ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.03.21

ASSESSMENT REPORT 17262
MINING DIVISION: Omineca

PROPERTY: Black

LOCATION:
LAT 57 15 00
LONG 127 02 41

CLAIM(S): Black IV
OPERATOR(S): Ashworth, C.
AUTHOR(S): Woods, D.V.

REPORT YEAR: 1988, 30 Pages

GEOLOGICAL SUMMARY:
The property is entirely underlain by the Lower-Middle Jurassic Black Lake quartz monzonite and granodiorite intrusive. Volcanic rocks of the Upper Triassic Takla Group and Middle Jurassic Toodoggone Volcanics are in fault contact with the intrusives near the northeast corner of the property.

WORK DONE:
Geophysical
MAGA 45.0 km
Map(s) - 2; Scale(s) - 1:10 000
CLIVE ASHWORTH
AIRBORNE MAGNETOMETER SURVEY
ON THE
BLACK IV CLAIM
OMINÉCA MINING DIVISION
LATITUDE: 57°15'N LONGITUDE: 127°03'W
NTS 94E/6E & 94E/3E
AUTHOR: Dennis V. Woods, Ph.D., P.Eng.
Consulting Geophysicist
DATE OF WORK: March 18, 1988
DATE OF REPORT: March 22, 1988
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## Illustrations

- FIGURE 1 - Location Map
- FIGURE 2 - Claims Map
- FIGURE 3 - Regional Geology
- FIGURE 4 - Local Geology
- FIGURE 5 - Magnetic Response Examples
- FIGURE 6 - Magnetic Intensity Contour Map
- FIGURE 7 - Vertical Second Derivative map
INTRODUCTION

In early 1986 an airborne magnetometer survey was conducted over the Toodoggone Gold Belt district (Figure 1). Over 10,000 line kilometers was flown over the district. Western Geophysical Aero Data Ltd. was commissioned by Clive Ashworth to reprocess and interpret the magnetic data obtained over the 12 units of the Black IV claim. The claim is located about 1.5 kilometers southeast of the Chappelle (Baker Mine) property, and 4 km southeast of the Lawyers deposit.

The intention of reprocessing of the magnetometer survey data is to more sharply define the geological structure of the area and direct further ground exploration to locations considered favourable for mineralization.

PROPERTY

The Black IV claim is owned by Clive Ashworth. The claim was recorded on March 25, 1985. It is described below and illustrated on Figure 1.

CLAIM NAME    UNITS    RECORD NO    EXPIRY DATE
BLACK IV      12        6925     March 25, 1988

LOCATION AND ACCESS

The Black IV claim is located in the Toodoggone River area. This area is located approximately 250 kilometers north of Smithers, B.C. The claim is just northwest of Black Lake and 1.5 kilometers southeast of the Chappelle (Baker Mine) property. It is situated within the Omineca Mining Division of B.C. The NTS map coordinates of the claim group are 94E/6E and 94E/3E. The approximate geographical coordinates are a latitude of 57°15'N and a longitude of 127°03'W.
CLIVE ASHWORTH
BLACK IV CLAIM
LOCATION MAP
N.T.S. 94E/3E,6E

SCALE 1:2000000

FIG. 1
FIG. 2

CLIVE ASHWORTH
BLACK IV CLAIM
CLAIM MAP
N.T.S. 94E/3E,6E
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 deposit 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 (Du Pont of Canada) 52,000 tonnes 1.07 oz/tonne Au, 23.2 oz/tonne Ag, Lawyers (Serem Inc.) 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 1,400,000 tonnes of unknown grade).
The Toodoggone area has been the scene of intense exploration activity during the past four years with numerous companies exploring over 3,000 mineral claim units. Exploration and development expenditures to 1988 are estimated to be in the order of $150 million.

Previous work on the Black claim group was carried out by Hi-Tec Resource Management Ltd. retained by the Toodoggone Syndicate in the fall of 1985 (Bell, 1986). This work delineated some geochemical anomalies of gold, silver and copper. The geochemical anomalies occurred mostly on the eastern portion of the Black II claim north of Black IV where the majority of soil samples were taken. Geochemical soil samples on the Black IV claim were sparse or nonexistent.

Aeromagnetic data from the 1986 regional survey of the Toodoggone Gold Belt was recovered from an area covering the Black claim group by Hermary and White (1987). The data was presented in hand contoured form on an orthophotomosaic base. They interpreted the data as generally reflecting the geometry and compositional variation of the Black Lake intrusive and indicated the presence of numerous faults bordering and intersecting the intrusive body.

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 an Open File, Geologic Survey of Canada, by H.Gabrielse, C.J.Dodds, J.L.Mansy and G.H.Eisbacher, 1976 (Figure 3).

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
CLIVE ASHWORTH
BLACK IV CLAIM
REGIONAL GEOLOGY
N.T.S. 94E/3E, 6E
FIG. 3
Triassic Takla Group and Permian carbonate units thought to belong to the Asitka Group. Several intrusive bodies of quartz monzonitic to grano-dioritic 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 in 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 cauldra 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.

LOCAL GEOLOGY

The Black IV claim, as shown in Figure 4, is entirely underlain by the Black Lake quartz monzonite and granodiorite intrusion of Lower to Middle Jurassic age. A major fault puts this intrusive body in contact with the Triassic Takla volcanics north of the claim and Jurassic Toodoggone volcanics to the east of the property. Other faults have been mapped or inferred in the Takla and Toodoggone volcanics north and east of the property, but no other geological structures are indicated on the Black IV claim. However, the interpretation of the magnetic data from the Black group of claims by Hermary and White (1987) indicates several
fault zones with northwest and northeast trends which coincides with the major structural trends in the Toodogone region.

No occurrence of mineral showings are known on the property. However, as indicated by the magnetic data, geologically mapped faults associated with gold showings may extend into the claim. For example, the Shas prospect, 3 kilometers east of the property, is near a westerly trending fault which appears to continue onto the claim. In addition the Chapelle (Baker Mine) property and the Castle Mountain showing, 5 kilometers to the northwest, are close to mapped northwest trending faults similar to those inferred from the magnetic data on the Black IV claim. All of these mineral showings occur in Takla volcanics.

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 feet 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 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 Black IV claim was surveyed in February and March of 1986.
Forty-five line kilometres of magnetometer data have been
reprocessed to examine these claims and the 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.
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 in the Toodoggone region 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. Figure 5 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 area and does not map any mineralization directly.

In order to more precisely define the positions of faults interpreted from the magnetic data, the original data files from the Black IV claim and surrounding areas have been transferred to a microcomputer/plotter for interactive reprocessing and machine contouring. The contour plot is shown in Figure 6 on an orthophotomosaic base map. The data was then enhanced by smoothing and applying a second vertical derivative transformation. This processing procedure has the effect of suppressing near-surface magnetic responses and enhancing more deep-seated, large-scale variations due to faults and lithologic contacts. A contour plot of the second vertical derivative is shown in Figure 7.
MAGNETIC RESPONSE EXAMPLES
BASE VALUE 58,000 - nT

FIG. 5

Western
Geophysical
Aero Data Ltd.
As previously indicated by Hermary and White (1987), the contoured magnetic data in Figure 6 confirms the general geological mapping as illustrated in Figure 4. The Black IV claim is predominantly associated with a high magnetic response, reflecting Jurassic intrusions as being the dominant geological member. The faulted contact with Takla and Toodoggone volcanics runs along the eastern boundary of the property. Very high amplitude magnetic responses over 59,300 nT, such as in the southwest corner of the claim and along the eastern boundary, are interpreted to be due to stocks and dykes of a feeder system for the Black Lake quartz monzonite and granodiorite intrusions. Lower amplitude magnetic responses between 59,000 nT and 59,300 nT appear to correlate with low topographic relief and may be due to compositional variation of the Jurassic intrusives, or greater overburden cover in the valleys, or even an unmapped veneer of magnetically transparent Takla or Toodoggone volcanics.

The northwesterly trending, geologically mapped contact between the Black Lake intrusive and the Takla and Toodoggone volcanics is clearly evident in the magnetic contour plot (Figure 6) by an abrupt decrease in field intensity to the northeast. This structure appears to be related to a regional northwesterly trending fault system which extends for over 25 kilometers. Several other faults, transecting the Black IV claim are apparent as linear gradients or flexures of the magnetic contours in Figure 6.

More precise definition of the intrusive/volcanic fault contact and the positions of the inferred faults on the Black IV claim are obtained from the second vertical derivative contour plot shown in Figure 7. Northwest trending faults appear as linear second derivative lows and cross-cutting north and northeast trending faults appear as offsets and flexures of the regional northwest second derivative trend. Although there is some discrepancy between the position of the geologically mapped
intrusive/volcanic contact and the geophysically interpreted fault location in the northeast corner of the claim block, this is considered to be acceptable given the regional nature of the geological mapping versus the detailed quality of the aeromagnetic data.

SUMMARY AND CONCLUSIONS

The area covering the Black IV claim was included as part of a regional airborne magnetic survey carried out in February and March 1986. Forty-five kilometers of magnetic data were reprocessed by applying a vertical second derivative transformation on behalf of Clive Ashworth to evaluate the subject claims.

The Black IV claim appears to be entirely underlain by Lower to Middle Jurassic granodiorite and quartz monzonite rocks of the Black Lake intrusion. High magnetic intensities over the intrusive body and are interpreted to be reflecting stocks and dykes which may have served as part of the feeder system for the area.

The eastern edge of the Black Lake intrusion is clearly evident in the magnetic data as being controlled by a major northwesterly trending fault. A number of other faults are also observed on the total field and vertical second derivative contour plots indicating that the intrusive body has been deformed by an intersecting pattern of northwesterly and northeasterly trending faults. Some of these faults coincide with topographic relief and may be related to the mineral deposits to the east and northwest of the claim block. Some of the magnetically inferred faults are surrounded or flanked by areas of low magnetic intensity. Either alteration effects or the presence of a thin cover of overburden or volcanic rocks could cause this magnetic signature.
RECOMMENDATIONS

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 Black IV claim fits the fault and intrusive criteria for this geological model and there are areas within the claims exhibiting low magnetic intensities which could be reflecting a suitable volcanic host environment or alteration zones. Ground confirmation of Toodoggone or Takla volcanics or of the geophysically inferred faults is recommended as a first stage for follow-up exploration on the property.

Exploration should initially consist of a program of geological prospecting and mapping, and geochemical soil sampling. Efforts should be concentrated along the low intensity magnetic trends which delineate and surround the faults illustrated on Figures 6 and 7. A limited amount of ground magnetometer and VLF-EM surveying should be carried out to precisely locate these faults in overburden areas.
Contingent upon favourable preliminary exploration results an induced polarization survey should be considered for delineating favorably anomalous areas of silica brecciation and sulphide mineralization. Induced polarization techniques have proven useful in this environment for detecting gold bearing silicified zones. Based on encouraging results, trenching and diamond drilling may be warranted.

Respectfully Submitted,

Dennis V. Woods, Ph.D., P.Eng.
Consulting Geophysicist
COST BREAKDOWN

The geophysical data was computer processed and analysed, and this report prepared for an all inclusive fee of $1,900.00. This total is based on a cost of $20/km for reprocessing magnetometer data.

45 km of Magnetometer data @ $20/km ............... $ 900.00

GEOPHYSICAL SUBTOTAL $ 900.00

Interpretation & Report ......................... $1,000.00

TOTAL $1,900.00

TOTAL ASSESSMENT VALUE OF THIS REPORT $1,900.00
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<th>TITLE AND SOURCE</th>
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<tr>
<td>DIAKOV, L.J.,</td>
<td>Geology of the Toodoggone River Area, NTS 94E, British Columbia</td>
</tr>
<tr>
<td>PANTELEYEV, A.,</td>
<td>Department of Mines, Preliminary Map 61.</td>
</tr>
<tr>
<td>MAUSY, J.L.,1976</td>
<td></td>
</tr>
</tbody>
</table>
SCHROETER, T.G., 1981  Toodoggone River, BCMEMPR

on the Black II Mines claim for First Allied Resources Ltd.
Private Report.
INSTRUMENT SPECIFICATIONS

HERZ TOTEM - 2A VLF-EM SYSTEM

Source of Primary Field: -Global network of VLF "OMEGA" radio stations in the frequency range of 14 KHz to 30 KHz

Number of Channels: Two; Field selectable by 100 Hz steps. Ex: Seattle, Washington at 24.8 KHz Annapolis, Maryland at 21.4 KHz

Type of Measurement: Total Field Strength (Location of Conductors)
Vertical Quadrature (useful in interpreting the quality and depth to a conductor)
Horizontal Quadrature (orientation of field & structures)

Type of Sensor: Ferrite antennae array of 3 orthogonal coils mounted in a fiberglass bird with preamp.

Output: -0 to +1000 mV displayed on two switch selectable analogue meters.
-noise monitoring light.
-audio monitor speaker.
Filters: Noise blanking spherics (lightning)
Anti Aliasing filters (Adjacent Stations)
Crystal Controlled Phase Lock loop digital tuning.
1 sec. output Time Constant.

Sensitivity: 130 micro V/m at 20 kHz.
INSTRUMENT SPECIFICATIONS

BARRINGER 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
  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 SPECIFICATIONS

FLIGHT PATH RECOVERY SYSTEM

i) 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, 75Ω 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 SPECIFICATIONS

#### DATA RECORDING SYSTEM

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<th>Component</th>
<th>Specification</th>
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<tr>
<td><strong>i) Chart Recorder</strong></td>
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<tr>
<td>Type</td>
<td>Esterline Angus Miniservo III Bench AC Ammeter - Voltmeter Power Recorder.</td>
</tr>
<tr>
<td>Model</td>
<td>MS 413B</td>
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<tr>
<td>Specification</td>
<td>S-22719, 3-pen servo recorder</td>
</tr>
<tr>
<td>Amplifiers</td>
<td>Three independent isolated DC amplifiers (1 per channel) providing range of acceptable input signals.</td>
</tr>
<tr>
<td>Chart</td>
<td>10 cm calibrated width z-fold chart.</td>
</tr>
<tr>
<td>Chart Drive</td>
<td>Multispeed stepper motor chart drive, Type D850, with speeds of 2,5,10,15,30 and 60 cm/hr. and cm/min.</td>
</tr>
<tr>
<td>Controls</td>
<td>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.</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>115/230 volts AC at 50/60 Hz (Approximately 30 W).</td>
</tr>
<tr>
<td>Writing System</td>
<td>Disposable fibre tipped ink cartridge (variable colors)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>38.6 cm X 16.5 cm X 43.2 cm</td>
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<td>Weight</td>
<td>9.3 kg.</td>
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ii) **Digital Video Recording System**

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

PROFESSION: Geophysicist

EDUCATION:
- B.Sc. Applied Geology
  Queens' University
- M.Sc. Applied Geophysics
  Queen's University
- Ph.D. Geophysics
  Australian National University

PROFESSIONAL ASSOCIATIONS:
- Registered Professional Engineer
  Province of British Columbia
- Society of Exploration Geophysicists
- Canadian Society of Exploration Geophysicists
- Australian Society of Exploration Geophysicists
- President, B.C. Geophysical Society

EXPERIENCE:
- 1971-79 - Field Geologist with St. Joe
  Mineral Corp. and Selco Mining
  Corp. (summers).
  - Teaching assistant at Queen's
    University and the Australian
    National University.
- 1979-86 - Professor of Applied Geophysics at
  Queen's University.
  - Geophysical consultant with
    Paterson Grant & Watson Ltd.,
    M.P.H. Consulting Ltd., James
    Neilson and Assoc. Ltd., Foundex
    Geophysics Geophysics Ltd.
  - Visiting research scientist at
    Geological survey of Canada and the
    University of Washington.
- 1986-87 - Project Geophysicist with Inverse
  Theory and Applications Inc.
  - Chief Geophysicist with White
    Geophysical Inc.