

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.04.14

ASSESSMENT REPORT 17288

MINING DIVISION: Omineca

PROPERTY: New Law
 LOCATION: LAT 57 21 11 LONG 127 18 08
 UTM 09 6357750 602155
 NTS 094E06W
 CLAIM(S): New Law 2-3
 OPERATOR(S): Marian Min.
 AUTHOR(S): White, G.E.; Hermary, R.G.; Cooke, D.L.
 REPORT YEAR: 1987, 67 Pages
 COMMODITIES
 RESEARCHED FOR: Gold, Silver
 GEOLOGICAL

SUMMARY: The claims are underlain by Middle Jurassic Toodoggone Volcanics consisting of plagioclase porphyry flows, plagioclase crystal tuff and lapilli tuff and breccia. Numerous north trending faults occur. Associated alteration includes silicification, sericitization and pyritization.

WORK DONE:
 Geological, Geophysical, Geochemical
 GEOL 400.0 ha
 Map(s) - 1; Scale(s) - 1:5000
 MAGA 57.0 km
 Map(s) - 1; Scale(s) - 1:10 000
 MAGG 23.0 km
 Map(s) - 1; Scale(s) - 1:5000
 ROCK 15 sample(s) ;ME
 SILT 22 sample(s) ;ME
 SOIL 255 sample(s) ;ME
 Map(s) - 2; Scale(s) - 1:5000

ACTION:

MARIAN MINERALS CORPORATION
AIRBORNE MAGNETOMETER SURVEY
ON THE
NEWLAW 2 AND NEWLAW 3 CLAIMS
Latitude: 57°22' Longitude: 127°18'
NTS: 94E/6W
AUTHORS: Richard G. Hermary, B.Sc.,
Geophysicist
Glen E. White B.Sc., P.Eng.,
Consulting Geophysicist
DATE OF WORK: March 15, 1987
DATE OF REPORT: August 31, 1987

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,288

Part 1 of 2

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ILLUSTRATIONS

- FIGURE 1 - Location Map
- FIGURE 2 - Claim Map
- FIGURE 3 - Regional Geology
- FIGURE 4 - Magnetic Contour Map



INTRODUCTION

In early 1986 an airborne magnetometer survey was conducted over the Toodoggone Gold Belt district. Over 10,000 line kilometers was flown over the district. Western Geophysical Aero Data Ltd. was commissioned by the Marian Minerals Corporation to recover, reprocess and interpret the magnetic data obtained over the 40 contiguous units of the Newlaw 2 and Newlaw 3 claims.

These claims are located northwest of the Chappelle (Baker Mine) property, and west of the Lawyers precious metal mineral deposits. The intention of this survey was to assist in the geological mapping of the area and direct further exploration to any favorably anomalous locations.

PROPERTY

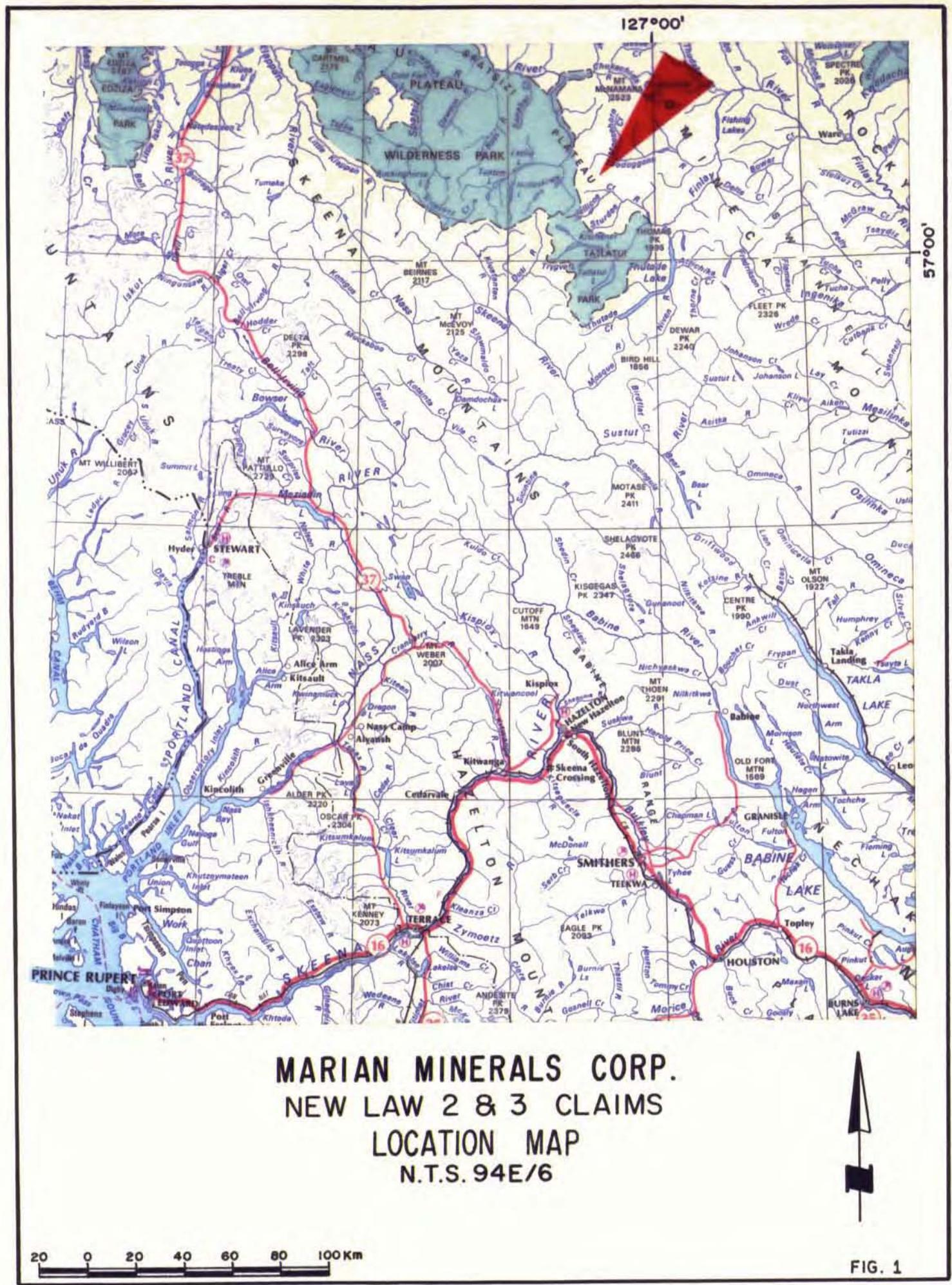
The Newlaw 2 and Newlaw 3 are owned by Malcolm Bell and optioned to Marian Minerals Corporation. The claims were recorded on April 16, 1987. They are described below and illustrated on Figure 2.

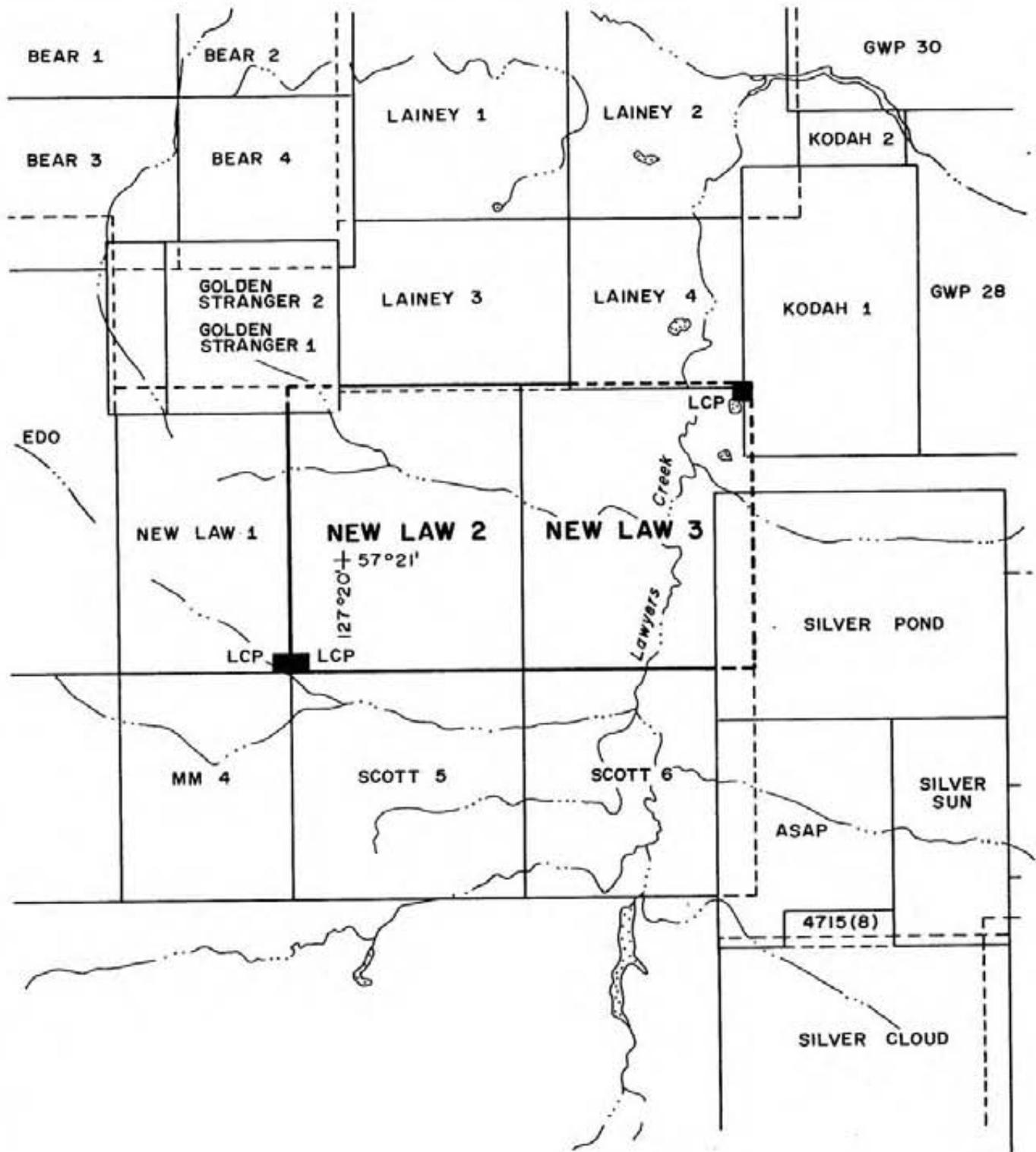
CLAIM NAME	UNITS	RECORD NO	EXPIRY DATE
Newlaw 2	20	8318	April 16, 1988
Newlaw 3	20	8320	April 16, 1988

LOCATION AND ACCESS

The Newlaw 2 and 3 are located in the Toodoggone River area. This area is located approximately 250 kilometers north of Smithers, B.C. The Newlaw 2 and 3 claims are located 7.5 kilometers west of the Lawyers precious metal mineral deposit. The claims are situated within the Omineca Mining Division of B.C. The NTS map coordinates of the Newlaw 2







MARIAN MINERALS CORP.
NEW LAW 2 & 3 CLAIMS
CLAIMS MAP
N.T.S. 94E/6



FIG. 2

and Newlaw 3 claims are 94E/6W. The approximate geographical coordinates are a latitude of 57°22'N and a longitude of 127°18'W. Access to the area is usually achieved by fixed wing aircraft from Smithers, B.C. to the Sturdee River airstrip and then by helicopter to the specific claim area. The helicopters are usually based at the Sturdee River airstrip during the summer.

HISTORY AND PREVIOUS WORK

The Toodoggone area was investigated for placer gold in the 1920's and 1930's. A public company, Two Brothers Valley Gold Mines Ltd., undertook considerable test work, including drilling in 1934. Most of this work was directed towards extensive gravel deposits principally near the junction of McClair Creek and the Toodoggone River.

Gold-silver mineralization was discovered on the Chappelle (Baker Mine) property by Kennco Explorations (Western) Ltd. in 1969. DuPont of Canada Exploration Ltd. acquired the property in 1974 and began production at a milling rate of 90 tonnes per day in 1980.

Numerous other gold-silver discoveries were made in the 1970's and 1980's, including the Lawyers deposits which was discovered by Kennco in 1973 and optioned by Serem Ltd. in 1979. Work on this property to date has included considerable trenching, drilling and underground development and a feasibility study is currently underway.

Within the belt, three properties show ore reserves: Baker Mine (Multinational Resources) 52,000 tonnes 1.07 oz/tonne Au, 23.2 oz/tonne Ag, Lawyers (Cheni) 561,000 tonnes 0.21 oz/tonne Au, 7.1 oz/tonne Ag, Al (Energex Minerals Ltd.) 160,000 tonnes 0.37 oz/tonne Au (subsequently, Lawyers



reserves were increased to 1,4000,000 tonnes of unknown grade).

The Toodoggone area has been the scene of intense exploration activity during the past five years with numerous companies exploring over 3,000 mineral claim units. Exploration and development expenditures to 1986 are estimated to be in the order of \$42 million.

Previous work on the Newlaw 2 and Newlaw 3 has consisted mainly of prospecting. Tanker oil and Gas Ltd. recently did some limited geology, prospecting and sampling of stream sediments. No geochemical anomalies were apparent. Work on nearby Toodoggone properties has indicated good potential for gold and other precious metal mineralization on the Newlaw 2 and Newlaw 3 claims.

REGIONAL GEOLOGY

The general geology of the area is shown on Preliminary Map 61, B.C. Ministry of Energy, Mines and Petroleum Resources by L.J. Diakow, A. Panteleyev and T.G. Schroeder, 1985 and on Open File, Geologic Survey of Canada, by H. Gabrielse, C.J. Dodds, J.L. Mansy and G.H. Eisbacher, 1977.

The Toodoggone River area is set within the Intermontaine Belt. The main geologic units are the Upper Cretaceous Sustut Group, the Lower to Middle Jurassic Toodoggone Volcanics, the Upper Triassic Takla Group and Permian carbonate units thought to belong to the Asitka Group.

Several intrusive bodies of quartz monzonitic to granodioritic composition, irregular in size and shape (belonging to the Omineca Intrusives) intruded the volcano-sedimentary complex in several localities. Swarms of dykes and small stocks are related to these intrusions.



The Asitka group limestones were deposited in a marine environment. The Takla rocks are the product of a volcanic event that may have been accompanied by an uplift of the whole area (possibly changing the environment from submarine to sub-areal). The result is a complex of interlayered volcanic and sedimentary units. This was followed by a period of regression and related deformations. These followed a volcanic episode during which the cyclic Toodoggone Volcanic rocks were formed. The event started with a quartzose acidic extrusion, followed by a mafic extrusion, and then by several intermediate extrusions. Much of the volcanics were porphyritic flows but within each cycle there are pyroclastic units and conglomerates, lahars and sandstones (reworked pyroclastics).

Of the structural elements, the most prominent are three fault zones, trending northwest-southeast which are intermittently exposed where outcrop is developed and are clearly outlined by the airborne geophysics. They had a major role not only in distribution of geologic units, but also in the emplacement of minerals. The same, northwest-southeast trend is also the general strike of the majority of the lithostratigraphic members.

Local uplifts accompanying intrusions resulted in several domal structures, characterized by a circular distribution of volcano-sedimentary units surrounding an intrusive core.

The Toodoggone River area is an important host of numerous precious metal and base metal prospects. Four main mineral deposit types have been identified:

- porphyry - occurring mainly in Takla Group volcanics and Omineca intrusives.



- skarn - contact of limestones (Asitka, and some in Takla) with intrusive.

- stratabound - occurring in Takla limestones interbedded with cherts.

- epithermal - occurring mainly in Toodoggone Volcanics and Takla rocks.

Of the four, the epithermal type is the most important, and has been subdivided into two subtypes: fissure vein deposits associated with fracture zones and possibly cauldera formations, and hydrothermally altered and mineralized deposits (associated with major fault zones).

Most common ore minerals in epithermal type deposits are argentite, electrum, native gold and silver. Baker Mine and Lawyers Deposit are the two most prominent deposits of this type in the area. For the generalized geology refer to Figure 3.

LOCAL GEOLOGY

No detailed geological mapping of the Newlaw 2 and Newlaw 3 is known to the authors. The claims are extensively covered by glacial till and moraine, with the exception of the northwestern part of the Newlaw 2 claim where outcrop is indicated by the photo mosaic.

AIRBORNE MAGNETIC SURVEY

This survey monitors and records the output signal from a proton precession magnetometer installed in a bird designed to be towed 30 meters below a helicopter. A gimbal and shock mounted TV camera, fixed to the helicopter skid, provides input signal to a video cassette recorder allowing



for accurate flight path recovery by correlation between the flight path cassette and air photographs of the survey area. A KING KRA-10A radar altimeter allows the pilot to continually monitor and control terrain clearance along any flight path. Continuous measurements of the earth's total magnetic field intensity are stored in three independent modes: an analogue strip chart recorder, digital magnetic tapes and a digital video recovery system. A three-pen analogue power recorder provides direct, unfiltered recordings of the proton magnetometer. A Hewlett-Packard 9875 tape drive system digitally records all information as it is processed through an onboard micro-computer. The magnetic data is also processed through the onboard micro-computer, incorporating an analogue to digital converter and a character generator, then superimposed along with the date, real time and terrain clearance upon the actual flight path video recording tape to allow exact correlation between geophysical data and ground location. The input signals are averaged and updated on the video display every second.

Correlation between the strip chart, digital tape and the video flight path recovery tape is controlled via fiducial marks common to all systems. Line identification, flight direction and pertinent survey information are recorded on the audio track of the video recording tape.

DATA PROCESSING

Field data is digitally recorded, with the time of day fiducial, on magnetic cassettes in a format compatible with the Hewlett-Packard 9845 computer. The recovered flight path locations are digitized and the field data is processed to produce plan maps of each of the parameters. A variety of formats are available in which to display this data.



Total field intensity magnetic information is routinely edited for noise spikes and corrected for any diurnal variations recorded on a base magnetometer located in the survey area.

DISCUSSION OF RESULTS

The Newlaw 2 and Newlaw 3 claim was surveyed in on March 15 of 1986. Fifty seven line kilometres of magnetometer data have been recovered to examine this claim and its' surrounding area.

Survey lines were flown east-west on 200 meter centres with data being digitally recorded at one second intervals, providing an average station spacing of 25 meters. The sensors were towed beneath the helicopter and maintained an average terrain clearance of 60 meters. The magnetic data is presented in contour form on an orthophotomosaic base map of the area as Figure 4.

This survey was flown as part of a regional package covering the Toodoggone Gold Belt from the Finlay River in the south to the Chukachida River in the north. Over 10,000 line kilometers of data was gathered to assist the geological mapping of the area as well as to locate specific targets for ground exploration.

The magnetic data is a useful tool for mapping both regional and local geological structures. Many localized magnetic variations are observed which are attributed to lithological changes.

There are two distinctive magnetic signatures observed which appear consistent across the large survey area. Firstly, Jurassic intrusions appear as magnetic highs;



typically with an intensity of greater than 59,300nT. Secondly, major fault and shear zones appear as linear magnetic lows, generally with intensities of less than 59,000nT, and often positioned along the flanks of intrusive bodies. The combination of these two signatures are observed across many of the larger epithermal precious metal deposits in the area. Plate 2 of this report illustrates this effect at the Baker Mine, Lawyers and Thesis deposits. The magnetic response is interpreted as reflecting only the general geological environment of these areas and does not map any mineralization directly.

The contoured magnetic data on Figure 4 indicates a major fault contact zone with alteration. The Newlaw 3 claim area is predominantly associated with a low magnetic response, reflecting both alteration and faulting as being the dominant geological structure. A very high amplitude magnetic response is observed to the south of the Newlaw 3 claim probably reflecting a Lower to Middle Jurassic intrusion. This anomaly is interpreted to be a stock or dyke of a feeder system for the Toodoggone volcanics of the Hazelton Group. This stock is deeply buried as half width calculations indicate a depth of burial of 400 to 500 meters. The dominant geological features inferred from the contoured magnetic data is a fault contact system trending north and just east, along the Newlaw 3's eastern claim border. This contact is clearly evident in the magnetic data because of the increase in field intensity and appears to parallel nearby geologically mapped regional faults just southeast of the Newlaw 2 and Newlaw 3 claims. A crosscutting fault is magnetically mapped in the centre of the Newlaw 2 and 3 claims, this fault may extend well into the Newlaw 2 claim. Both of the above mentioned faults parallel surface drainage parallel systems.



Magnetic lows on the Newlaw 3 claim may represent altered zones along faults or possibly a lithological contact with the Toodoggone Volcanics, Takla Group or Asitka Group rocks, since these rocks tend to have a lower magnetic response. This may be more plausible because contacts between different lithologies in the Toodoggone area, have been associated with faults.

SUMMARY AND CONCLUSION

The area covering the Newlaw 2 and Newlaw 3 was included as part of a regional airborne magnetic survey. Only partial coverage was obtained over the claims. Fifty-seven line kilometers of magnetic data was recovered, reprocessed and examined in detail on behalf of Marian Minerals Corporation to evaluate the subject claims.

The claims are extensively covered by glacial till and moraine. Very little geological mapping and prospecting has been done on the Newlaw 2 and Newlaw 3 claims.

The claims area is predominantly associated with a low magnetic response probably caused by faulting and mineral alteration. The magnetic data also indicates a major fault contact system trending northeast along the eastern claim boundary of Newlaw 3.

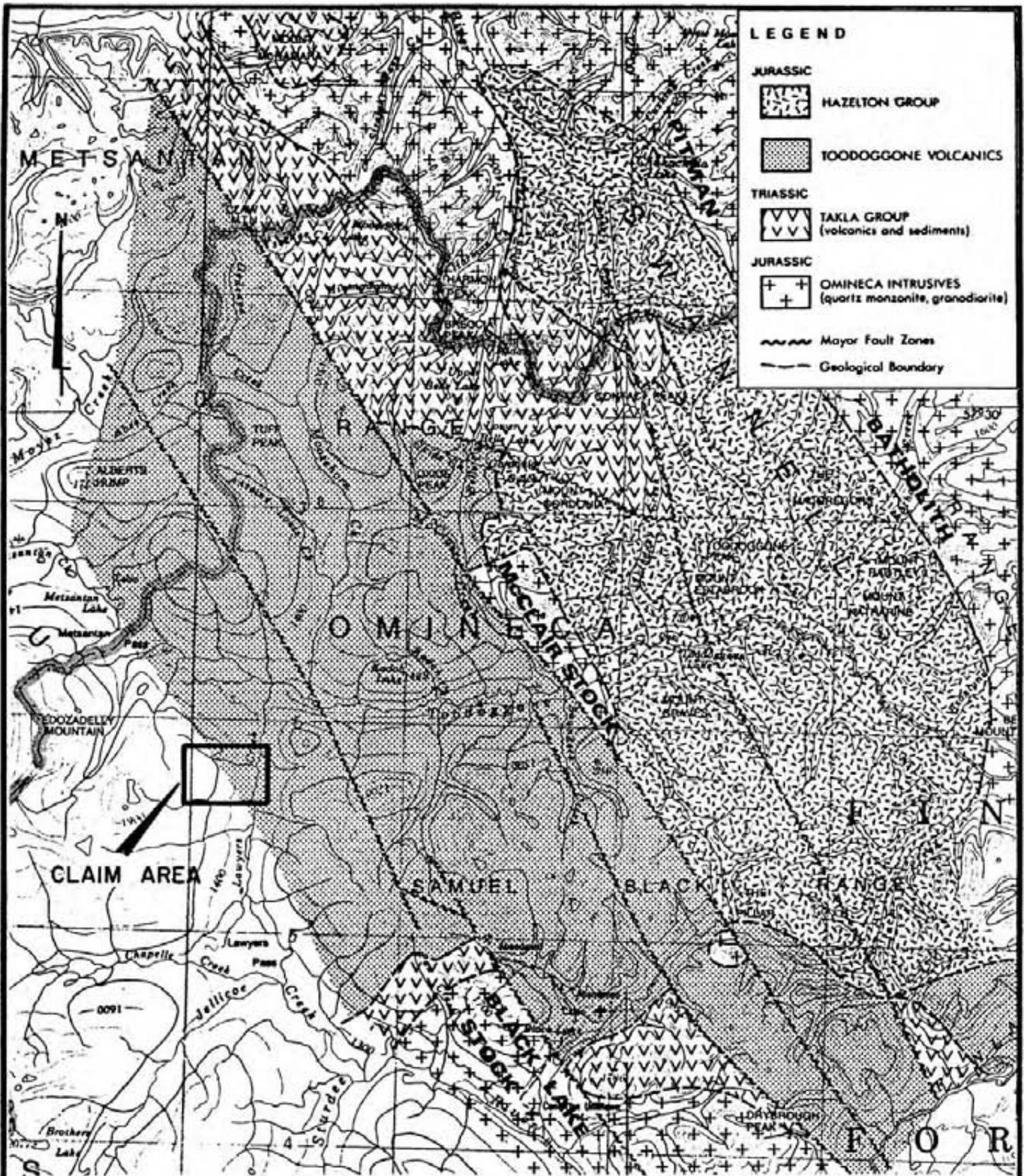
The most important type of economic mineralization identified in the Toodoggone Gold Belt area are epithermal precious and base metal deposits, hosted principally by lower and middle units of Toodoggone volcanics. Mineralization occurs principally in fissure veins, quartz stockworks, breccia zones and areas of silicification, generally close to major fault systems and associated with intrusive activity.



The Newlaw 2 and 3 conform to the fault and intrusive criteria for this geological model and there are areas within the Newlaw 3 claim exhibiting low magnetic intensities which could be reflecting a suitable volcanic host environment.

Nonetheless, more geological and geophysical data is required for a more thorough and complete interpretation of the geology underlying the Newlaw 2 and Newlaw 3 claims.





LEGEND

- JURASSIC
 -  HAZLETON GROUP
 -  TOODOGGONE VOLCANICS
- TRIASSIC
 -  TAKLA GROUP
(volcanics and sediments)
- JURASSIC
 -  OMINECA INTRUSIVES
(quartz monzonite, granodiorite)
-  Major Fault Zones
-  Geological Boundary

**MARIAN MINERALS CORP.
 NEW LAW 2 & 3 CLAIMS
 REGIONAL GEOLOGY
 N.T.S. 94E/6**



GEOLOGY AFTER L. J. DIAKOW, A. PANTELEYEV, T. G. SCHROETER, 1985

FIG. 3

RECOMMENDATIONS

An airborne magnetometer and VLF-EM survey should be carried out over the remaining portions of the Newlaw 2 & 3 claims. Lines should be flown in the east-west direction and spaced at 200 meters apart. The survey should also overlap the previously flown area in order that correlation between the new data and previously flown data can be done. Based on encouraging results from the airborne survey ground targets should be determined and investigated.

The airborne determined ground targets should be followed up with a comprehensive ground program. The ground program should consist of geological mapping, geochemical soil analysis for gold and detailed ground magnetics and VLF-EM. Contingent upon encouraging results from these efforts, trenching and diamond drilling may eventually be warranted.

Respectfully Submitted,

R. Henratty

Richard Henratty, B.Sc.,
Geophysicist

Glen E. White
Glen E. White, B.Sc., P.Eng.
Consulting Geophysicist



COST BREAKDOWN

The geophysical data was analyzed, geological information researched and compiled, and this report prepared for an all inclusive fee of \$4200.00. This total is based on a cost of \$35/km for magnetometer data.

57 km of Magnetometer data @ \$35/km	\$1,995.00
GEOPHYSICAL SUBTOTAL	\$1,995.00
Geological compilation	\$ 700.00
Interpretation & report	\$1,505.00
TOTAL	\$4,200.00
TOTAL ASSESSMENT VALUE OF THIS REPORT	<u>\$4,200.00</u>



REFERENCES

- BELL, M., 1986 1985 Soil Geochemistry Report on the Black I, II, III AND IV Mineral claims for Toodoggone Syndicate Assessment Report (private file)
- BURGOYNE, Alfred A.,
1974 Geology, Geochemical Soil Survey and EM-16 survey on Gord 1-40 Mineral Claims, Assessment Report 5194.
- CARTER, N.C., 1985 Geological Report on the Joanna I and II Mineral Claims.
- DIAKOV, L.J., 1983 Geology between Toodoggone and Chukachida Rivers, Paper 1984-1.
- DIAKOV, L.J.,
PANTELEYEV, A.,
SCHROETER, T.G. 1985 Geology of Toodoggone River Area, NTS 94E, British Columbia Department of Mines, Preliminary Map 61.
- FLOYD, A.,
MEYER, W., 1973 Geological, Geochemical & Magnetometer survey - Shas claim group, Assessment Report 4570.
- GABRIELSE, H.,
DODDS, C.J., Geology of the Toodoggone River (94E) Map Area, GSC Open File 306.



- HARIVLE, C., 1986 Report on the MM4, PC1 and PC2 claims for Tanker Oil and Gas Ltd. (private file).
- MCLAREN, G., 1984 Report on the 1984 Diamond Drilling project; Golden Lion, Golden Lion 2-11 claim, Hump, Hump 2 claims Assessment Report 13,324.
- PANTELEYEV, A., 1983 Geology between Toodoggone and Sturdee Rivers; Paper 1983-1.
- SCHROETER, T.G., 1981 Toodoggone River, Geological Feild-work 1980, Paper 1981-1
- STEEL, J.S. and
SORBARA, J.P., 1986 Geological and Geochemical Report on the Black II Mines claim for First Allied Resources Ltd. (private file).



INSTRUMENT SPECIFICATIONSBARRINGER AIRBORNE MAGNETOMETER

MODEL: Nimbin M-123
TYPE: Proton Precession
RANGE: 20,000 to 100,000 gammas
ACCURACY: ± 1 gamma at 24 V d.c.
SENSITIVITY: 1 gamma throughout range
CYCLE RATES:
 Continuous - 0.6, 0.8, 1.2 and 1.9 seconds
 Automatic - 2 seconds to 99 minutes in 1 second steps
 Manual - Pushbutton single cycling at 1.9 seconds
 External - Actuated by a 2.5 to 12 volt pulse longer than 1 millisecond.

OUTPUTS:
 Analogue - 0 to 99 gammas or 0 to 990 gammas
 - automatic stepping
 Visual - 5 digit numeric display directly in gammas

EXTERNAL OUTPUTS:
 Analogue - 2 channels, 0 to 99 gammas or 0 TO 990 gammas at 1 m.a. or 1 volt full scale deflection.
 Digital - BCD 1, 2, 4, 8 code, TTL compatible

SIZE: Instrument set in console
 30 cm X 10 cm X 25 cm

WEIGHT: 3.5 Kg.

POWER

REQUIREMENTS: 12 to 30 volts dc, 60 to 200 milliamps maximum.

DETECTOR: Noise cancelling torroidal coil installed in air foil.



INSTRUMENT SPECIFICATIONSFLIGHT PATH RECOVERY SYSTEMi) T.V. Camera:

Model: RCA TC2055 Vidicon
Power Supply: 12 volt DC
Lens: variable, selected on basis of
expected terrain clearance.
Mounting: Gimbal and shock mounted in
housing, mounted on helicopter
skid.

ii) Video Recorder:

Model: Sony SLO-340
Power Supply: 12 volt DC / 120 volt AC (60Hz)
Tape: Betamax 1/2" video cassette -
optional length.
Dimensions: 30 cm X 13 cm X 35 cm
Weight: 8.8 Kg
Audio Input: Microphone in - 60 db low
impedance microphone
Video Input: 1.0 volt P-P, 75 Ω unbalanced, sync
negative from camera.

iii) Altimeter:

Model: KING KRA-10A Radar Altimeter
Power Supply: 27.5 volts DC
Output: 0-25 volt (1 volt /1000 feet) DC
signal to analogue meter,
0-10 v (4mv/ft) analogue signal to
microprocessor.
Mounting: fixed to T.V. camera housing,
attached to helicopter skid.



INSTRUMENT SPECIFICATIONSDATA RECORDING SYSTEMi) Chart Recorder

Type:	Esterline Angus Miniservo III Bench AC Ammeter - Voltmeter Power Recorder.
Model:	MS 413B
Specification:	S-22719, 3-pen servo recorder
Amplifiers:	Three independent isolated DC amplifiers (1 per channel) providing range of acceptable input signals.
Chart:	10 cm calibrated width z-fold chart.
Chart Drive:	Multispeed stepper motor chart drive, Type D850, with speeds of 2,5,10,15,30 and 60 cm/hr. and cm/min.
Controls:	Separate front mounted slide switches for power on-off, chart drive on-off, chart speed cm/hr. - cm/min. Six position chart speed selector individual front zero controls for each channel.
Power Requirements:	115/230 volts AC at 50/60 Hz (Approximately 30 W).
Writing System:	Disposable fibre tipped ink cartridge (variable colors)
Dimensions:	38.6 cm X 16.5 cm X 43.2 cm
Weight:	9.3 kg.



ii) Digital Video Recording System

Type:	L.M. Microcontrols Ltd. Microprocessor Control Data Acquisition System.
Model:	DADG - 68
Power Requirements:	10 - 14 volts DC, Maximum 2 amps.
Input Signal:	3,0 - 100 mvolt DC signals 1,0 - 25 DC signals
Microprocessor:	Motorola MC-6800
CRT Controller:	Motorola MC-6845
Character Generator:	Motorola MCM-6670
Analogue/Digital Convertor:	Intersil 7109
Multiplexer:	Intersil IH 6208
Digital Clock:	National MM 5318 chip 9 volt internal rechargeable nickle-cadmium battery.
Fiducial Generator:	internally variable time set controls relay contact and audio output.
Dimensions:	30 cm X 30 cm X 13 cm
Weight:	3 kg.

iii) Digital Magnetic Tape

Type:	Hewlett Packard cartridge tape unit.
Model:	9875A
Power Requirements:	24 volt d.c.
Data Format:	HP'S Standard Interchange Format (SIF)



Tape Cartridge: HP 98200A 225K byte cartridge compatible with HP Series 9800 desktop computers.

Tape Drive: Dual tape drives providing up to 8 hours continual recording time.

Controller: Internal micro-computer provides 23 built in commands External computer generated commands.



STATEMENT OF QUALIFICATIONS:

NAME: HERMARY, Richard G.

PROFESSION: Geophysicist

EDUCATION: University of British Columbia -
B.Sc. - Major Geophysics

PROFESSIONAL B.C. Geophysical Society

EXPERIENCE: Six months as field geophysicist,
A & M Exploration Ltd.

Six months with Western Geophysical Aero Data



STATEMENT OF QUALIFICATIONS

NAME: WHITE, Glen E., P.Eng.

PROFESSION: Geophysicist

EDUCATION: B.Sc. Geophysics - Geology
University of British Columbia

PROFESSIONAL ASSOCIATIONS: Registered Professional Engineer,
Province of British Columbia.

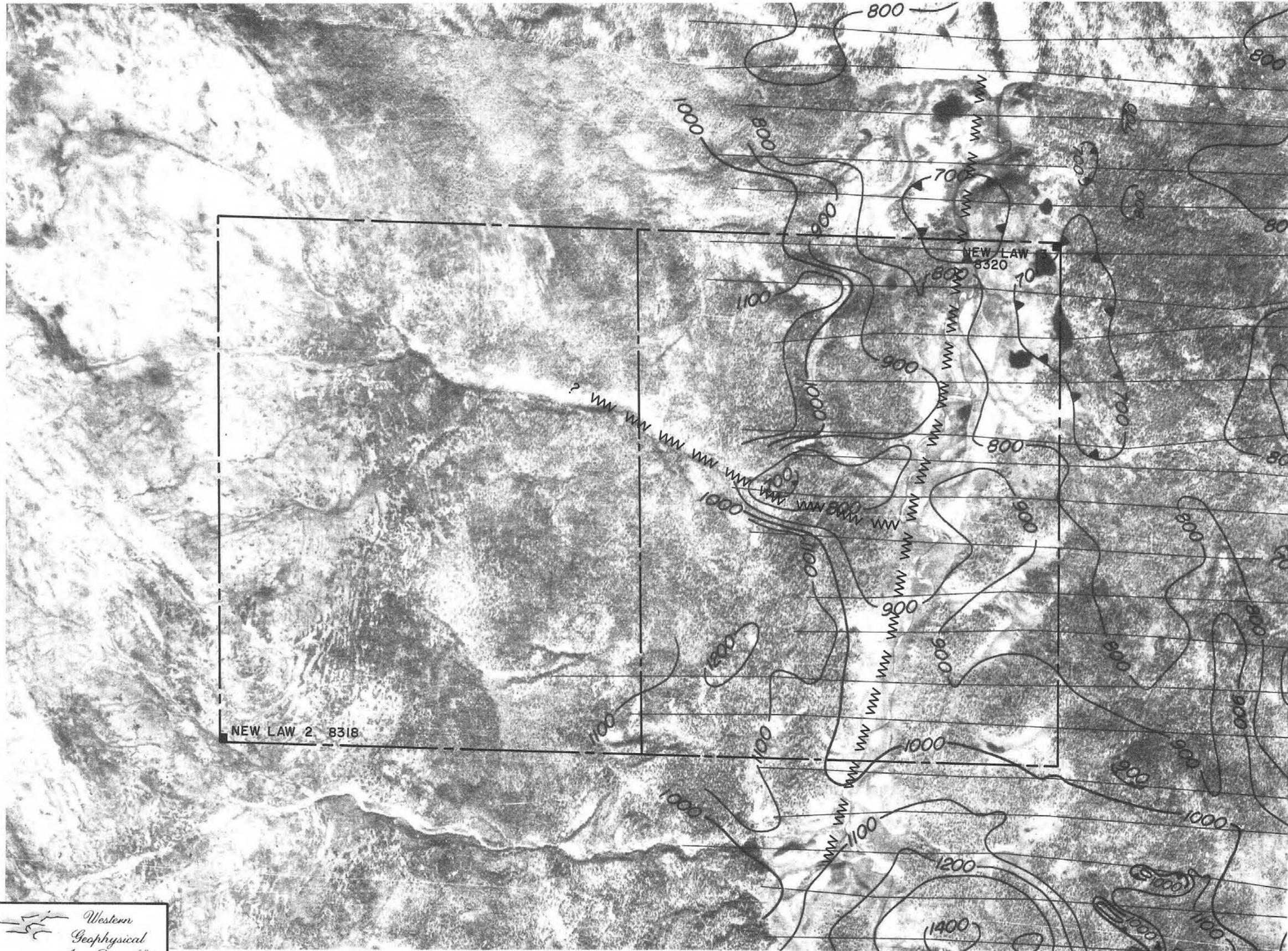
Associate Member of Society of Exploration Geophysicists.

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.
- Seventeen years Consulting Geophysicist.
- Active experience in all Geologic provinces of Canada.

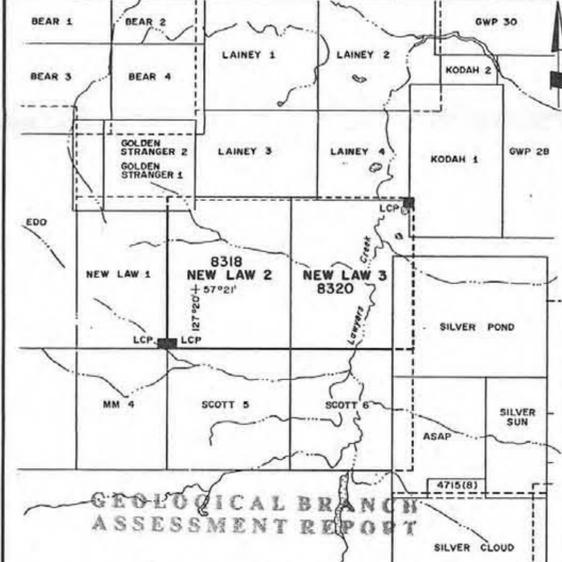




KEY

INSTRUMENT Barringer M-123 Magnetometer
 Data corrected for diurnal variations
 Base value = 58 000 nt
 Contour interval = 50 nt
 Sensor elevation = 60 metres
 Claim line = - - - - -
 Claim post = ■
 Inferred fault = WW WW WW
 Magnetic low = ○

N.T.S. 94E/6



17,288



Part 1 of 2

MARIAN MINERALS CORP.

AIRBORNE MAGNETIC SURVEY
 NEW LAW 2 & 3 CLAIMS
 MAGNETIC CONTOUR MAP
 TOTAL FIELD INTENSITY (GAMMAS)

DATE: AUGUST, 1987

FIGURE 4

Western
 Geophysical
 Aero Data Ltd.