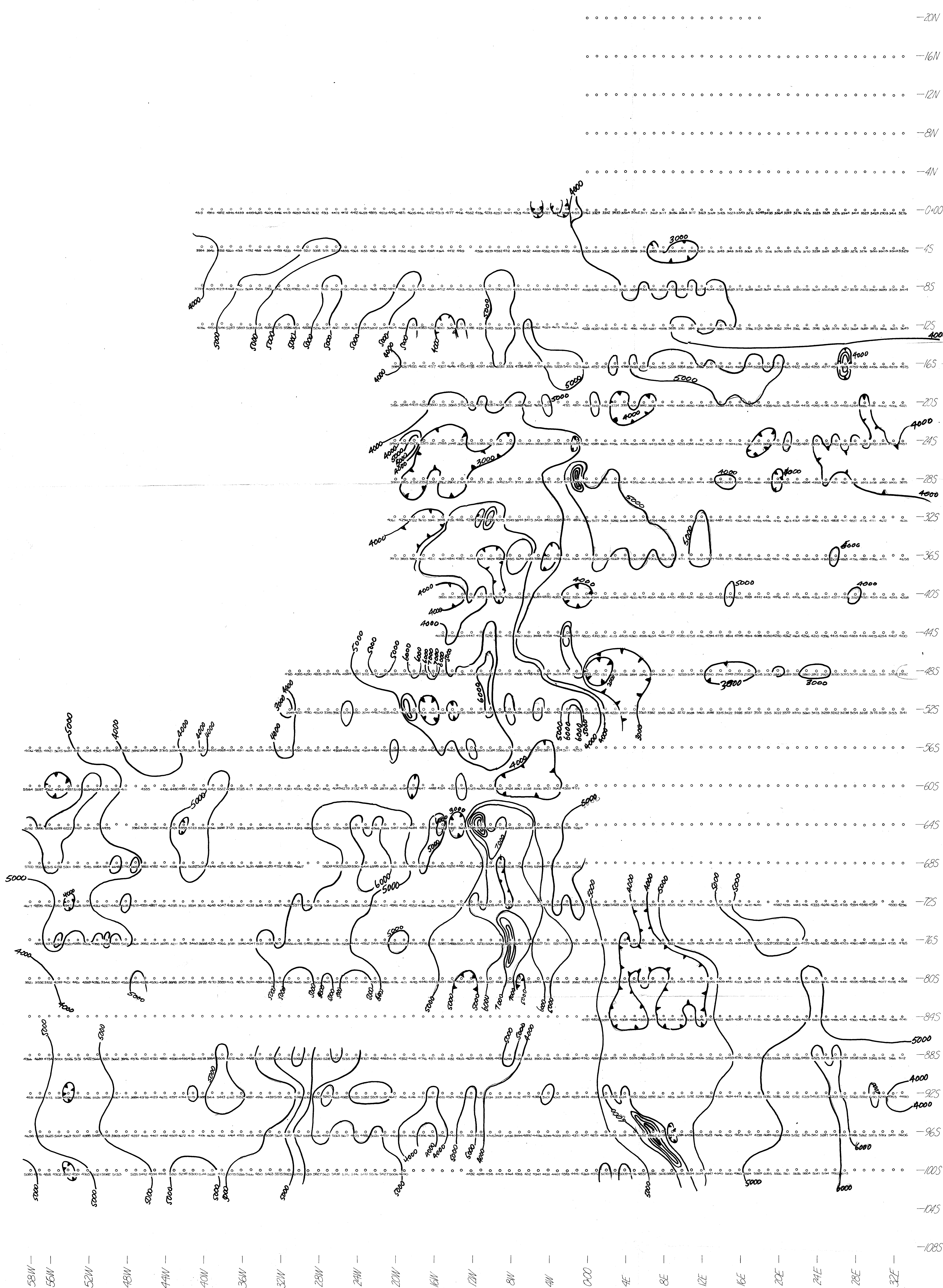
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2027 MAP #2

- Specially biased lines For future accessibility
- Newly cut grid lines
- Old grid lines

Field Work completed prior to May 25, 1969
R. H. H. H.

2027

FRANKLIN PRICE
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MULTIPLE MINING LTD.
RED DEER, ALBERTA
OSOYOOS PROJECT
MAGNETOMETER SURVEY



58W — 56W — 52W — 48W — 44W — 40W — 36W — 32W — 28W — 24W — 20W — 16W — 12W — 8W — 4W — 000 — 4E — 8E — 12E — 16E — 20E — 24E — 28E — 32E

2027

LEGEND
C.I. = 1000 gammas.

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MULTIPLE MINING LTD.
RED DEER, ALBERTA
OSOYOOS PROJECT
MAGNETOMETER SURVEY

