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SELCO INC.

GEOPHYSICAL REPORT

4

SASK 38 claim, Grid 78-13, Salmon Lake,
Caribou Mining Division, B. C.

Lat. 54°53'N, Long. 123°49'W, N.T.S. 93J/13W

AUTHOR: Glen E. White, P. Eng., Geophysicist

DATE OF WORK: October 3 - 10, 1982

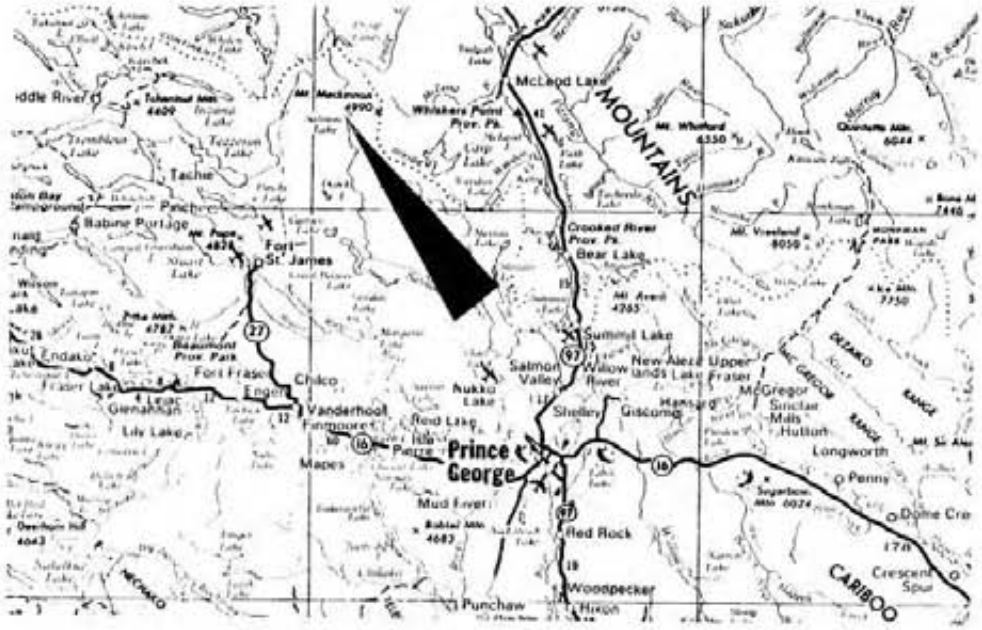
DATE OF REPORT: December 3, 1982

Owner: Quichon Explorco Limited

Operator: Selco Inc.

C O N T E N T S

ILLUSTRATIONS



SELCO INC.

SASK 38 CLAIM

LOCATION AND CLAIMS MAP

N.T.S. 93J/13

Glen E. White
geophysical consulting
services ltd

FIG. 1

INTRODUCTION

This report describes Horizontal Loop Max-Min II electromagnetometer and magnetometer surveys which were conducted during the dates October 3 - 10, 1982 on behalf of Selco Inc. by Glen E. White Geophysical Consulting & Services Ltd.

Glen E. White Geophysical Consulting & Services Ltd. was contracted to Selco Inc. to locate a series of input conductors on the ground, and detail them with a proton magnetometer and a Max-Min II electromagnetometer survey.

PROPERTY

The mineral claim covered by this survey is the SASK 38 claim comprising 4 units as illustrated on Figure 1. This claim was recorded on October 29, 1982 in Vancouver, receipt number 181956E.

LOCATION AND ACCESS

The survey area is located in the Carp Provincial Forest on the Nechako plateau some 56 km northeast of Fort St. James. The area is drained by the Salmon River. Four by four forest access roads traverse the general area, however, specific access is by helicopter. The Salmon Lake grid is located at Latitude 54°53'N, Longitude 123°49'W, N.T.S. 93 J/13.

GENERAL GEOLOGY

The general geology of the region is considered to be a series of upper Triassic andesite and basaltic flows along with the sedimentary equivalents. Lower Jurassic alkaline and calc-alkaline intrusives are present. Most of the area is covered with glacial till, gravel, sand, clay and silt. Bedrock exposures are sparce and less extensive than suggested by regional geology maps.

SURVEY GRID

The survey grid is located immediately north of Salmon Lake. The baseline is orientated in a north 45° east direction through a cluster of airborne input anomalies. The survey lines are spaced 100 m apart along the lines and numbered at 25 m intervals. 10.7 km of survey grid was established.

PROTON PRECESSION MAGNETOMETER SURVEY

The magnetometer survey was carried out utilizing two GSM-8 proton precession magnetometers. One of these was operated in conjunction with a CMG MR-10 base magnetometer recorder to allow diurnal and micropulsation variation removal. Operator precautions of demagnetization and consistancy were observed and field clock to base magnetometer timing skew was maintained within one second per day. Corrected, unfiltered data are plotted on each of the base maps.

MAX-MIN II SURVEY

The Max-Min II horizontal loop system was used for this survey. The system was used in the Max mode where the transmitter coil plane and receiver coil plane are co-planar and parallel to the terrain. Separation between the transmitter and receivers was 50 meters and the monitoring frequency was 1777 Hz and 444 Hz.

In-phase and quadrature voltage measurements are induced in the receiver relative to like quantities induced in a reference coil. The reference voltage and the receiver voltage are compared in a bridge or ratiometer circuit and the output is calibrated to read in percent of normal field. Thus, a zero reading indicates no conductors present.

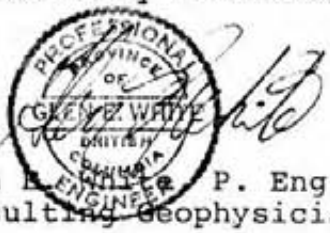
DISCUSSION OF RESULTS

Figure 2 outlines the horizontal loop Max-Min II data which was obtained at two frequencies, 1777 Hz and 444 Hz. The original input data detected a scattered cluster of six channel responses. The ground survey has detected two good conductors but at a depth of 100 to 120 m. The response at 1200N - 300W shows a slight positive inflection suggesting a deep, wide conductor. Lines 100N and 200N also show a deeply buried wide conductor which responds in both the high and low frequencies. The irregular positive responses suggest a variable clay content to the overburden. Higher frequency responses were noted in the northern corner of the grid which may continue southwestward just off of the survey grid. However, an interesting response was detected on lines 900N and 1000N at 475W. This response reflects a shallow, good conductor which appears to be plunging southwestward. Moreover, this anomaly coincides directly with a strong magnetic dipole as shown on Figure 3. The total field magnetic intensity map shows a general background of some 3000 gammas with variations of plus or minus 300 gammas typical of underlying volcanic rocks. The dipole effect on lines 700N and 900N lie along the possibly lithologically caused conductor; thus, a more high frequency response may possibly be obscured. A slight inphase ripple is noted at the dipole anomaly on line 100N.

CONCLUSION AND RECOMMENDATION

A program of horizontal loop surveying to outline several airborne detected input conductors was undertaken by Glen E. White Geophysical Consulting & Services Ltd. on behalf of Selco Inc. This survey was conducted on a grid near Salmon Lake. Two deep, wide, good conductors were detected which could cause a strong input response. These are thought to be lithologic. A smaller high frequency response was detected on lines 900N and 1000N at 475W which is flanking an interesting dipole magnetic intensity response. This anomaly appears to be plunging southwestward. It is recommended that this anomaly be further investigated.

Respectfully submitted,

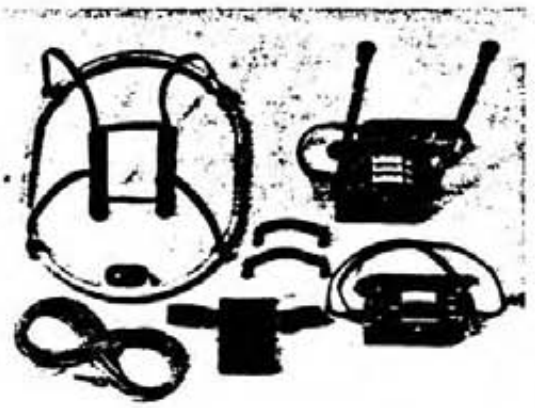


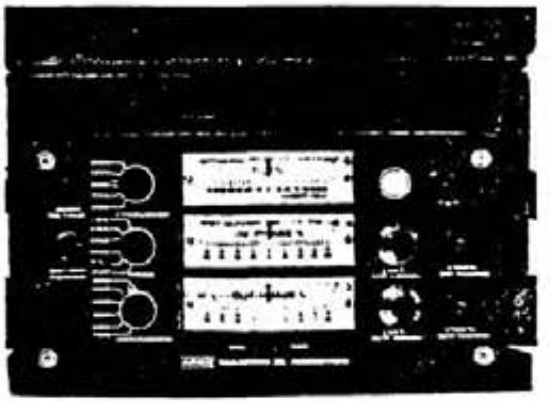
Glen E. White, P. Eng.
Consulting Geophysicist

GSM-8 PROTON PRECESSION MAGNETOMETER

SPECIFICATIONS

RESOLUTION:	1 gamma
ACCURACY:	±1 gamma over operating range
RANGE:	20,000-100,000 gamma in 23 overlapping steps
GRADIENT TOLERANCE:	Up to 5000 gamma/metre
OPERATING MODES:	MANUAL PUSHBUTTON, new reading every 1.85 sec., display active between readings
	CYCLING, pushbutton initiated, 1.85 sec. period
	SELFTEST, pushbutton controlled, 7 sec. period
OUTPUT:	VISUAL: 5 digit 1 cm (0.4") high Liquid Crystal Display, visible in any ambient light
	DIGITAL: Multiplied precession frequency and gating pulse
	ANALOG: Optional 0-99 or 0-999 gamma
EXTERNAL TRIGGER:	Permits externally triggered operation with periods longer than 1.85 sec. (optional minimum period 0.9 sec.)
POWER REQUIREMENTS:	12V 0.7A peak, 5mA standby
POWER SOURCE:	INTERNAL: 12V 0.75Ah NiCd rechargeable battery 3,000 readings per full charge
	EXTERNAL: 12-32V
BATTERY CHARGER:	Input: 110/220V 50/60Hz; output: 14V 75mA DC
OPERATING TEMPATURE:	-35 to +55C
DIMENSIONS:	CONSOLE: 15x8x15cm (6x3¼x6")
	SENSOR: 14x7cm dia (5½x3" dia)
	STAFF: 175cm (70") extended, 53cm (21") collapsed
WEIGHT:	2.7kg (6 lb) per standard complete with batteries





SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555 Hz.

Modes of Operation:
- MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.
- MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.
- V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

Coil Separations: 25, 50, 100, 150, 200 & 250m (MMB) or 100, 200, 300, 400, 600 and 800 ft. (MMIF).
Coil separations in V.L. mode not restricted to fixed values.

Parameters Read:
- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in V.L. mode.

Readouts:
- Automatic, direct readout on 90 mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90 mm edgewise meters in V.L. mode.

Scale Ranges:
NOW ALSO ±4% QUADRATURE FULL SCALE
- In-Phase: ±20%, ±100% by push-button switch.
- Quadrature: ±20%, ±100% by push-button switch.
- Tilt: ±75% slope.
- Null (V.L.): Sensitivity adjustable by separation switch.

Readability: In-Phase and Quadrature: 0.25% to 0.5% ; Tilt: 1%.

Repeatability: ±0.25% to ±1% normally, depending on conditions, frequencies and coil separation used.

Transmitter Outputs:
- 222 Hz : 220 Am²
- 444 Hz : 200 Am²
- 888 Hz : 120 Am²
- 1777 Hz : 60 Am²
- 3555 Hz : 30 Am²

Receiver Batteries: 9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

Transmitter Batteries: 12V 8 Ah Gel-type rechargeable battery. (Charger supplied).

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warning lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F).

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weights: Typically 80kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO Telex: 06-966775 APEXPARA MKHM

NOTE OUR NEW TELEX NUMBER:
06-966775 APEXPARA MKHM

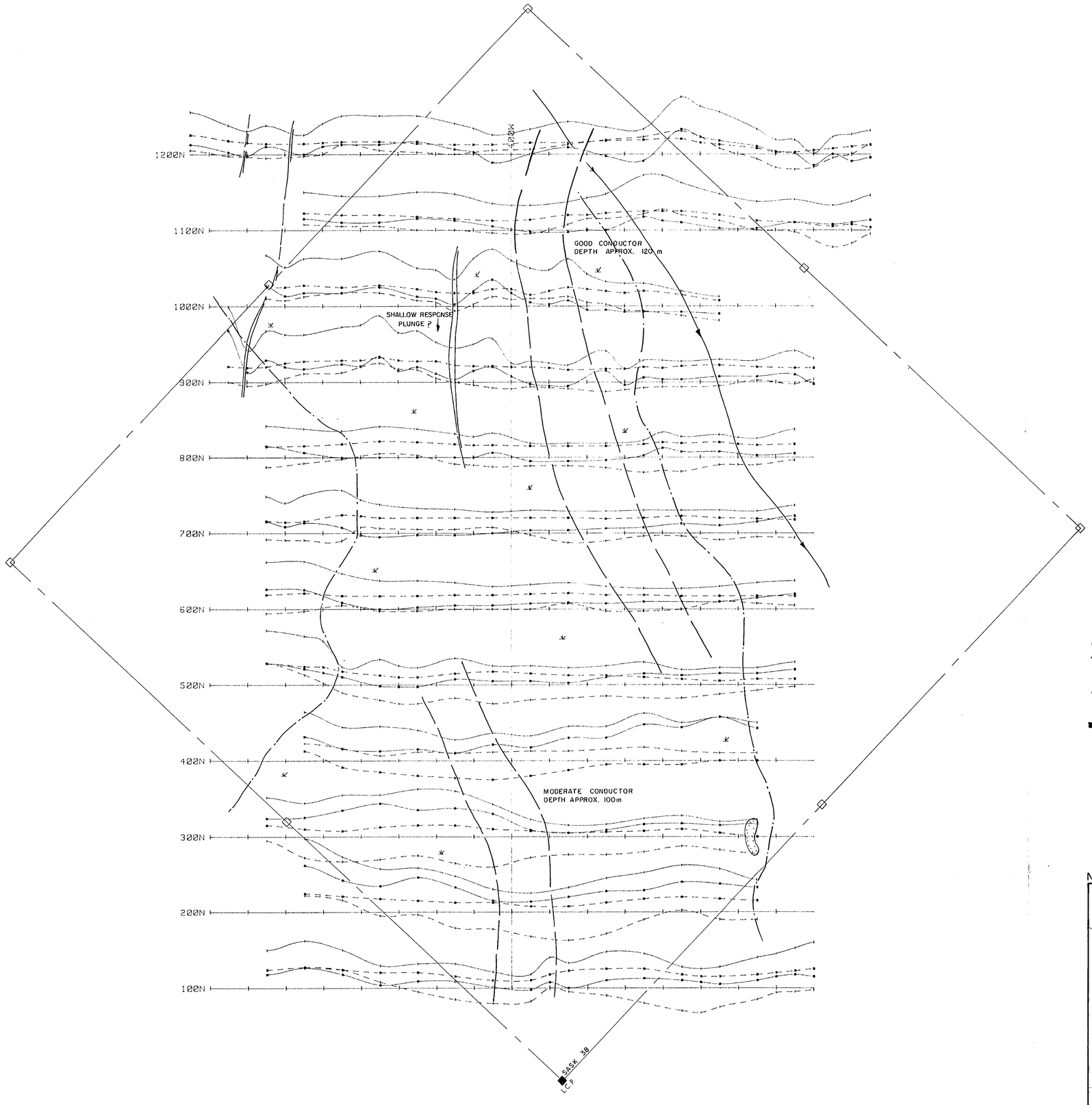
STATEMENT OF QUALIFICATIONS

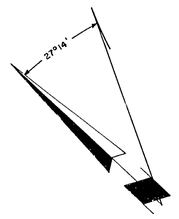
NAME:	WHITE, Glen E., P.Eng.
PROFESSION:	Geophysicist
EDUCATION:	B.Sc. Geophysicist - Geology University of British Columbia.
PROFESSIONAL ASSOCIATIONS:	Registered Professional Engineer, Province of British Columbia.
	Associate member of Society of Exploration Geophysicists.
	Past President of B.C. Society of Mining Geophysicists.
EXPERIENCE:	Pre-Graduate experience in Geology - Geochemistry - Geophysics with Anaconda American Brass.
	Two years Mining Geophysicist with Sulmac Exploration Ltd. and Airborne Geophysics with Spartan Air Services Ltd.
	One year Mining Geophysicist and Technical Sales Manager in the Pacific north-west for W.P. McGill and Associates.
	Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions with Geo-X Surveys Ltd.
	Two years Chief Geophysicist Tri-Con Exploration Surveys Ltd.
	Twelve years Consulting Geophysicist.
	Active experience in all Geologic provinces of Canada.

COST BREAKDOWN

Personnel	Date	Wages	Total
M. McDermott	Oct.3-10/82	$230/day	$1840.00
M. Kilby	"	180/day	1440.00
I. Clark	"	160/day	1280.00
S. Thompson	"	160/day	1280.00

Meals and accomodations	960.00
Instruments	480.00
Vehicle expenses	200.00
Interpretation and reports	850.00
Total	$8330.00

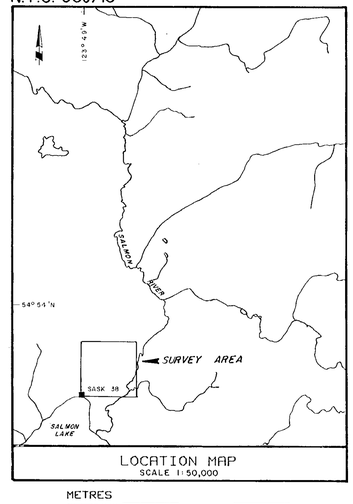




GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,112

N.T.S. 93J/13



LOCATION MAP
SCALE 1:50,000

METRES
0 50 100 150 200

0
10
20
30
40
50
60
SCALE

KEY

- Inphase Component, 1777 Hz, Solid Line
- Quadrature Component, 1777 Hz, Dashed Line
- Inphase Component, 444 Hz, Solid Line
- Quadrature Component, 444 Hz, Dashed Line
- Topographic Corrections Applied
- Conductor axis:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
GLEN E. WHITE

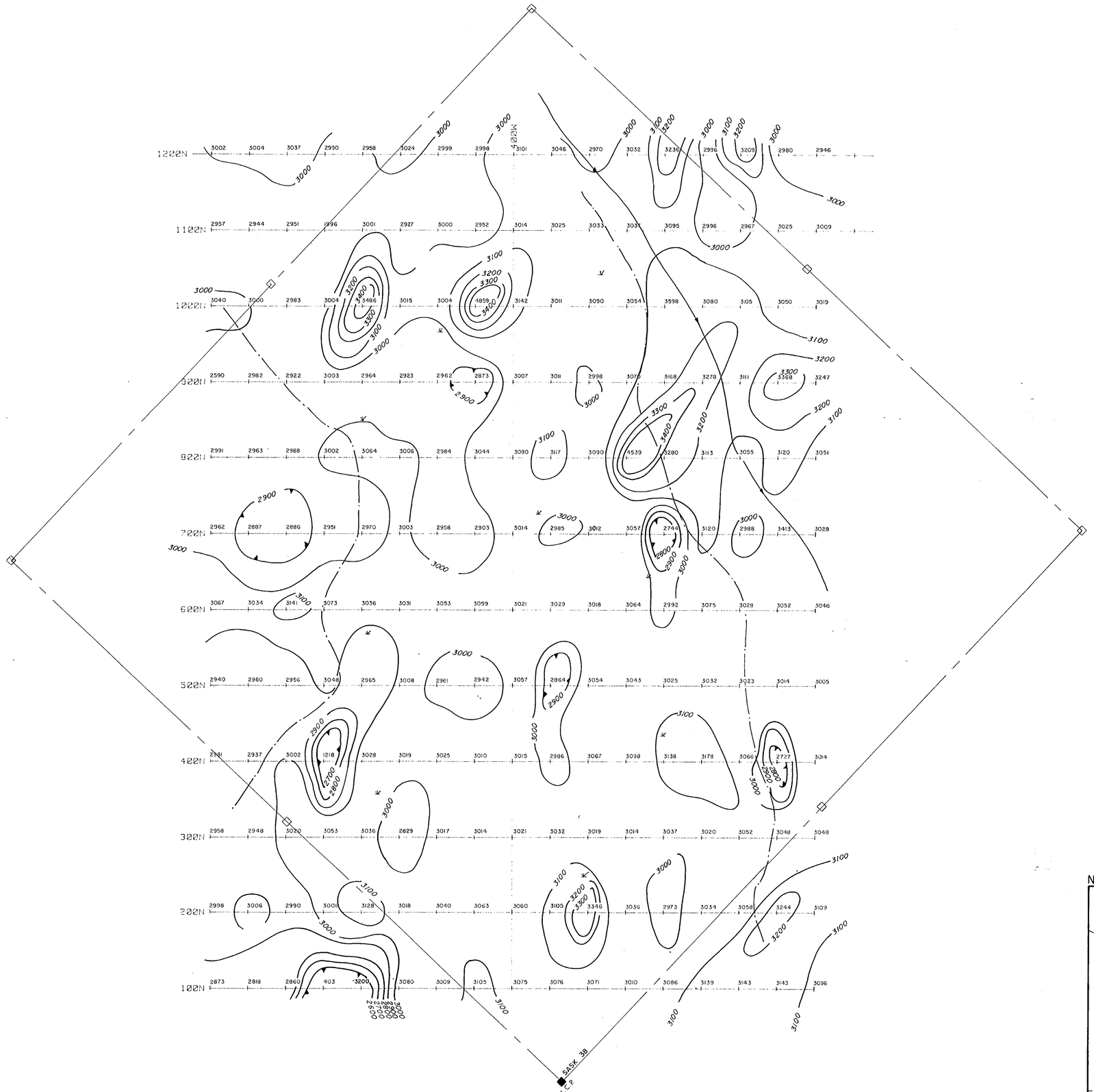
INSTRUMENT: APEX PARAMETRICS MAX MIN II

To accompany Geophysical Report on Grid 78-13

GLEN E. WHITE
GEOPHYSICAL CONSULTING
& SERVICES LTD.

SELCO INC.
SALMON LAKE, GRID 78-13
HORIZONTAL LOOP SURVEY
SEPARATION: 150 METRES

DATE: NOV/82 | FIG.: 2



KEY

Contoured Magnetic Field, Gammas

Base Value: 56000 Gammas

GEOLOGICAL BRANCH
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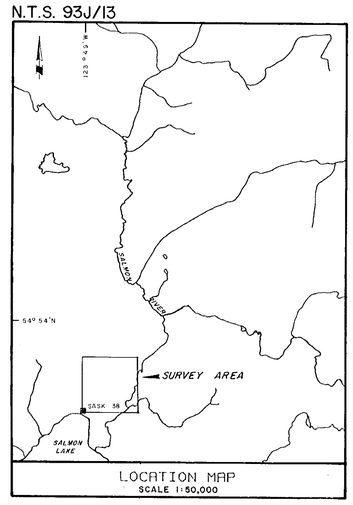

LOCATION MAP
SCALE 1:50,000

METRES
0 50 100 150 200

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
GLEN E. WHITE

INSTRUMENT: GSM-8 PROTON PRECESSION MAGNETOMETER

To accompany Geophysical Report on Grid 78-13

GLEN E. WHITE
GEOPHYSICAL CONSULTING
& SERVICES LTD.

SELCO INC.
SALMON LAKE, GRID 78-13
TOTAL FIELD MAGNETIC INTENSITY

DATE: NOV/82 | FIG.: 3