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ASSESSMENT REPORT

VLF-EM GEOPHYSICS

DAVID CLAIMS

Moyie River Area

FORT STEELE MINING DIVISION

TRIM MAP 82F.040
NTS 82 F/8E

Latitude 49° 22' N
Longitude 116° 07' W

UTM 5468300 N, 562900 E

LOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,317

By

PETER KLEWCHUK, P.Geo.

January, 2004

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1.00 INTRODUCTION

1.10 Location and Access

The David property is located in southeastern British Columbia, in the Fort Steele Mining Division, approximately 30 kilometers southwest of Cranbrook, centered approximately at UTM coordinates 5468300 N 562900 E (Figs. 1 & 2).

The property is readily accessible by road, via Highway 3/95 south of Cranbrook and the Lumberton, Moyie and then Kutlits Creek or North Moyie logging roads.

1.20 Physiography

The David claims cover portions of North Moyie River and Kutlits Creek (two east-flowing tributaries of the Moyie River) and include moderate to rugged, wooded mountainous topography with elevations ranging from 1500 to 2150 meters. Hillsides are forested with a mixture of pine, larch, spruce and fir. A number of logged clear cuts exist on the property, ranging in age from about 5 to 20 years old.

1.30 Property

The David property consists of fourteen contiguous 2-post claims, staked in the names of Lloyd Morgan of Cranbrook, B.C. and Peter Klewchuk of Kimberley, B.C (Fig. 3).

1.40 History of Previous Exploration

Moyie River, Perry Creek and numerous of their tributary streams have produced considerable placer gold, with many small placer operations active on a small scale basis. Knowledge of this placer gold has spurred long-standing exploration activity for bedrock sources. A number of small lode gold occurrences were discovered and a few have seen very minor production. Virtually all of the lode gold has come from relatively small quartz veins, usually in association with minor base metal sulfides. The advent of historically high gold prices in the late 1970's prompted staking which blanketed these areas of known placer production.

Exploration activity has been constrained by the extensive coverage of glacial drift, and, although many small exploration programs have been undertaken, few have been successful at delineating drill targets. Within the past 25 years logging activity has enhanced the exploration process by providing road access and exposing bedrock along haul roads and skid roads.

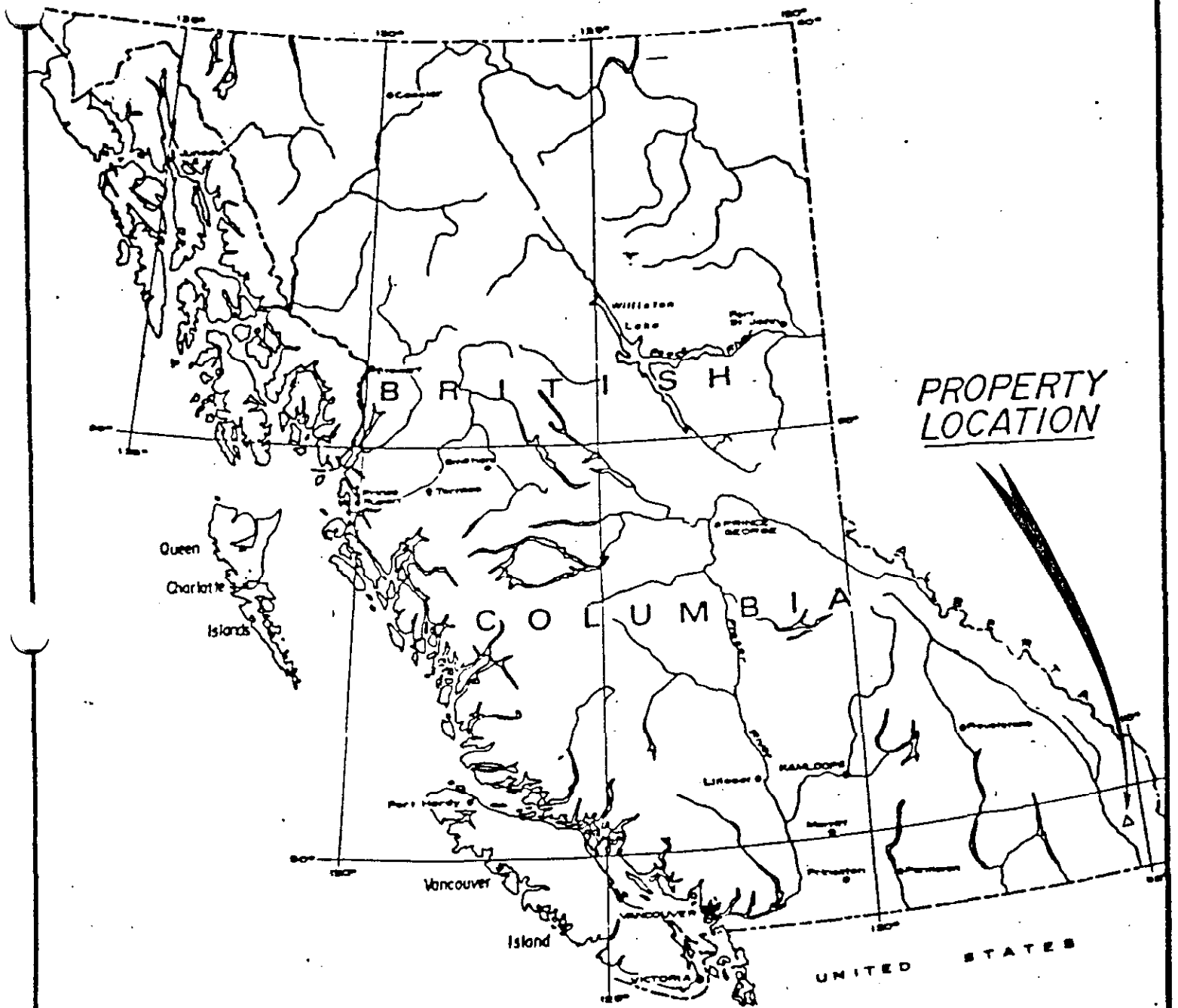
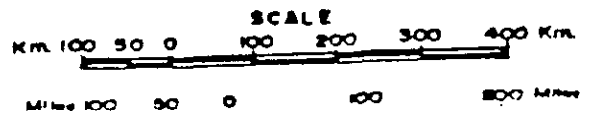


Figure 1.
DAVID CLAIMS
PROPERTY LOCATION MAP



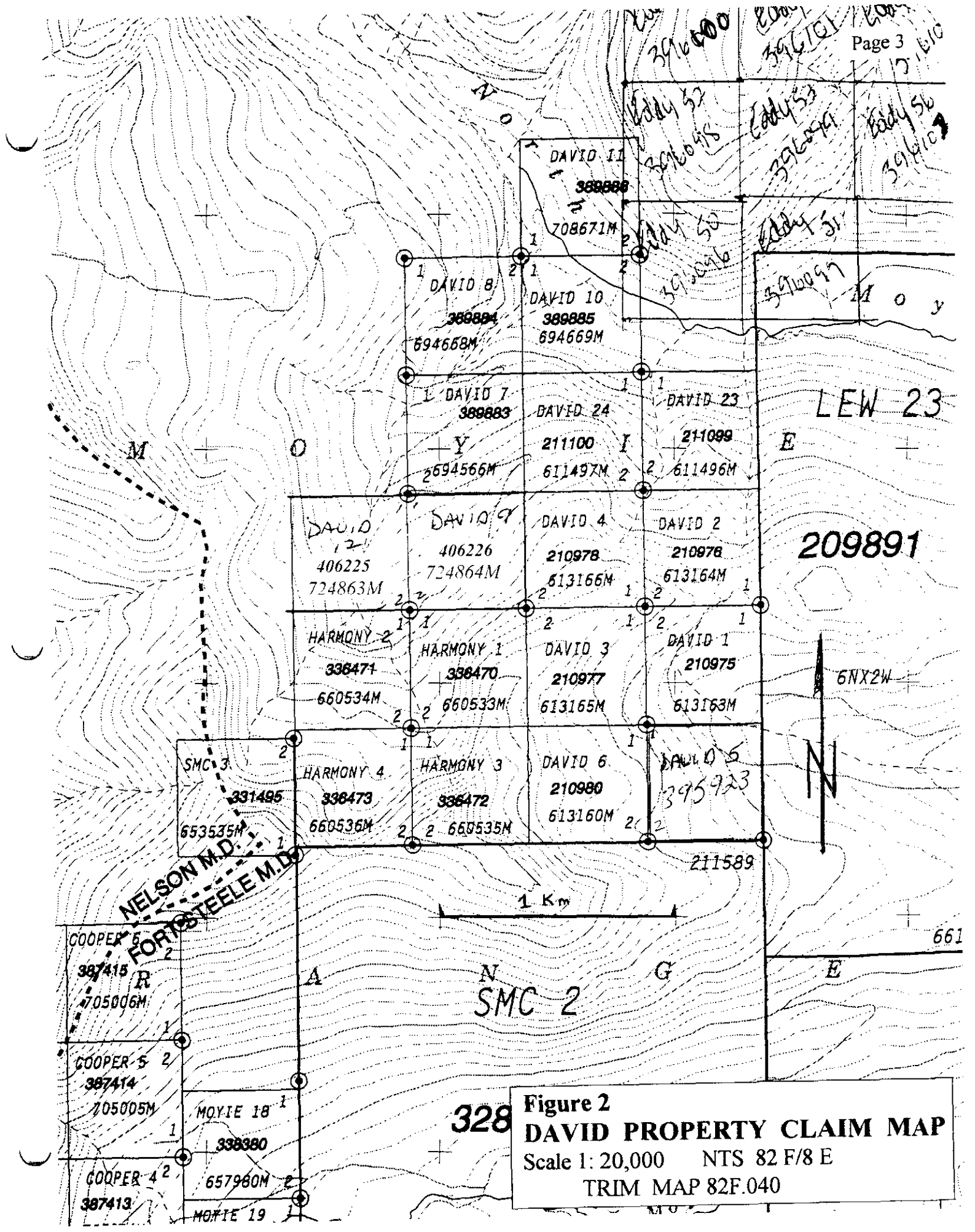


Figure 2
DAVID PROPERTY CLAIM MAP
 Scale 1: 20,000 NTS 82 F/8 E
 TRIM MAP 82F.040

Modern interest in the David area arose in 1989 when prospecting activity discovered significant gold mineralization within a quartz-enriched shear system in bedrock exposed at surface near the headwaters of Kutlits Creek (Kennedy & Klewchuk, 1990, A.R. 20,365).

Within the next two years Dragoon Resources Ltd. explored the David claims utilizing geological mapping, soil and rock geochemistry, geophysics and diamond drilling, and established a 'drill-indicated' gold resource of just less than 100,000 tonnes of 10 grams gold/tonne (Murrell et al, 1991). The gold mineralization is within a steep west-dipping, north-northeast-striking shear zone which averages more than two meters in thickness. Most of the drilling was carried out during the winter of 1990-91.

In 1999 and 2000, small programs of rock geochemistry were utilized to evaluate areas near the main zone of gold mineralization, where previous exploration had identified high gold values in soils and rocks (Klewchuk, 2000 & 2001, A.R.'s. 26,165 & 26,471).

In the summer of 2000 a wildfire burned through part of the David claims, including areas near the main showings of gold mineralization. The fire improved exposure of bedrock and new trails created to fight the fire exposed bedrock and float material. A rock geochemistry program in 2000 took advantage of this improved exposure on the claims (Klewchuk, 2002, A.R. 27007).

1.50 Scope of present program

In 2003 a small program of VLF-EM geophysical surveying was conducted near the northern edge of the David claims to evaluate an area near a known exposure of the Old Baldy Fault.

2.00 GEOLOGY

The David property in southeastern British Columbia lies within the Purcell Anticlinorium, a geologic sub-province between the Rocky Mountain Thrust and Fold Belt to the east and the Kootenay Arc to the west. The core of the Purcell Anticlinorium is made up of the Mesoproterozoic Purcell Supergroup, an eleven kilometer thick succession of fine-grained terrigenous clastic, carbonate and very minor volcanic rocks.

The basal member of the Purcell Supergroup is the Aldridge Formation, a thick sequence (~4000 meters) of fine-grained siliciclastic rocks deposited largely by turbidity currents. Reesor (1958) has divided the Aldridge Formation in the Purcell Mountains into three informal units: rusty weathering siltstone, quartzitic wacke and argillite of the lower Aldridge Formation; grey weathering quartz wacke and siltstone of the middle Aldridge Formation; and laminated argillite of the upper Aldridge Formation.

The base of the lower Aldridge Formation is not exposed; within southeastern British Columbia this unit is about 1500 meters thick; the middle Aldridge is about 2500 meters thick and includes periodic inter-turbidite intervals of thin bedded, rusty-weathering argillites some of which form finely laminated marker beds that are time stratigraphic units and which can be correlated over great distances within the Aldridge basin and equivalent stratigraphy in the United States. The upper Aldridge Formation is about 300 meters thick. The lower and middle units of the Aldridge Formation are host to a proliferation of gabbroic to dioritic composition Moyie Intrusions, predominantly as sills. These intrusions are interpreted to be penecontemporaneous with deposition of their host sediments (Hoy, 1989).

The Aldridge Formation is gradationally overlain by shallower-water deltaic clastics of the Creston Formation. The Creston Formation is in turn overlain by predominantly dolomitic siltstones of the Kitchener Formation. Moyie Intrusions are rarely present within the Creston and Kitchener Formations.

Cretaceous granodiorite and quartz monzonite intrusives cut through these Purcell Supergroup rocks as batholiths and small stocks. Apparently late-stage quartz monzonite to syenite composition intrusives of this suite are known to occur locally as dikes within fault structures.

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976) and Hoy (1982) suggests a possible genetic link between mineralization and syndepositional faulting.

Longitudinal faults which more closely parallel the direction of basin growth faults may have played a similar role. Gold mineralization, most of which is believed Cretaceous in age, appears to be related to felsic intrusive activity and controlled by fault or shear structures.

Detailed interpretation of structure is hindered by the thickness and monotonous character of some of the litho-stratigraphic units. For example, the middle Aldridge Formation is lithologically quite uniform over a thickness of almost 2500 meters. Furthermore, glacial drift cover is extensive and recessive-weathering structural breaks that might host gold mineralization are usually not well exposed.

The David property is underlain by fine-grained clastic rocks of the middle Aldridge and Creston Formations. Bedding is northeast-striking with steep to moderate west dips. Structure on the claim block is dominated by NNE-striking, steeply west-dipping faults and shear zones with both normal and reverse movement. The most prominent of these is the Old Baldy Fault which crosses the northwest portion of the property and separates middle Aldridge Formation on the east from Creston Formation on the west. No transverse east-striking faults are known although topographic linears of this orientation, namely Kutlits and North Moyie Creeks, suggest such breaks may be present.

Numerous small northeast-oriented quartz veins are present and many carry anomalous gold mineralization. The main zone of gold mineralization on the property is a NNE-striking shear zone composed of wavy, lensey quartz veins and intensely sheared middle Aldridge Formation sediments. The gold mineralized zone and its immediate host rocks are characterized by strong silicification, related bleaching and elevated lead and copper values. Chlorite and pyrite occur within and marginal to the mineralized zone. Surface trenching and subsequent diamond drilling by Dragoon Resources Ltd. in the early 1990's established a 150 meter long by 150 meter deep extent to the higher gold values, with a resultant 'drill-indicated' tonnage and grade of "approximately 96,000 tonnes grading 13.08 grams/tonne gold (uncut) or 7.11 grams/tonne gold (cut)" (Murrell et al, 1991). Assay values greater than 30 grams/tonne gold were cut to 30 grams/tonne gold.

3.00 VLF-EM GEOPHYSICS

3.10 Introduction

A limited VLF-EM survey was conducted near the northern edge of the claim block during 2003. Two 'reconnaissance' road lines were surveyed as well as six east-west grid lines (50 m spacing) for a total of 5500 meters (Figure 3). Survey lines on the grid were initially located by using a Garmin 76 hand-held GPS, then run east-west by compass; reconnaissance lines were surveyed along two roads. All survey lines were measured with a hip-chain with VLF-EM readings (field strength and dip angle) taken at 25 meter spacings. Sufficient GPS readings were taken during VLF-EM surveying to provide confidence in plotting all survey lines on the base map.

3.20 VLF-EM Survey

3.21 Instrumentation and Survey Procedure

The VLF-EM (Very Low Frequency Electromagnetics) method uses powerful radio transmitters set up in different parts of the world for military communication and navigation. In radio communication terminology, VLF means very low frequency, about 15 to 25 kHz. Relative to frequencies generally used in geophysical exploration, the VLF technique actually uses very high frequencies.

A Crone Radem VLF-EM receiver, manufactured by Crone Geophysics Ltd. of Mississauga, Ontario, was used for the VLF-EM survey. Seattle, Washington, transmitting at 24.8 kHz and at an approximate azimuth of 247° from the survey area, was used as the transmitting station.

In all electromagnetic prospecting, a transmitter produces an alternating magnetic (primary) field by a strong alternating current usually through a coil of wire. If a conductive mass such as a sulfide body is within this magnetic field, a secondary alternating current is induced within it, which in turn induces a secondary magnetic field that distorts the primary magnetic field. The

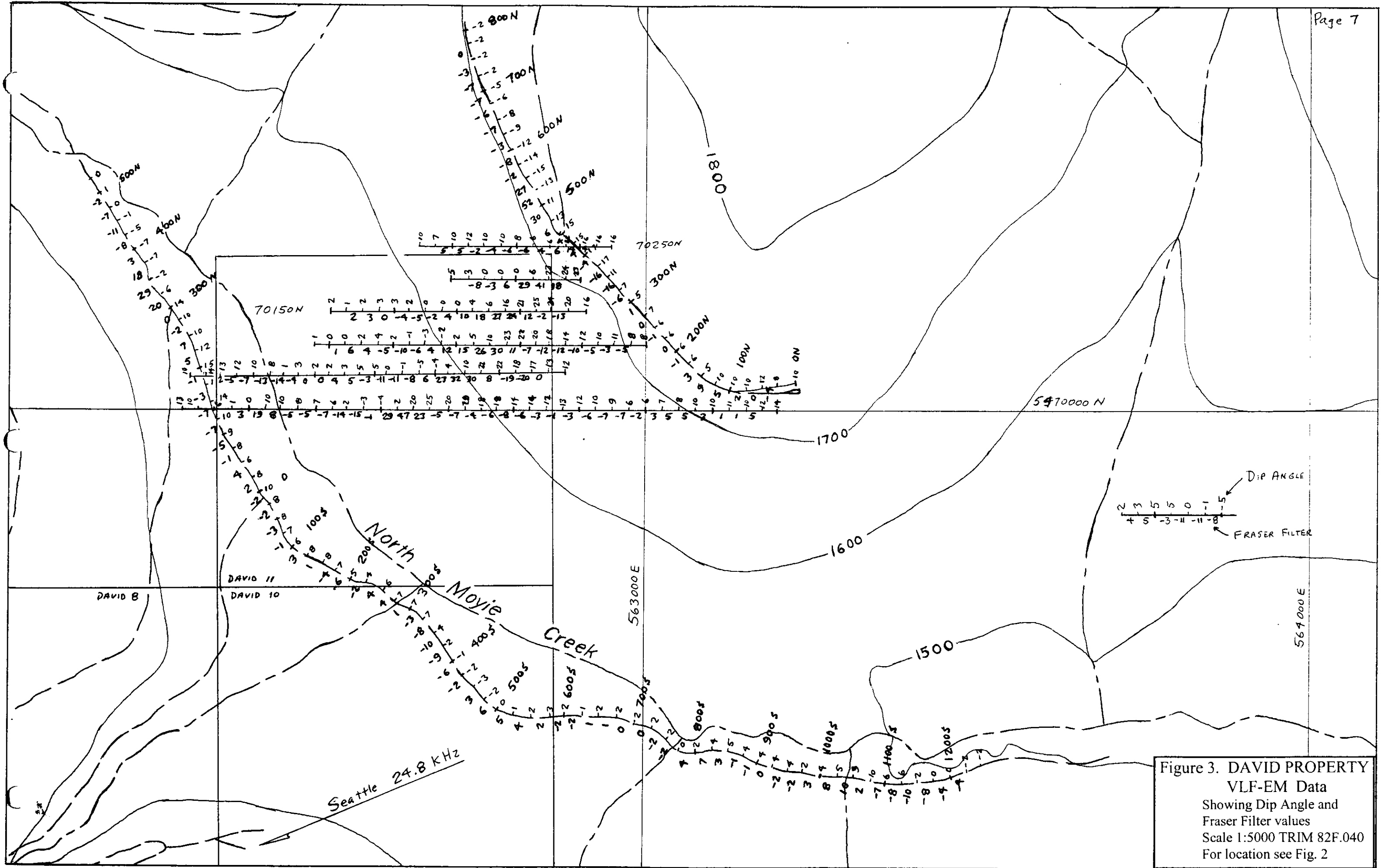


Figure 3. DAVID PROPERTY
 VLF-EM Data
 Showing Dip Angle and
 Fraser Filter values
 Scale 1:5000 TRIM 82F.040
 For location see Fig. 2

VLF-EM receiver measures the resultant field of the primary and secondary fields, and measures this as the tilt or 'dip angle'. The Crone Radem VLF-EM receiver measures both the total field strength and the dip angle.

The VLF-EM uses a frequency range from about 15 to 28 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can detect zones of relatively lower conductivity. This results in it being a useful tool for geologic mapping in areas of overburden but it also often results in detection of weak anomalies that are difficult to explain. However the VLF-EM can also detect sulfide bodies that have too low a conductivity for other EM methods to pick up.

Results were reduced by applying the Fraser Filter and both dip angle and Fraser Filter values are shown on the survey lines in Figure 3. Profiles of the data, with Field Strength, Dip Angle and Fraser Filter data, are provided in Figures 4a, 4b, 4c and 4d.

The Fraser Filter is essentially a 4-point difference operator which transforms zero crossings into peaks, and a low pass operator which induces the inherent high frequency noise in the data. Thus the noisy, often non-contourable data are transformed into less noisy, contourable data. Another advantage of this filter is that a conductor which does not show up as a zero crossover in the unfiltered data quite often shows up in the filtered data.

3.22 Discussion of Results

Three anomalies were identified on the main North Moyie Creek road. Additional surveying is required to establish the orientation of these anomalies. On the upper road, two anomalies were identified, near the northeast corner of the claim block. The eastern anomaly may correlate with the middle anomaly of the main North Moyie Creek road survey - if so, this anomaly would be parallel to the Old Baldy Fault. The location of the Old Baldy Fault is evident on the upper road, with an apparent slice of Creston Formation quartzites sandwiched between footwall middle Aldridge rocks to the east and hangingwall upper Aldridge Formation rocks to the west. The Old Baldy Fault zone is not a VLF-EM anomaly here although the filtered data shows a strong negative value (-16) at the fault trace.

VLF-EM surveying on the 6 grid lines on the northern David 11 claim define a broad northeast-trending anomaly in the immediate hangingwall area of the Old Baldy Fault zone, and trending parallel to the Old Baldy Fault. Some complexity is evident in that this grid anomaly apparently does not correlate with the strong VLF-EM anomaly on the western part of the upper road survey. These results suggest there is previously unrecognized structural complexity associated with the Old Baldy Fault. As known mineralization at the main David mineralized zone is structurally-controlled, this inferred structural complexity associated with the Old Baldy Fault bodes well for the discovery of additional gold mineralization on the David claims.

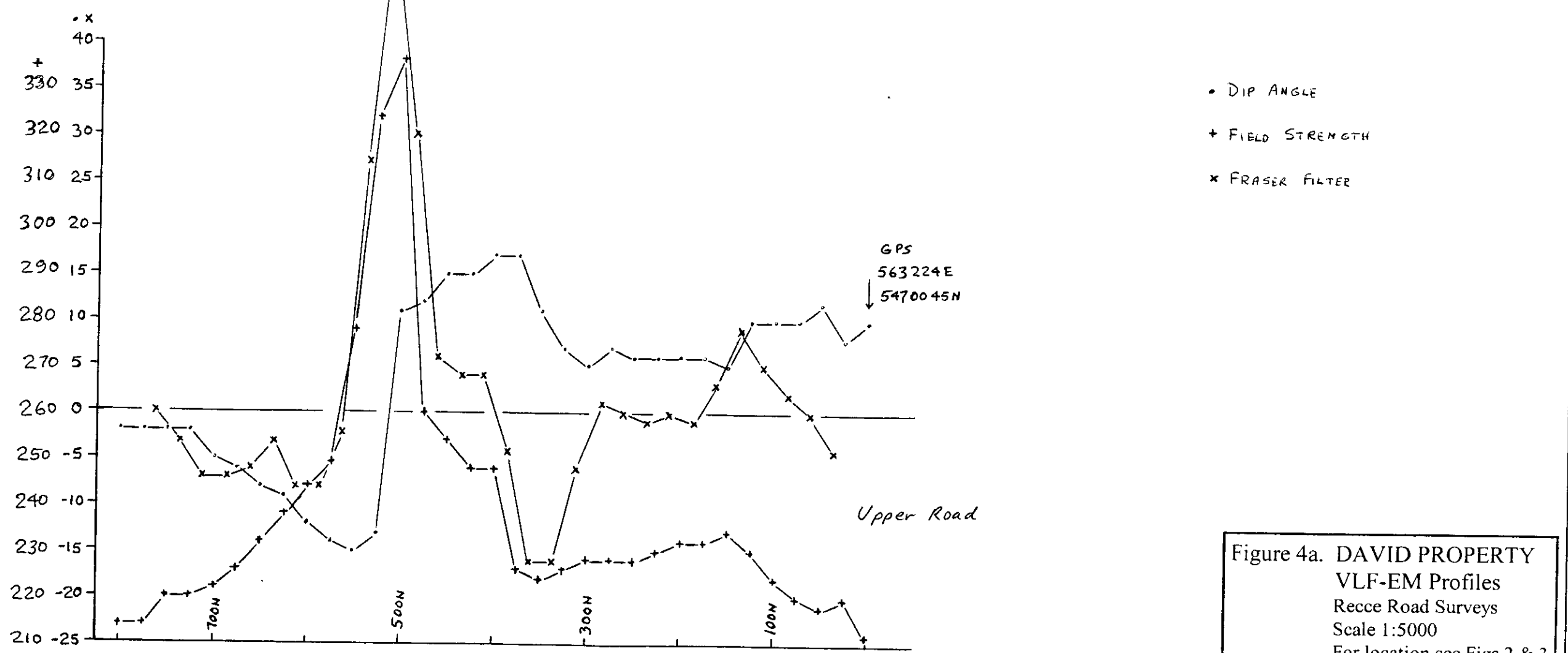
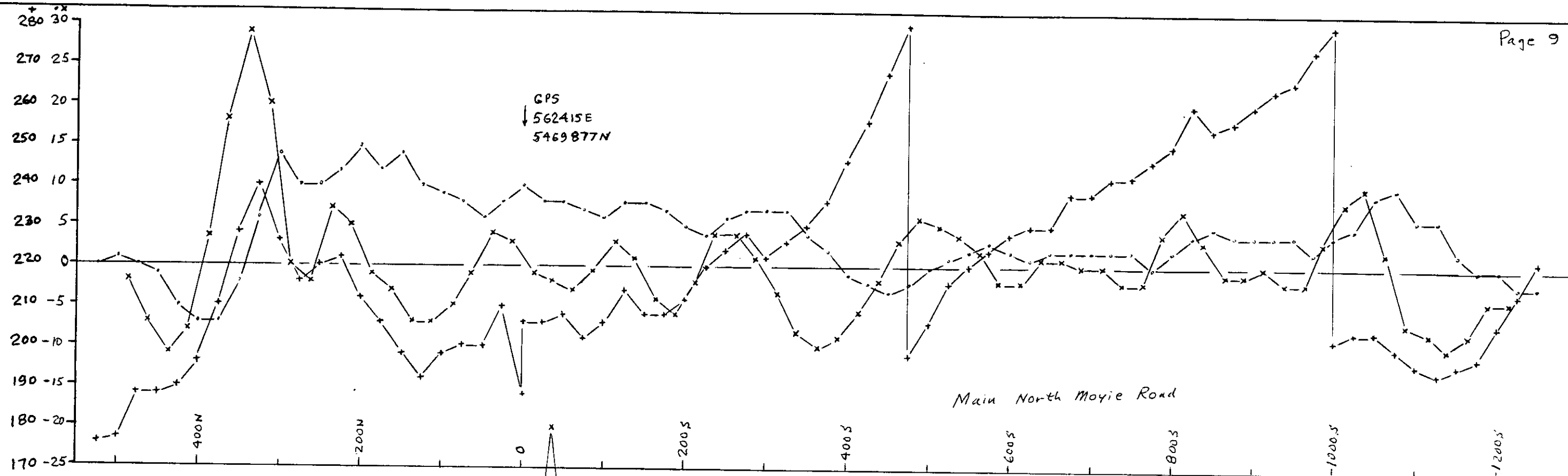
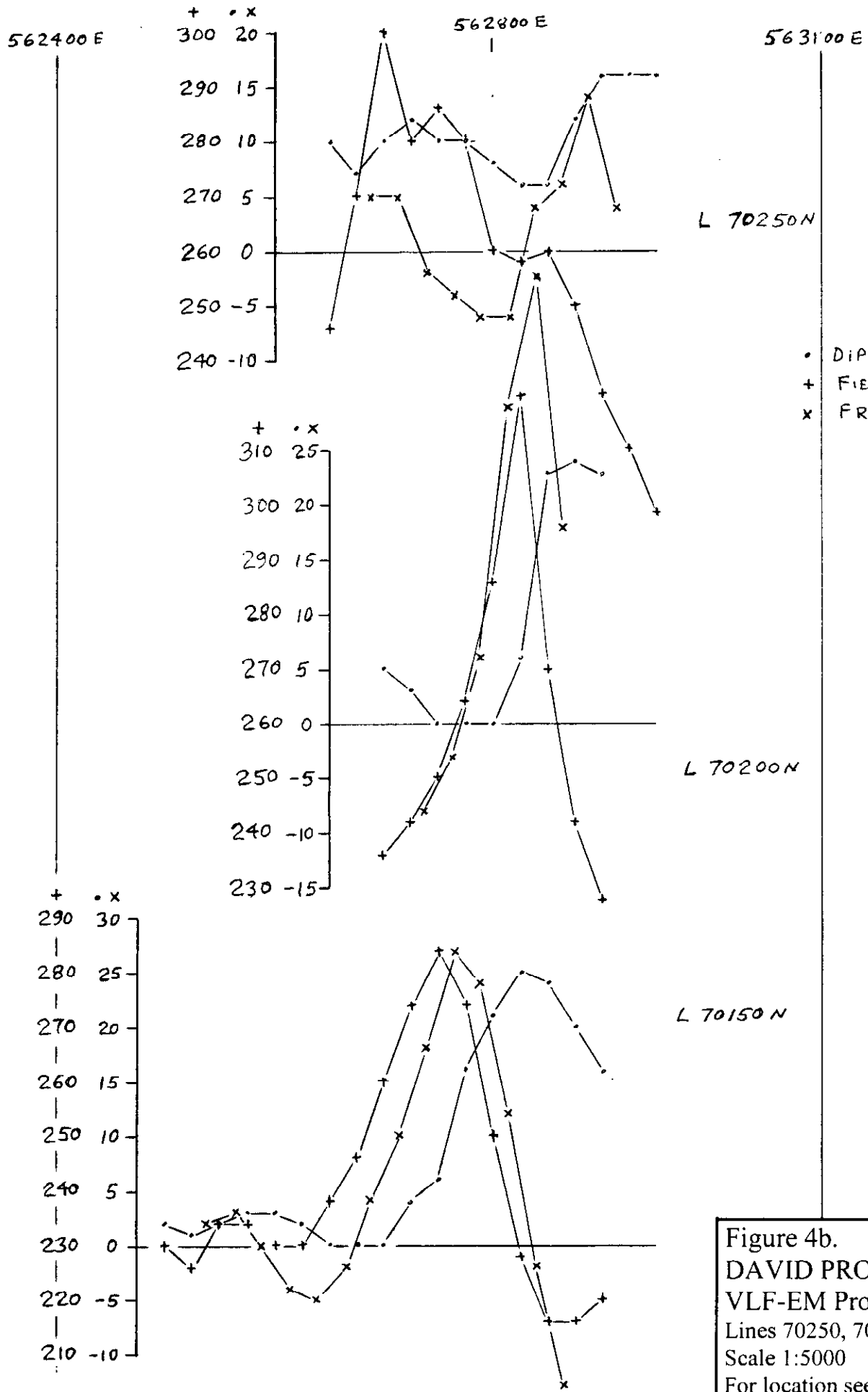


Figure 4a. DAVID PROPERTY
VLF-EM Profiles
Recce Road Surveys
Scale 1:5000
For location see Figs 2 & 3



• DIP ANGLE
+ FIELD STRENGTH
x FRASER FILTER

Figure 4b.
DAVID PROPERTY
VLF-EM Profiles
Lines 70250, 70200 & 70150
Scale 1:5000
For location see Figs 2 & 3

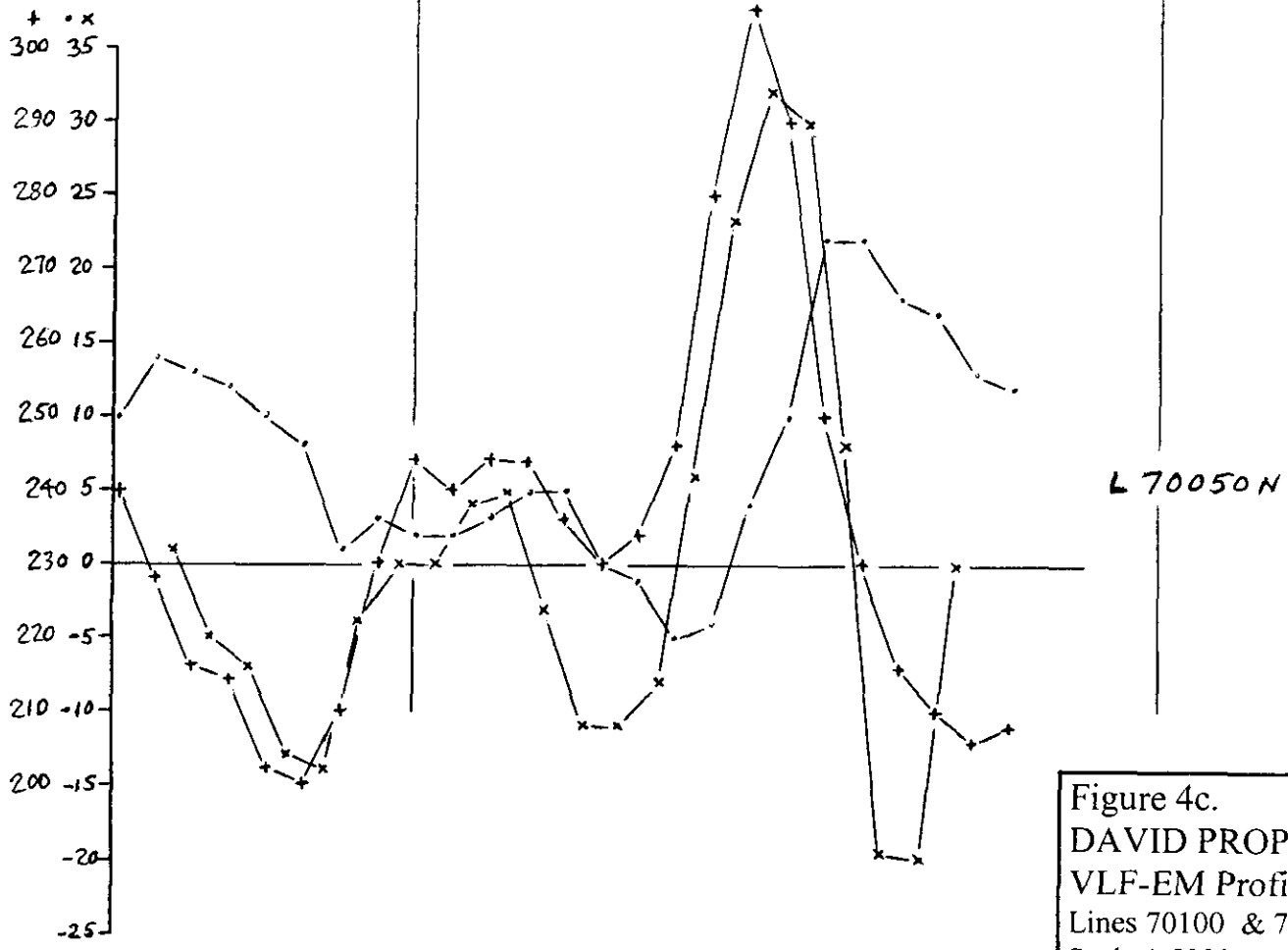
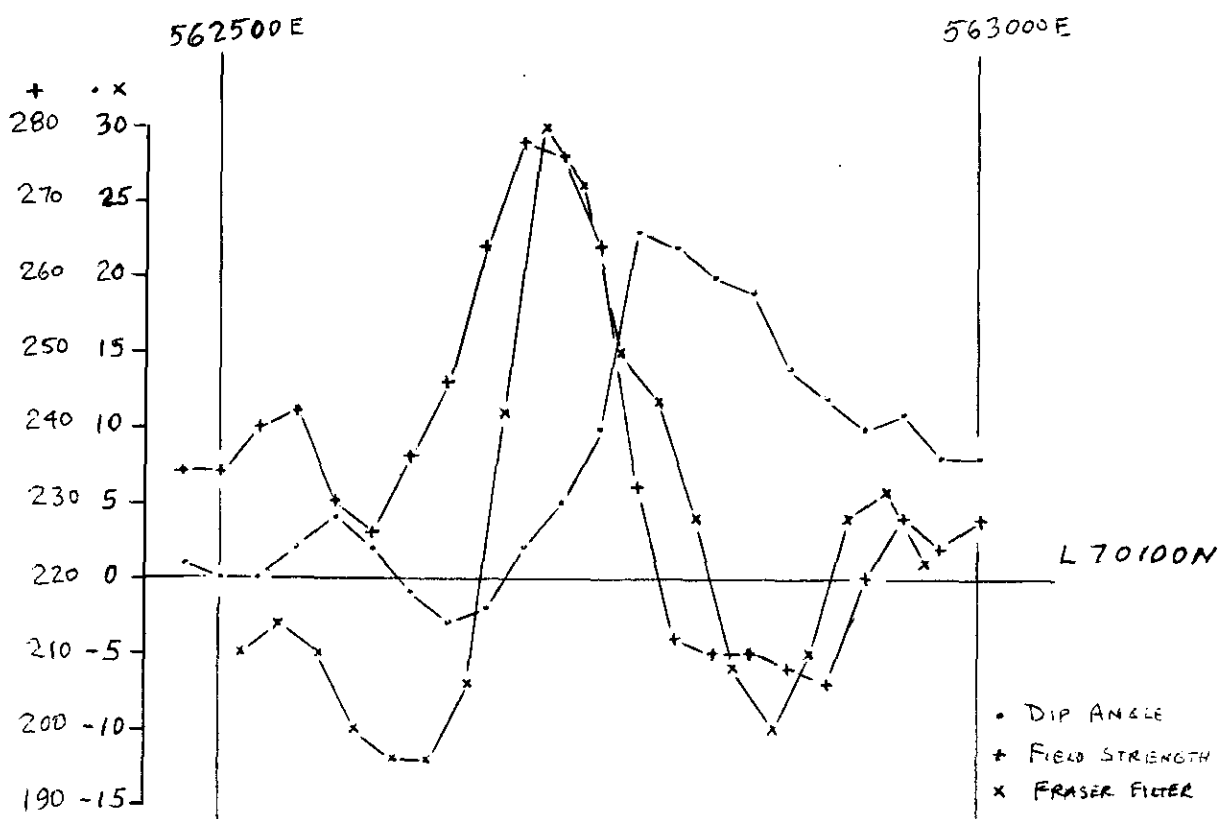


Figure 4c.
DAVID PROPERTY
VLF-EM Profiles
Lines 70100 & 70050
Scale 1:5000
For location see Figs 2 & 3

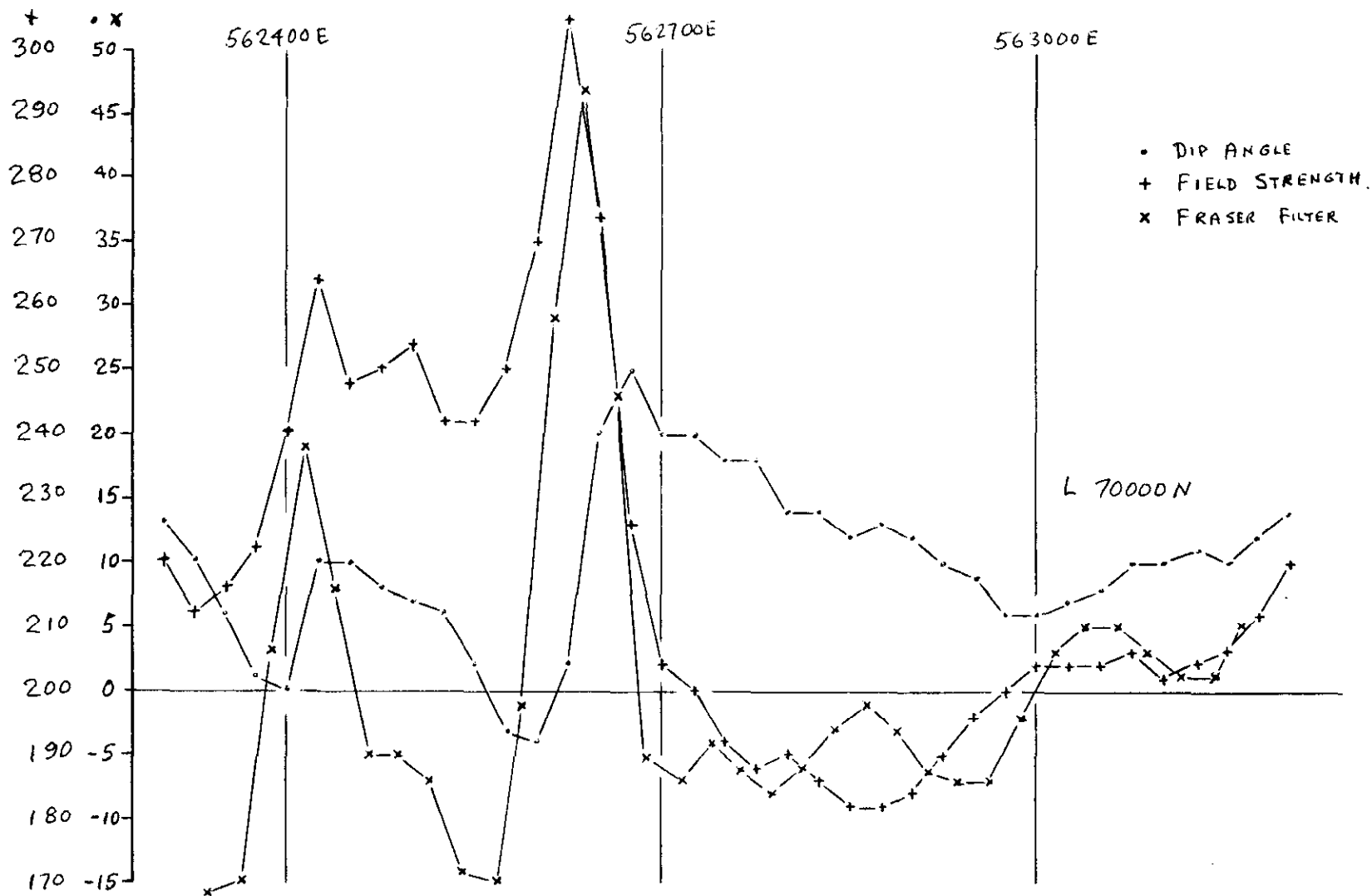


Figure 4d.
 DAVID PROPERTY
 VLF-EM Profiles
 Line 70000
 Scale 1:5000
 For location see Figs 2 & 3

4.00 CONCLUSIONS

Reconnaissance and grid VLF-EM surveying on the David claims in 2003 has detected a number of anomalies proximal to the Old Baldy Fault. At least one of the anomalies, partially delineated by the grid survey, trends parallel to the Old Baldy Fault and may be an associated feature. Other anomalies, which at present are just single line anomalies, require further work to establish their orientation.

The Old Baldy Fault zone shows up on the upper road survey line as a filtered fairly strong negative value.

Further VLF-EM surveying is warranted to further delineate the anomalies so they may be better understood.

5.00 REFERENCES

- Hoy, T., 1982 The Purcell Supergroup in southeastern British Columbia: sedimentation, tectonics and stratiform lead-zinc deposits. In : Precambrian sulphide deposits; H.S. Robinson Memorial Volume (R.W Hutchison, C.D. Spence, and J.M. Franklin, Eds.) Geol. Assoc. Can. Special Paper 25.
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6.00 STATEMENT OF EXPENDITURES

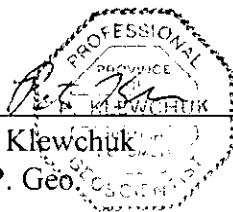
VLF-EM surveying 2.5 man-days @ \$300.00 / day	\$750.00
4x4 truck rental 3 days @ \$75.00 / day	225.00
VLF-EM rental 3 days @ \$25.00 / day	75.00
Report and drafting 2 days @ \$300.00 / day	600.00
Report and field supplies	52.00
Physical work; clearing brush and debris from surface trench at main mineralized zone, repairing washout on main North Moyie Road: 2 man-days @ \$250.00 / day	500.00
4x4 truck rental 2 days @ \$75.00 / day	150.00
Chain saw rental 2 days @ \$25.00 / day	50.00
Total Expenditure	<u>\$2402.00</u>

8.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 28 years.
5. I have been employed by major mining companies and provincial government geological departments.

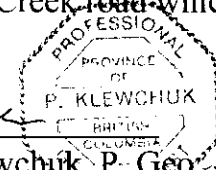
Dated at Kimberley, British Columbia, this 6th day of January, 2004.

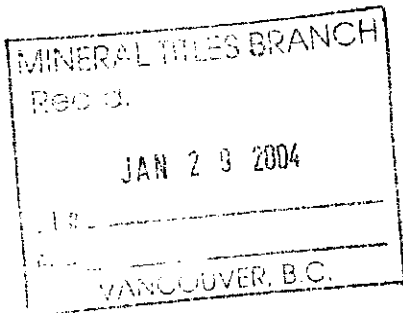

Peter Klewchuk
P. Geoscientist

Description of Physical Work
David Property

Two days were spent in the fall of 2003 on the following:

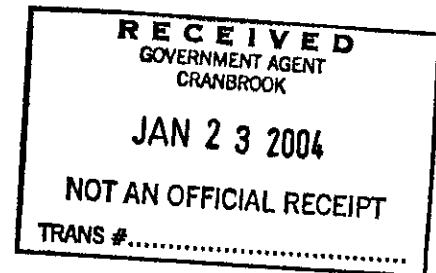
1. Cleaning off the main trench which exposes high grade gold mineralization and shows the character of the shear zone. This trench was dug in 1989 and has not been maintained since. Work included removing debris and pulling many small trees which have started to grow in the trench area.
2. Diverting a small stream back into its normal channel where it is threatening to wash out the main North Moyie road which provides access to the western part of the claim block.
3. Fixing water bars and cleaning brush off the main Kutlits Creek road which provides access to the main David Shear zone.


Peter Klewchuk
Peter Klewchuk, P. Geoscientist
January, 2004



PROLOGICAL SURVEY BRANCH
REPORT

27317



Repair Washout

DAVID 8

389884

694668M

DAVID 10

389885

694669M

DAVID 7

389883

2694566M

DAVID 24

211100

611497M

DAVID 23

211099

611496M

DAVID 12

406225

724863M

DAVID 9

406226

724864M

DAVID 4

210978

613165M

DAVID 2

210978

613164M

Area of Cleaning Main Trench

Fixing waterbars, Clearing brush

HARMONY 2

336471

660534M

HARMONY 1

336470

660533M

DAVID 3

210977

613165M

DAVID 5

210975

613163M

SMC 3

331485

653535M

HARMONY 4

336473

660536M

HARMONY 3

336472

660535M

DAVID 6

210980

613160M

DAVID 5

395723

211589

209891

LEW 23

6NX2W



1 Km

SMC 2

328

Figure 2
DAVID PROPERTY CLAIM MAP
Scale 1: 20,000 NTS 82 F/8 E
TRIM MAP 82F.040

Showing areas of Physical Work

NELSON M.D.
FORT STEELE M.D.

COOPER 6
387415 R
705006M

COOPER 5 2
387414
705005M

COOPER 4 2
387413

MOYIE 18 1
338380

MOYIE 19
657980M

661

273

3910000
396101
Eddy 52
389095
Eddy 53
386099
Eddy 54
391010
Eddy 55
391016
Eddy 56
391017

WAVEY RD

NELSON M.D.
FORT STEELE M.D.