



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S) GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL	TOTAL COST \$76,038.00
---	---------------------------

AUTHOR(S) David Shaw SIGNATURE(S) *David Shaw*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED .. September 12, 1984 YEAR OF WORK 1984
PROPERTY NAME(S) NIE Claim Group, SNIE Claim Group, NIE #8 Claim, DUCK Claim

COMMODITIES PRESENT .. gold, silver

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION .. Atlin NTS 104K, Tulsequah Sheet

LATITUDE .. 58°19' LONGITUDE .. 132°18'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

NIE #3-#7; NIE #2, SNOW 1, SNOW 3-6; NIE #8 (20 units); DUCK Claim (18 units)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

OWNER(S)
(1) .. Chevron Canada Limited (2)

MAILING ADDRESS
1900 - 1055 West Hastings St.,
Vancouver, B. C. V6E 2E9

12,688

OPERATOR(S) (that is, Company paying for the work)
(1) .. Chevron Canada Resources Limited (2)

MAILING ADDRESS
1900 - 1055 West Hastings St.
Vancouver, B. C. V6E 2E9

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):
Main rock types are pre-Upper Triassic, intermediate to mafic, chloritized volcanics and Triassic, foliated diorite. Also get pre-Upper Triassic phyllite, limestone and mafic/ultramafics. Main structure is West Wall fault, strikes northerly and dips steeply to east. Majority of Claim area located on hanging wall, highly fractured zone segmented into large blocks. Alteration and mineralization associated with West Wall fault on west side and Ultramafic fault on east.

REFERENCES TO PREVIOUS WORK .. NIE Group '82 and '83; NIE #8 '82 and '83; SNOW Group '83.

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground	1:10,000 40.75 km ²	NIE #2-#8; DUCK	\$20,980.00
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	66.52 km	NIE #2-#4	\$ 9,000.00
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analyzed for)			
Soil	1134	NIE #2-#4	\$28,155.00
Silt			
Rock	155	NIE #2-#7, NIE #8, DUCK	3,000.00
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)	68.17 km	NIE #2-#4	\$12,303.00
Road, local access (kilometres)			
Trench (metres)	14.6	NIE #2	\$ 2,600.00
Underground (metres)			
			TOTAL COST \$76,038.00

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date	Rept. No.			Information Class

ASSESSMENT REPORT
GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEY
NIE and SNIE GROUPS, DUCK and NIE 8
ATLIN MINING DIVISION
TATSAMENIE LAKE AREA, B. C.
N.T.S. 104K/TULSEQUAH SHEET
58°19'N
132°18'W

OWNER: CHEVRON CANADA LIMITED
OPERATOR: CHEVRON CANADA RESOURCES LIMITED

AUTHOR: DAVID SHAW
November 1984

TABLE OF CONTENTS

	<u>Page</u>
LOCATION AND ACCESS	1 /
CLAIMS	1 /
PREVIOUS WORK	1 /
REGIONAL GEOLOGY	3 /
CLAIM GEOLOGY	3 /
STRUCTURAL GEOLOGY	6 /
MINERALIZATION AND ALTERATION	7 /
GEOCHEMICAL SURVEY	8 /
GEOCHEMICAL RESULTS	9 /
VLF. GEOPHYSICAL SURVEY	10 /
GEOPHYSICAL RESULTS	11 /
TRENCH RESULTS	12 /
CONCLUSIONS AND RECOMMENDATIONS	13 /
REFERENCES	14 /
COST STATEMENT	15 /
STATEMENT OF QUALIFICATIONS	19 /

LIST OF FIGURES

	<u>Page</u>
FIGURE 1: Location Map	2 ✓
2: Claim Map	3 ✓
3A: Geology (north)	in pocket
3B: Geology (south)	"
4: Trench Map	"
5: Soil Geochemistry: Gold	"
6: Soil Geochemistry: Arsenic and Antimony	"
7A: VLF Contour Map NIE Northwest	"
7B: VLF Contour Map NIE Northeast	"
7C: VLF Contour Map NIE Northeast extension	"
7D: VLF Contour Map NIE Southwest	"
7E: VLF Contour Map NIE Southeast	"
8A-M: VLF Profiles NIE West	"
9A-Q: VLF Profiles NIE East	"

LOCATION AND ACCESS

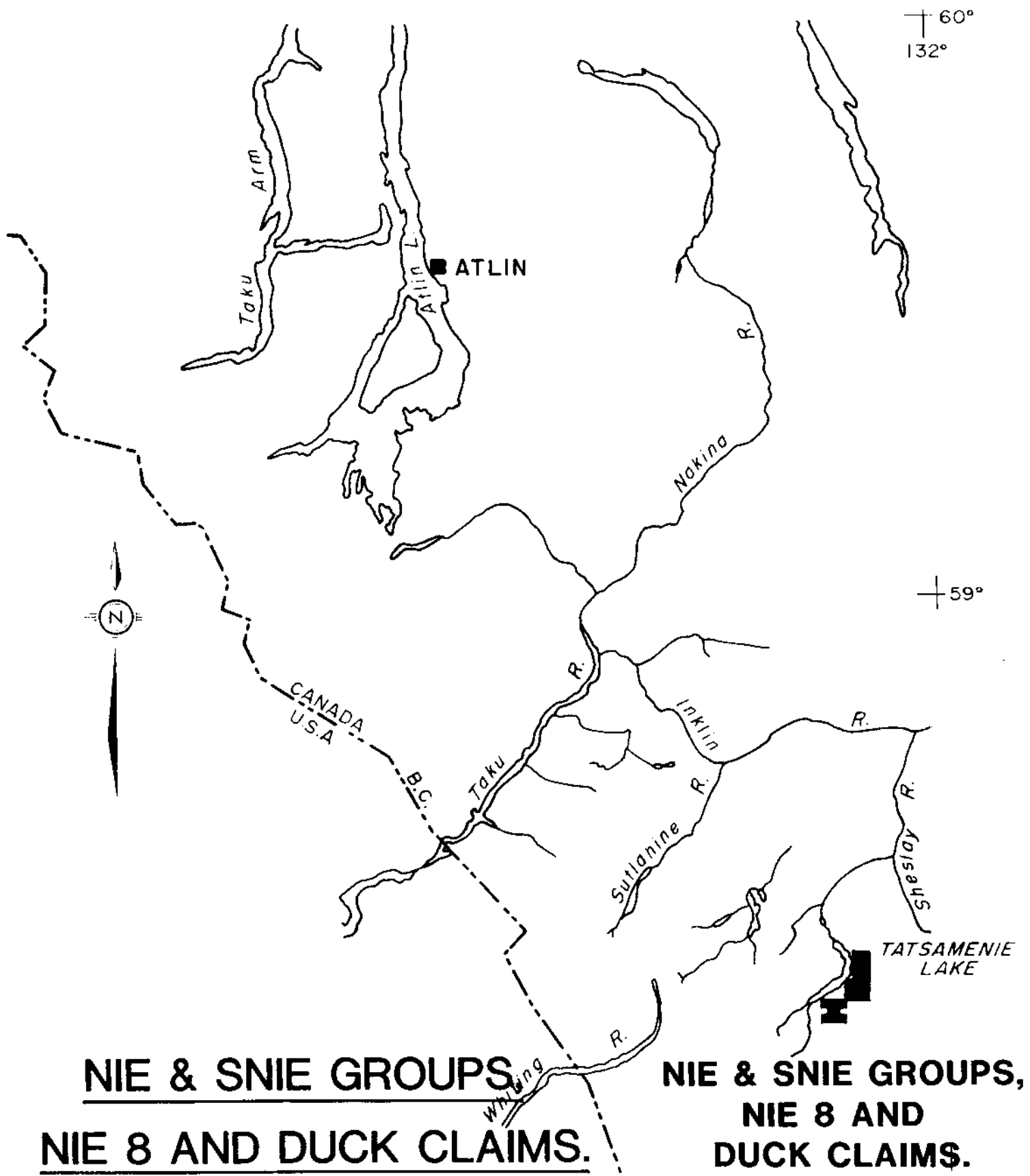
The NIE Group (NIE #3 to #7), the SNIE group (NIE #2, SNOW #1, #3 to #6), NIE #8 and the DUCK claims are located 58°19'N and 132°18'W. Sam Creek is at the southern end of these claims and they extend northwards to and alongside the southeastern and eastern shoreline of Tatsamenie Lake. The small town of Atlin, B.C. is approximately 150 km to the northwest whilst Juneau, Alaska is approximately 140 km to the east.

CLAIMS

<u>Claim</u>	<u>Record Number</u>	<u>Record Date</u>	<u>No. of Units</u>
NIE #2	1540	September 18, 1981	20
NIE #3	1541	September 18, 1981	20
NIE #4	1542	September 18, 1981	20
NIE #5	1543	September 18, 1981	15
NIE #6	1544	September 18, 1981	10
NIE #7	1545	September 18, 1981	20
NIE #8	1546	September 18, 1981	20
SNOW 1	1748	September 22, 1982	15
SNOW 3	1750	September 22, 1982	16
SNOW 4	1751	September 22, 1982	4
SNOW 5	1752	September 22, 1982	20
SNOW 6	1753	September 22, 1982	15
DUCK	2054	September 26, 1983	18

PREVIOUS WORK

In 1982 Chevron Canada Resources Limited performed rock and soil sampling plus reconnaissance mapping on the NIE Claim Group and on NIE #8. A total of 243 soil samples and thirty-six rock samples were collected and analysed. The mapping/prospecting failed to reveal any major areas of alteration and/or mineralization. Results from the rock and soil sampling programmes failed to indicate any zones of anomalous precious metal mineralization.



LOCATION MAP

M 504

FIG. 1

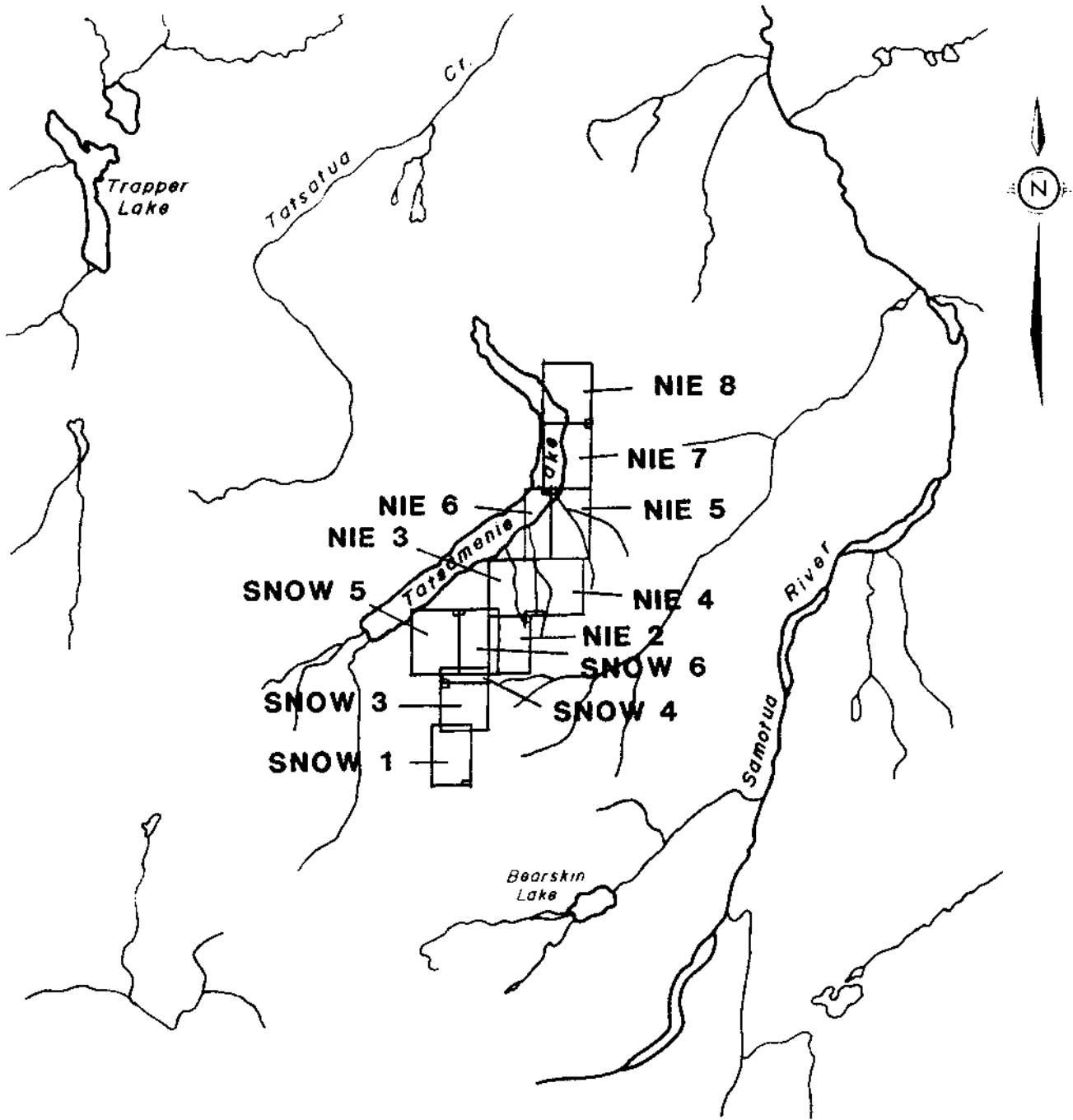
0 30
Km

In 1983 Chevron Canada Resources Limited performed prospecting, reconnaissance mapping plus a limited amount of detailed mapping, rock and soil sampling on the SNOW claims (part of SNIE Group), the NIE Claim Group and on NIE #8. A total of seventy-nine rock samples and six hundred and forty-one soil samples were collected and analysed for precious metal and trace element content.

The majority of the rock and soil samples were collected on the NIE Group (fifty-five and three hundred and eighty-five respectively). The soils were collected from a large grid on NIE #4 and #5 which was an extension to the NIE #3 soil grid constructed during 1982. Only one rock sample was found to be highly anomalous in gold; there were some weak anomalies. Geochemical results from the soil survey failed to indicate any strong gold or silver anomalies.

Forty-nine soil samples were collected from contour soil lines on the NIE #8 claim, these lines were orientated to complement those utilized during the previous season. Only three samples contained greater than 50 ppb gold; silver, arsenic and antimony values were all at background levels.

Twenty-four rock and two hundred and seven soil samples were collected from the SNOW Group (these claims have now been re-grouped and are part of the SNIE Group). Due to the nature of the topography and lack of good soil development most of these samples were from SNOW 1, 2, 5 and 6. Analysis for Au, Ag, As, Sb yielded a distribution that was weak and sporadic. The main area of interest generated was one of anomalous arsenic and antimony values on SNOW 1.



NIE + SNIE CLAIM GROUPS , DUCK AND NIE 8 CLAIMS



M523

FIG. 2

REGIONAL GEOLOGY

The area south and immediately east of Tatsamenie Lake and north of Sam Creek (excluding the area covered by the MISTY Claim Group) consists predominantly of pre-Upper Triassic volcanic rocks intercalated with sedimentary rocks and Lower-Middle Triassic age, foliated, hornblende diorite (Souther, 1971). Intruding these rocks are stocks and dykes of non-foliated, post-Middle Jurassic diorite.

Structurally the area is dominated by the northerly striking West Wall fault which lies on the west side of the NIE Claims. To the south this structure strikes through the MISTY Claim Group. On the western side of the NIE Claims, there is another major fracture that has within it pods of mafic/ultramafic rocks, predominantly amphibolite. The ground in between these two major structural breaks is segmented by a complex array of conjugate joints and faults.

Tight to isoclinal, small scale (wave length less than one metre) folds are observed in thinly layered limestone, the limestone outcrops being fault blocks or slivers.

CLAIM GEOLOGY

Pre-Upper Triassic Rocks (Units 1, 2, 3 and 4)

The pre-Upper Triassic rocks are of four main types - mafics/ultramafics, limestones, phyllites and volcanics. These rocks account for approximately sixty-five percent of the claims outcrop, the volcanics are by far the most abundant whilst the limestone and phyllites are restricted in outcrop. The degree of deformation varies; tight to isoclinal minor folds are recognized in the thinly layered limestones whilst brittle failure phenomenon is well represented by numerous faults and shear zones.

Rock exposure varies from non-existent (in the vegetated, glacial and lacustrine sediment covered area bordering Tatsamenie Lake) to one hundred percent on the glaciated valley sides.

A varied degree of chloritization has affected all of the volcanics and has resulted in a large volume of greenstone being produced. The most common volcanic rock type is a fine to medium grained tuff which is usually strongly chloritized but not deformed unless adjacent to a fault(s). Subordinate in frequency to the tuffs are fine grained, dark green-black, magnetic, massive flows. Many of the chloritized tuffs and flows have been sheared producing phyllites and schists.

Stratigraphy within the volcanics is difficult to establish due to rapid textural changes. One possible marker horizon is an augite porphyry that contains phenocrysts up to 2 centimetres in length. Textural differences are often masked on the weathered surfaces which are generally dark green except where a local pyrite content has produced a rusty red patch of hematite.

The limestone occurs either as slivers in a shear zone that is located in the hangingwall of the West Wall fault or as fault blocks within the central area. The limestone varies from a clean white/grey, massive type to a thinly layered, grey, carbonaceous rock. As the limestone is everywhere in fault contact with adjacent rocks its stratigraphic position is unknown. Detailed mapping to the south by the author has indicated that the limestones are stratigraphically below the previously described volcanics.

A single outcrop of grey/buff siliceous phyllite was recognized. These thinly layered metasediments occur as a fault sliver within a shear zone that is structurally located on the hangingwall of the West Wall fault.

On the eastern part of the NIE Claim Group and in the DUCK Claims (Figures 3A and 3B) highly sheared, fracture bounded blocks of amphibolite occur. These exotic rocks are located in a major structure that strikes north-south, the Ultramafic Fault zone.

Triassic Diorite (Unit #5)

Approximately thirty percent of the Claim Group is underlain by a diorite of Lower or Middle Triassic age (Souther, 1971). This intrusive is fine to medium grained and greenish-grey in colour. Biotite and hornblende, often altered to chlorite and epidote, are aligned to form a planar fabric. Feldspars are often weathered to a chalky-white colour possibly indicating saussuritization.

Both the eastern and western contacts of the diorite body within the central part of the NIE Claims as well as the western contact of the foliated diorite body on the eastern side of the NIE Claims, adjacent to the DUCK and NIE #8 Claims, are of a sheared intrusive nature. Iron carbonate alteration plus minor silica veining and silicification has occurred sporadically along these contacts, affecting primarily the contact volcanics.

Cretaceous-Jurassic Diorite (Unit #6)

Within the central part of the NIE Claim Group is what appears to be a faulted, non-foliated diorite stock. Emanating from this intrusion into the volcanic country rock are numerous diorite dykes. This diorite is distinguished from the previously described diorite by an absence of mineral fabric and a distinctive red colour. The unaltered

appearance of the rock is that of a syenite due to the presence of iron contaminated plagioclase feldspar which is red in colour. The dykes vary in width from a few centimeters to a couple of metres and are usually cut by a well developed joint pattern, as in the stock.

The location and orientation of the dykes appears to be controlled by local fractures, either at the contact of different rock types or within a single rock type.

STRUCTURAL GEOLOGY

A major fault, the West Wall fault, strikes north-northwesterly through the western part of the NIE Claim Group. The structure dips steeply to the east. In the footwall there are volcanics - tuffs in the northern part and massive, fine-grained flows in the southern part. A shear zone composed of slivers of limestone, phyllite and volcanics forms the immediate hangingwall. Non-foliated diorite and quartz-feldspar porphyry dykes as well as quartz veins have been injected into the fault and hangingwall shear zone.

On the eastern side of the NIE Claims and on NIE #8 and the DUCK Claims there is another major fracture, the Ultramafic fault. This structure has north-south alignment with a vertical dip. Amphibolite within the structure is strongly fractured.

Wall rocks are also fractured and faulted, parts of the west wall volcanics being intensely sheared. The fault zone in places has a width of up to 0.5 km, this zone being occupied by fracture segmented, amphibolite blocks.

The ground between the two major fractures is strongly jointed and faulted. Movement along fractures has moved juxtaposed limestone blocks against the stratigraphically younger and structurally higher volcanics.

Minor folds, tight to isoclinal, of small wavelength are recognized within the limestone slivers located on the West Wall fault hangingwall shear zone. These folds are thought to be correlative with those generated during a regional second phase of deformation (this correlation is based on detailed mapping done by the author on ground to the south).

MINERALIZATION AND ALTERATION

The majority of the alteration, mineralization and vein intrusion within the claim group occurs at, or in the hangingwall of, the West Wall fault. Rock samples collected at locations on or adjacent to this structure yield the highest gold values. The most promising section of the structure (based on mapping and geochemical values from surface grab samples) was trenched (Figure 4 and page 12). Along its entire length the West Wall fault exhibits evidence of either alteration, vein intrusion and/or mineralization. The alteration type may be iron-carbonate and/or silica, the former is more apparent and plentiful being particularly well developed within pods of chloritized volcanics located in the hangingwall shear package. Veins may be composed of either quartz or non-foliated diorite. One section of diorite (Station DS-337) has been fractured parallel to the structure that it intrudes and is itself veined by quartz. These veins have yielded assay values in excess of 14 gms. gold.

The north-northwest/south-southeast trending Au-Sb-As soil anomaly (Figures 5 and 6) is probably a reflection of mineralization along the West Wall fault.

On the east side of the claims there is a major structural break (the Ultramafic fault) that contains mafic/ultramafic pods. Associated with this structure is strong shearing and alteration. The volcanics at the west contact are highly iron-carbonate altered with some subordinate quartz veining and silicification. This structure can be traced northwards to NIE #8 where grab samples of altered and fractured foliated diorite yielded anomalous Au values.

These two major, northerly striking fractures (the West Wall fault and the Ultramafic fault) enclose an area that is diversely segmented by numerous fractures and faults. Alteration and mineralization is concentrated at, or adjacent to, these structures. Iron carbonate alteration of volcanics is common with minor silica veining and silicification. Less common is silica alteration of the limestone fault blocks that are occasionally located within the ubiquitous volcanics. Whilst such mineralization and alteration of the volcanics may show anomalous concentrations of As and Sb the presence of anomalous amounts of Au is somewhat rare.

GEOCHEMICAL SURVEY

Soil Geochemistry

A baseline, originating on the southeastern shoreline of Tatsamenie Lake and trending due south for a distance of 5.4 km, was surveyed, cut and marked. Cross lines were orientated at ninety degrees to the baseline and spaced at one hundred metre intervals. These lines were compassed and chained, pickets were placed every 25 m. Cross lines to the west of the baseline extend up to 1700 m, those to the east have a maximum length of 3100 m.

One thousand, one hundred and thirty-four soil samples were collected during 120 man days of work (Figures 5 and 6). Sample sites were spaced at 50 m intervals, samples were collected by use of a soil mattock with the upper B soil layer being the target horizon.

Soil samples were placed in kraft wet strength soil bags, air dried and shipped to Chemex Labs, North Vancouver, B. C. The samples were further dried and then sieved, with the -80 mesh portion being retained for analysis. Rock samples were crushed and then pulverized in a ring grinder to -100 mesh. For Au determination, a fire assay - atomic absorption technique is used with the fire assay bead being dissolved in HCl and HNO₃ then analyzed by conventional atomic absorption techniques. For Ag, a mixture of HClO₄ and HNO₃ is used to digest the sample, which is followed by atomic absorption spectrophotometry. The As analyses are done by standard colorimetric techniques following an HClO₄ plus HNO₃ digestion. Antimony analyses are done by digesting the sample in HCl, then adding potassium iodide, extracting with TOPO - MIBK and then analyzing by atomic absorption spectrophotometry.

GEOCHEMICAL RESULTS

Laboratory analysis revealed anomalous Au values up to 595 ppb (grid location 3400S - 840W) the majority of these anomalous values appear to be related to the West Wall fault. The north-central and eastern parts of the grid (those outside of the MISTY claim group) show only low levels of Au content.

The distribution of anomalous Sb and As samples is similar to that of Au in that they also appear to be related to the West Wall fault. The north-central and eastern part of the grid are generally devoid of anomalous samples. An exception to this occurs on

line 1600S immediately east of the baseline where there are thirteen consecutive anomalous Sb samples. This anomalous zone is possibly related to mineralization along an east-west trending fault which possibly intersects the main area of mineralization associated with the West Wall fault.

Rock Geochemistry

Eighteen of the one hundred and twenty-five rock samples assayed returned values in excess of 100 ppb Au. Five of these samples had Au contents in excess of one thousand ppb. The highest value obtained was 8100 ppb, this sample was located in NIE #2 on the West Wall fault (the above does not relate to the DS-337 trench samples which will be discussed later). The majority of the anomalous samples were obtained on the West Wall fault.

Anomalous values of As, Hg and Sb are more common but also tend to be located at the West Wall fault or within the immediate hangingwall section. Exceptions to this are found at the northern end of the Ultramafic fault zone (NIE #8) and in the central part of the NIE Group where mineralization is associated with a complex fracture array.

VLF GEOPHYSICAL SURVEY

Principles of Operation

An EM 16 is a sensitive receiver covering the frequency band of VLF-transmitting stations with means of measuring the vertical field components. The receiver has two inputs, with two receiving coils built into the instrument. One coil has normally

vertical axis and the other is horizontal. The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt angle is calibrated in percentage. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil after being shifted by 90°. This coil is normally parallel to the primary field. Thus if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $1/2$ signal from the horizontal coil is a measure of the quadrature vertical signal (Geonics Operating Manual).

The magnetic field lines from a station are always at right angles to the direction of that station. Consequently a station (Seattle) was selected that gave a field approximately at right angles to the general strike of the geological structure (West Wall fault) that was being investigated.

The VLF-EM16 survey was conducted on the NIE grid. Readings were taken at 12½ metre intervals. Not all of the grid lines were covered during the survey; those readings taken are plotted in plan view and profile view in Figures 7A to 7E, 8A to M, 9A to Q.

GEOPHYSICAL RESULTS

A dominant feature of the VLF EM-16 survey is the extremely strong, linear response that strikes approximately north-northwest along the western edge of the grid. This zone varies in width from less than 50 m to in excess of 250 m and is probably generated by the West Wall fault and the associated hangingwall shear zone.

Elsewhere on the grid there is a varied electromagnetic response, determining the orientation of the conductors responsible however is difficult. It is assumed that they are related to the multiple fracture array that is found throughout the NIE claims.

TRENCH RESULTS

A 14.6 m long trench, orientated east-west, was blasted across the West Wall fault at station DS-337 (Figure 4). At this location the fault contact between the footwall volcanics and the hangingwall shear zone assemblage strikes north-south and dips steeply towards the east. Due to the precipitous terrain at this location the trench was not extended sufficiently far to the west to intersect the footwall volcanics.

Geology exposed in the trench involves two distinct units. A twelve metre width of a strongly jointed, weak to moderately altered, non-foliated diorite dyke forms the hangingwall contact with the footwall volcanics off to the immediate west. The diorite is fractured by two distinct through-going planar structures (Units G and K) and a third, less well defined fracture/shear zone (Unit P). Mineralization within the diorite appears to be fracture controlled. The highest Au assay (14.00 gm) was obtained from the fracture Unit G whilst the highest silver assay (Unit N - 8.9 gm) was obtained from strongly jointed and veined diorite.

Structurally overlying the diorite dyke and separated from it by yellow, clay gouge is highly fractured and sheared carbonaceous limestone. This limestone sliver is intruded by a mottled white/grey, quartz vein which contains xenoliths of the host rock.

Precious metal mineralization appears to be structurally controlled, the highly fractured carbonaceous limestone bounded by the quartz vein and gouge contains 3.1 gm Ag and 8.6 gm Au (Unit C).

CONCLUSIONS AND RECOMMENDATIONS

Detailed mapping, geochemical sampling, geophysical surveying and trenching has outlined major structures hosting mineralization and alteration. Whilst no widths of economic grade material were discovered on surface the geochemical and geophysical responses at and adjacent to the West Wall fault suggest that potential may exist at depth. Detailed mapping and sampling on and adjacent to the Ultramafic fault zone have also outlined a very interesting geological environment. Future work should be orientated towards further trench targets across the West Wall fault and into the hangingwall shear zone. Also detailed sampling and VLF-EM16 surveying should be carried out across the Ultramafic fault zone in order to locate sites for trenching.

REFERENCES

Geonics Limited, 1979. EM 16 Operating Manual

Souther, J. G. (1971). Geology and mineral deposits of Tulsequah map-area, British Columbia. Geological Survey of Canada, Memoir 362, 84p.

1984 EXPLORATION PROGRAMME

DUCK CLAIM

COST STATEMENT

PERIOD June 1 to August 30, 1984

(1) Personnel

<u>Name</u>	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>
D. Shaw	Geologist	7	1
F. Wohlgemuth	Geol. Asst.	1	

Average cost per man day \$221.00 \$1,768.00

Average cost for office day - \$240.00 240.00

(2) Analysis

Rock: 7 @\$18. 126.00

(3) Camp Costs

Total man days 8 @\$60./day 480.00

(4) Helicopter

3.1 hours @\$450./hr. 1,395.00

(5) Drafting

1 day @\$150./day 150.00

\$4,159.00

1984 EXPLORATION PROGRAMME

NIE #8 CLAIM

COST STATEMENT

PERIOD June 1 to August 30, 1984

(1) Personnel

<u>Name</u>	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>
D. Shaw	Geologist	1	1
F. Wohlgemuth	Geol. Asst.	1	
M. Wood	Sampler	2	
A. Paramonoff	Sampler	2	
A. Grigoruk	Sampler	2	
T. Zanger	Sampler	2	

Average cost per man day \$96.00 \$ 960.00

Average cost for office day - \$240.00 240.00

(2) Analysis

Rock: 54 @\$18. 972.00

(3) Camp Costs

Total man days 10 @\$60./day 600.00

(4) Helicopter

1.8 hours @\$450./hr. 810.00

(5) Drafting

1 day @\$150./day 150.00

\$3,732.00

1984 EXPLORATION PROGRAMME

NIE #3, #4, #5, #6 and #7

COST STATEMENT

PERIOD June 1 to August 30, 1984

(1) Labour

<u>Name</u>	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>	
D. Shaw	Geologist	18	8	
F. Wohlgemuth	Geol. Asst.	16		
M. Wood	Sampler	17		
A. Paramonoff	Sampler	17		
A. Grigoruk	Sampler	17		
A. Debowski	Surveyor	7		
C. Miroslaw	Surveyor	7		
D. Cook	Geophys. Tech.	15		
Average cost per man day \$106.00				\$12,084.00
Average cost for office day - \$240.00				1,920.00
(2) <u>Analysis</u>				
Soil: 928 @\$14.00				12,992.00
Rock: 41 @\$18.00				738.00
(3) <u>Camp Costs</u>				
Total man days 114 @\$60./day				6,840.00
(4) <u>Helicopter</u>				
15.3 hours @\$450./hr.				6,885.00
(5) <u>Drafting</u>				
5 days @\$150./day				<u>750.00</u>
				<u>\$42,209.00</u>

1984 EXPLORATION PROGRAMME

NIE #2, SNOW 1, 3, 4, 5, and 6

COST STATEMENT

PERIOD June 1 to August 30, 1984

(1) Labour

<u>Name</u>	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>
D. Shaw	Geologist	13	3
F. Wohlgemuth	Geol. Asst.	9	
M. Wood	Sampler	10	
A. Paramonoff	Sampler	10	
A. Grigoruk	Sampler	10	
A. Debowski	Surveyor	3	
C. Miroslaw	Surveyor	3	
D. Cook	Geophys. Tech.	22	

Average cost per man day \$106.00 \$ 8,480.00

Average cost for office day - \$240.00 720.00

Yukon Eric Mining Services

8 man days @\$133.13/day 1,065.00

(2) Analysis

Soil: 206 @\$14.00 2,884.00
Rock: 53 @\$18.00 954.00

(3) Camp Costs

Total man days 82 @\$60./day 4,920.00

(4) Helicopter

14.7 hours @\$450./hr. 6,615.00

(5) Drafting

2 days @\$150./day 300.00

\$25,938.00

STATEMENT OF QUALIFICATIONS

I, David Shaw, graduated from the University of Sheffield in 1973 with a B.Sc. (Hons. Geology) and from Carleton University in 1980 with a Ph.D. (Structural Geology).

I have worked for Chevron Canada Resources Limited since November 1, 1981.

David Shaw

DAVID SHAW

ASSESSMENT REPORT
GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL SURVEY
MISTY GROUP
ATLIN MINING DIVISION
TATSAMENIE LAKE AREA, B. C.
N.T.S. 104K/TULSEQUAH SHEET
58°17'N
132°18'W

OWNER: CHEVRON CANADA LIMITED
OPERATOR: CHEVRON CANADA RESOURCES LIMITED

AUTHOR: DAVID SHAW

October 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,688

TABLE OF CONTENTS

	<u>Page</u>
LOCATION AND ACCESS	1 ✓
CLAIMS	1 ✓
PREVIOUS WORK	1 ✓
REGIONAL GEOLOGY	2 ✓
GROUP GEOLOGY	2 ✓
STRUCTURAL GEOLOGY	4
MINERALIZATION AND ALTERATION	5 ✓
GEOCHEMICAL ANALYSES OF CLAIMS	5 ✓
GEOCHEMICAL RESULTS	6 ✓
VLF GEOPHYSICAL SURVEY	6 ✓
GEOPHYSICAL RESULTS	7 ✓
CONCLUSIONS AND RECOMMENDATIONS	8 ✓
REFERENCE	9 ✓
COST STATEMENT	10 ✓
STATEMENT OF QUALIFICATIONS	11 ✓

LIST OF FIGURES

	<u>Page</u>
FIGURE 1: Location Map	2 ✓
2: Geology	in pocket ✓
3: Soil Geochemistry: Locations	in pocket ✓
4: Soil Geochemistry: Au	in pocket ✓
5: Soil Geochemistry: As and Sb	in pocket ✓
6: VLF Contour Map	in pocket ✓
7: VLF Profiles	in pocket ✓

LOCATION AND ACCESS

The Misty Group (NIE 1, SAM 1, SNOW 2, MISTY 1 and 2) is located at 58°17'N and 132°18'W, about five km south of Tatsamenie Lake. Atlin, B.C. is approximately 160 km northwest of the Misty group (Figure 1). A helicopter provided access to the property from the Tatsamenie Lake camp on the western shore of the lake.

CLAIMS

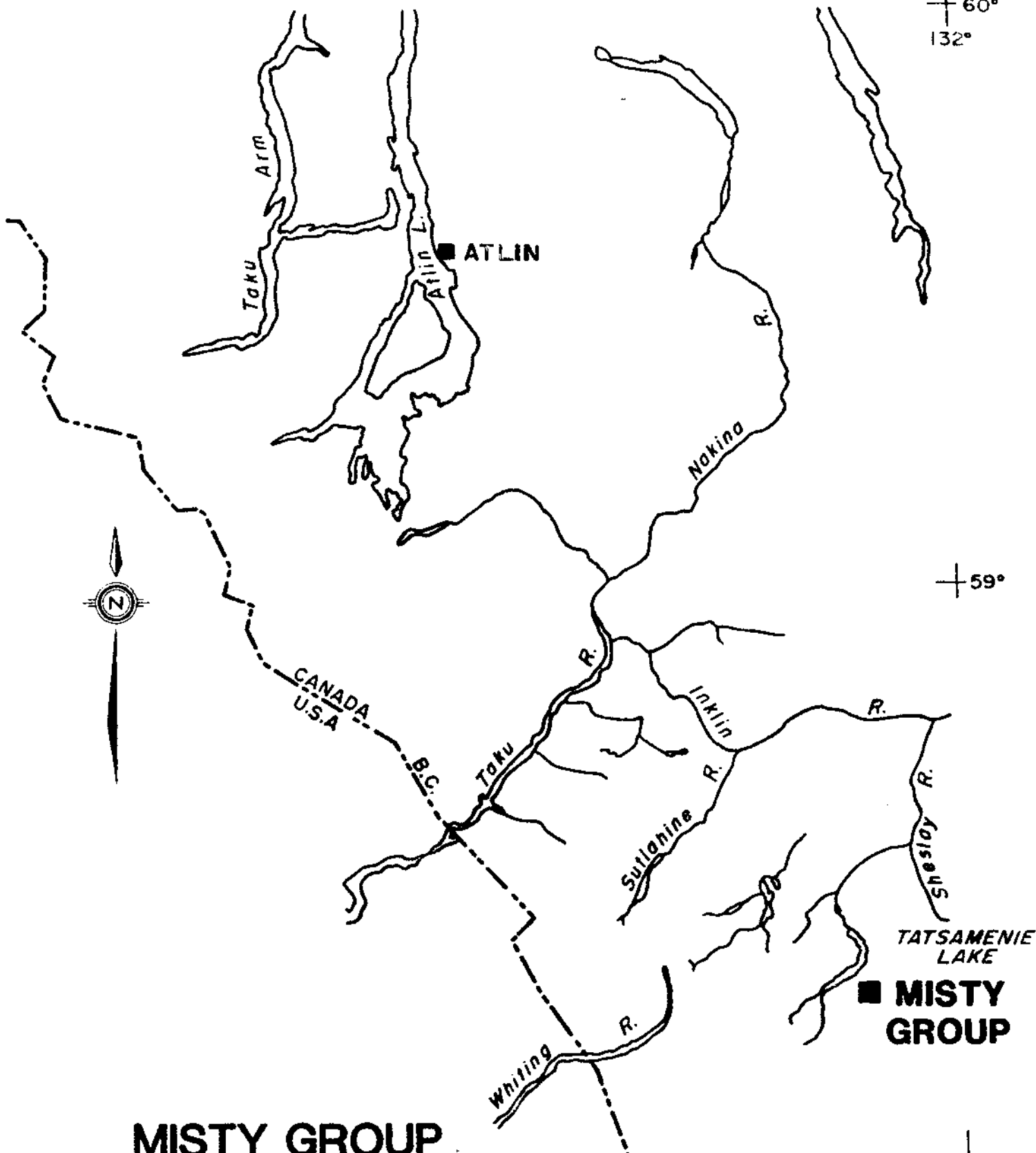
<u>CLAIM</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>	<u>NUMBER OF UNITS</u>
SNOW 2	1749	September 22, 1982	20
NIE 1	1539	September 18, 1981	20
SAM 1	1290	March 5, 1981	15
MISTY 1	1484	August 21, 1981	20
MISTY 2	1485	August 21, 1981	20

These claims cover previously unstaked ground. The claims are owned by Chevron Canada Limited with Chevron Canada Resources Limited acting as the operator.

PREVIOUS WORK

Work has been done on the Misty Claim Group by Chevron Canada Resources Limited during the 1982 and 1983 field seasons.

During 1982 the work consisted of reconnaissance mapping and rock sampling plus soil sampling. Thirty-seven rock and seventy-six soil samples were analyzed. Significant gold and silver values were found to be associated with narrow veins. A more detailed and larger soil grid was recommended as a result.



MISTY GROUP

LOCATION MAP

M 504



FIGURE 1

The 1983 programme consisted of follow-up mapping, not of a detailed nature, and a larger soil survey. Results obtained verified and expanded those gained in the previous year. No further work was recommended due to the small size of the alteration zones and the limited size of the anomalies.

REGIONAL GEOLOGY

The area south of Tatsamenie Lake and north of Sam Creek consists predominantly of pre-Upper Triassic volcanic rocks intercalated with sedimentary rocks (Souther, 1971). Phyllite and chlorite schists are common. Permian (?) ultramafic rocks (Souther, 1971) occur at the extreme eastern edge of the claims within a north-south fracture. A small area of Permian limestone is exposed in a fault bounded sliver within a major shear zone. The pre-Upper Triassic rocks are strongly folded and sheared.

Foliated hornblende diorite of Lower or Middle Triassic age (Souther, 1971) outcrops over a large part of the Claim Group. Dykes and stocks of non-foliated, post-Middle Jurassic diorite intrude the Pre-Triassic rock.

GROUP GEOLOGY

Pre-Upper Triassic Rocks (Units 1, 2, 3 and 4)

The pre-Upper Triassic rocks are divided into four main types - ultramafics, limestones, phyllites and volcanics. They cover approximately thirty percent of the Claim Group; the volcanics are the most abundant and the phyllites do not outcrop. The degree of deformation varies, locally primary compositional layering and textures are preserved whilst elsewhere phyllitic and schistose textures may be developed.

A varied degree of chloritization has affected all of the volcanics and has resulted in a large volume of greenstone being produced. The most common volcanic rock type is a

fine to medium grained tuff which is usually strongly chloritized but not deformed unless adjacent to a fault(s). Subordinate in frequency to the tuffs are fine grained, dark green-black, magnetic, massive flows. Many of the chloritized tuffs and flows have been sheared producing phyllites and schists.

Stratigraphy within the volcanics is difficult to establish due to rapid textural changes. One possible marker horizon is an augite porphyry that contains phenocrysts up to 2 cm in length. Textural differences are often masked on the weathered surfaces which are generally dark green except where a local pyrite content has produced a rusty red patch of hematite.

The small fault sliver of sedimentary rock is composed of a dirty grey, thinly layered, carbonaceous limestone. As it is in fault contact with adjacent rocks its stratigraphic position is unknown. Work elsewhere suggests that this lithology is correlative with a unit below the previously described volcanics.

On the eastern border of NIE 1, highly sheared amphibolite is in fault contact with sheared and chloritized tuffs and flows to the west. These ultramafics occur at the western edge of a major north-south shear zone.

Triassic Diorite (Unit #5)

Approximately fifty-five percent of the Claim Group is underlain by a diorite of Lower or Middle Triassic age (Souther, 1971). This intrusive is fine to medium grained and greenish-grey in colour. Biotite and hornblende, often altered to chlorite and epidote, are aligned to form a planar fabric. Feldspars are often weathered to a chalky-white colour possibly indicating saussuritization.

Both the eastern and western contacts of the diorite body within NIE 1 and MISTY 2 are of a sheared, intrusive nature. Silica veining, silicification and iron-carbonate alteration has occurred intermitantly along these two contacts, affecting primarily the contact volcanics.

The southern contact of this diorite body, centrally located within MISTY 2, is one of multiple xenoliths of chloritized tuffs and flows within the diorite plus numerous diorite dykes and apophyses within the contact volcanics.

Cretaceous - Jurassic Diorite (Unit #6)

Within the Claim Group there are a few outcrops of diorite dykes, distinguished from the previously described diorite by an absence of mineral fabric and a distinctive red colour. The unaltered appearance of the rock is that of a syenite due to the presence of iron contaminated plagioclase feldspar which is red in colour. The dykes vary in width from a few centimeters to a couple of metres and are usually cut by a well developed joint pattern.

The location and orientation of these dykes is controlled by local fractures, either at the contact of different rock types or within a single rock type.

Miocene - Level Mountain Plateau Basalts (Unit #8)

The Miocene extrusives, Level Mountain Group (Souther, 1971), exposed in the north-east corner of the Claim Group are subhorizontal, dark brown to black, vesicular basalt flows. They rest unconformably on the centrally located, foliated diorite. A rusty-yellow regolith is developed at the contact.

A major fault, the West Wall fault, strikes NW/SE just to the east of the MISTY 1 and 2/SAM 1 and 2 Legal Claim Post. The volcanics to the west are in the footwall of this major structure which post-dates D₂. The remainder of the Claim Group occupies a hanging wall position and is intensely fractured and sheared. Three dominant fracture orientations are recognized - 340/160, 220/040, 080/260.

MINERALIZATION AND ALTERATION

The West Wall fault is the major locus of alteration and mineralization within the Claim Group. Zones of iron carbonate alteration, silica vein injection and silicification are recognized within the intensely sheared hangingwall rock, the footwall is less altered. Anomalous values of gold, silver, arsenic and antimony are encountered in narrow, intermitant zones along the structure.

The sheared, intrusive contact of the centrally located diorite body also hosts a similar type of alteration and mineralization. However, the precious metal values are lower and more intermitant.

Away from the major structures there are varying degrees of pervasive iron-carbonate alteration of the volcanics, particularly the tuffs. Within these alteration rocks there are occasional thin veins and small quartz sweats, some of which can host higher than background values of Au, Ag, As and Sb

GEOCHEMICAL ANALYSES OF CLAIMS

Sixty-three rock samples and one hundred and thirty-eight soil samples were collected throughout the MISTY Claim Group. Soil samples were collected to aid prospecting in areas covered by overburden. B-horizon soil was used when possible, otherwise C-horizon soil was collected.

Soil samples were placed in kraft wet strength soil bags, air dried and shipped to Chemex Labs, North Vancouver, B. C. The samples were further dried and then sieved, with the -80 mesh portion being retained for analysis. Rock samples were crushed and then pulverized in a ring grinder to -100 mesh. For Au determination, a fire assay -atomic absorption technique is used with the fire assay bead being dissolved in HCl and HNO₃ then analyzed by conventional atomic absorption techniques. For Ag, a mixture of HClO₄ and HNO₃ is used to digest the sample, which is followed by atomic absorption spectrophotometry. The As analyses are done by standard colorimetric techniques following an HClO₄ plus HNO₃ digestion. Antimony analyses are done by digesting the sample in HCl, then adding potassium iodide, extracting with TOPO - MIBK and then analyzing by atomic absorption spectrophotometry.

GEOCHEMICAL RESULTS

The soil geochemical results are plotted on Figures 4, and 5.

There are only eight samples having greater than 50 ppb gold, one sample with greater than 200 ppm arsenic and six samples with greater than 10 ppm antimony. These anomalous samples do not form a cluster or define a definite trend, rather they occur as isolated individual or paired samples.

VLF GEOPHYSICAL SURVEY

Principles of Operation

The VLF Survey was conducted using an EM 16 receiver, on a grid with line spacing of 100 m, readings being taken every 12½ metres.

An EM 16 is a sensitive receiver covering the frequency band of VLF-transmitting stations with means of measuring the vertical field components. The receiver has two

inputs, with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal. The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt angle is calibrated in percentage. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil after being shifted by 90°. This coil is normally parallel to the primary field. Thus if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $\pi/2$ signal from the horizontal coil is a measure of the quadrature vertical signal (Geonics Operating Manual).

The magnetic field lines from a station are always at right angles to the direction of that station. Consequently a station (Seattle) was selected that gave a field approximately at right angles to the general strike of the geological structure (West Wall fault) that was being investigated.

GEOPHYSICAL RESULTS

The results of the VLF-EM 16 survey are plotted on Figure 6. Only areas containing readings of ten or greater are contoured.

Three areas of interest are defined. The first one spans between lines 4300S and 5000S and has a maximum width of 275 m between the zero contours. This zone trends approximately north-south. The second zone also trends grossly north-south; its northern end is at 5250S and it is open to the south. The final area of interest is on line 5200S, due to a lack of control points to either the north or south it is open in both directions.

All three zones are correlated with faults involving the foliated diorite that is centrally located within the Claim Group. The first two zones are mapping out part of the diorite's western fault contact whilst the third is on the eastern margin.

CONCLUSIONS AND RECOMMENDATIONS

Detailed mapping, geochemical sampling and geophysical surveying has outlined major structures hosting alteration and mineralization. Whilst no economic grade material was discovered on surface the geochemical indications associated with the strongly developed structures suggest that potential may exist at depth. If further work is done in the Misty Claim Group it would be orientated towards a drill programme. However, due to the lack of economic mineralization on surface no further work is recommended at this time.

REFERENCES

Geonics Limited, 1979. EM 16 Operating Manual

Souther, J. G. (1971). Geology and mineral deposits of Tulsequah map-area, British Columbia. Geological Survey of Canada, Memoir 362, 84p.

1984 EXPLORATION PROGRAM
MISTY 1 and 2; SNOW 2; SAM 1 and NIE 1
COST STATEMENT

Period June 1 to August 30, 1984

(1) Labour

	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>
D. Shaw	Geologist	7	7
F. Wohlgemuth	Sampler	5	
M. Wood	Sampler	5	
A. Paramonoff	Sampler	6	
A. Grigoruk	Sampler	6	
A. Debowski	Surveyor	6	
C. Miroslaw	Surveyor	6	
D. Cook	Geophysical Tech.	6	
	Total man days	47	

Average Cost per field man day - \$105. \$ 4,935.00

Average Cost per office man day - \$240. 1,680.00

(2) Analysis:

Soil: 138 samples @\$14.00 1,932.00

Rock: 63 samples @\$18.00 1,134.00

(3) Camp Costs

Total man days 47 @\$60.00 per day 2,880.00

(4) Helicopter

9.5 hrs. @\$450.00 all in 4,275.00

(5) Drafting

3 man days @\$150.00 450.00

Total \$ 17,286.00

STATEMENT OF QUALIFICATIONS

I, David Shaw, graduated from the University of Sheffield in 1973 with a B.Sc. (Hons. Geology) and from Carleton University in 1980 with a Ph.D. (Structural Geology).

I have worked for Chevron Canada Resources Limited since November 1, 1981.

David Shaw.

DAVID SHAW

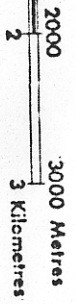
David Shaw.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

Province of British Columbia
Energy, Mines and Petroleum Resources



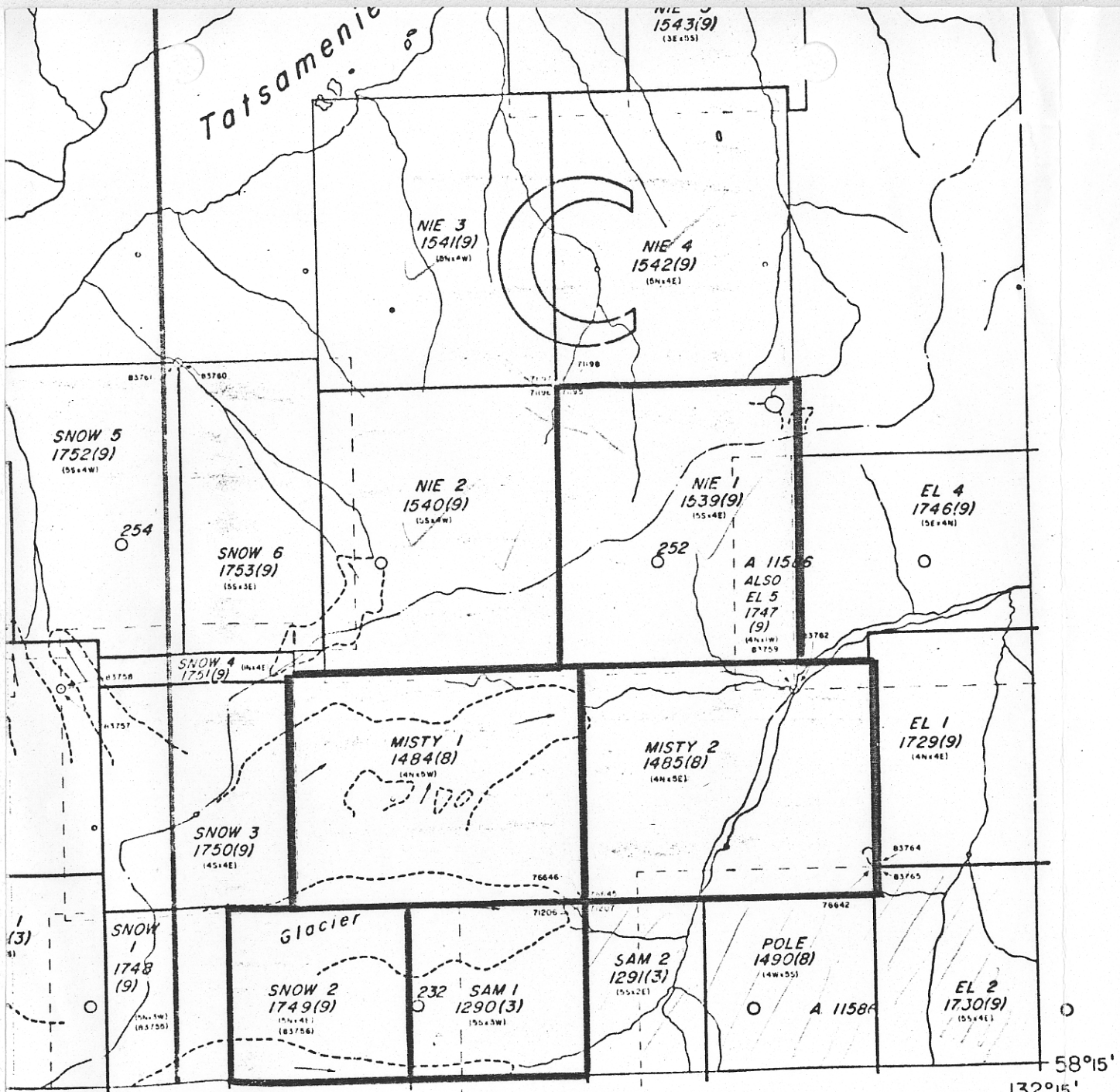
2 Miles



12688 M 104K
8W

UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A
LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH. FOR FUR-
THER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION
CONCERNED.

DATE OF MICROFILM: 83 10 28



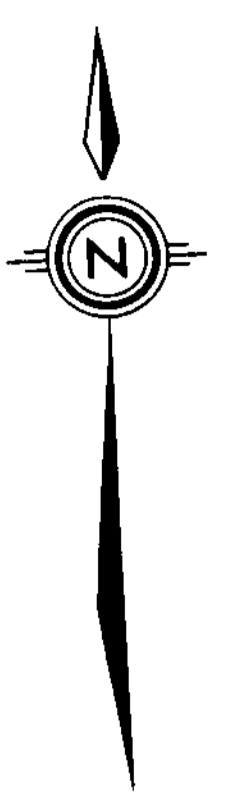
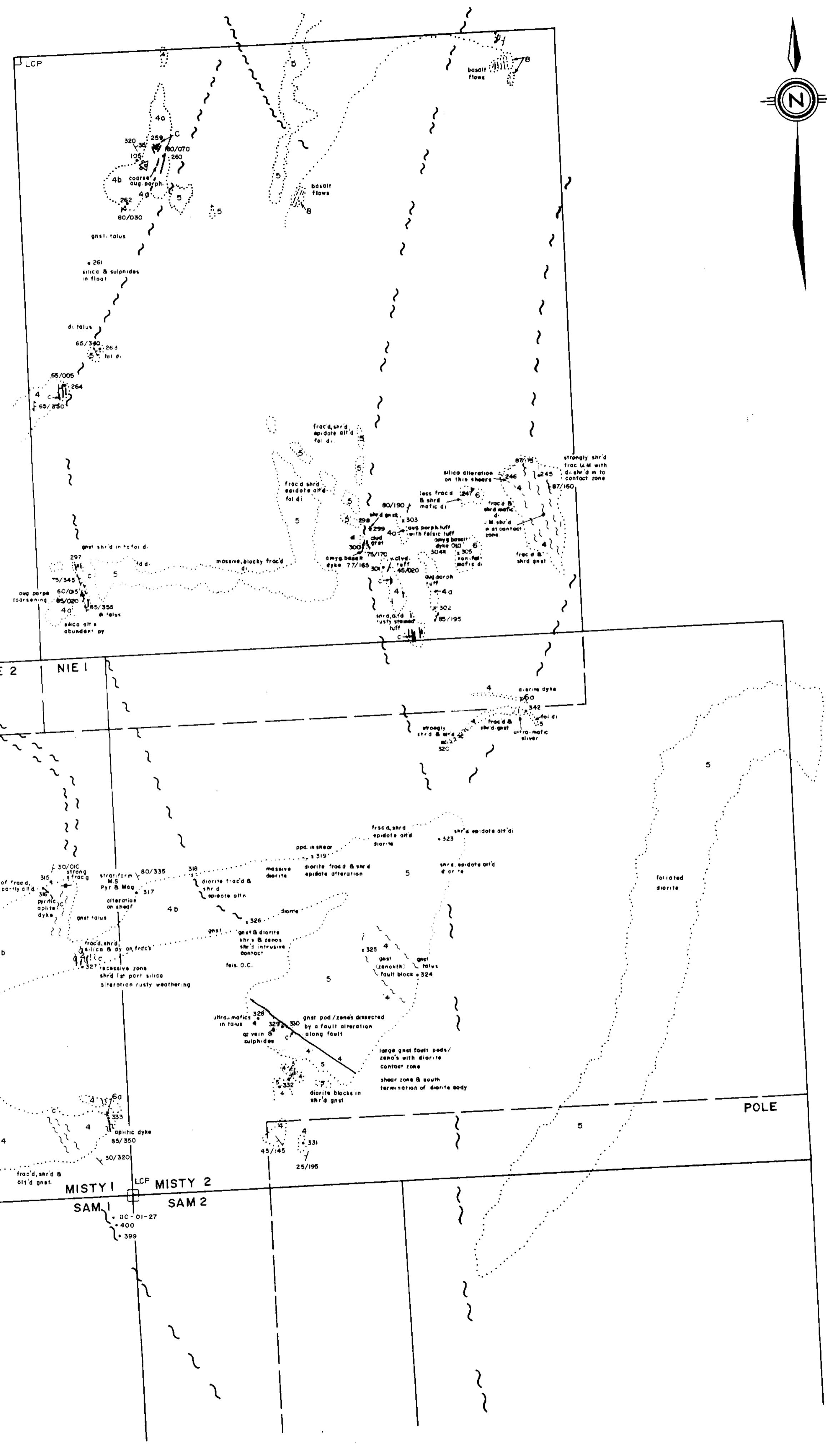
TO SOUTH SEE MAP 104-K-1-W

MINERAL TITLES REFERENCE MAP 104K/8W

DEPARTMENT OF MINES AND PETROLEUM RESOURCES VICTORIA, B.C.

58°15'
132°15'

	Ag ppm	As ppm	Sb ppm	Au ppb	Hg ppb
DC 4T1-01	0.1	4	0.5	15	15
02	0.2	3	0.1	15	15
03	0.1	3	3.2	15	15
04	0.1	4	0.1	15	15
05	0.1	3	2.0	15	15
06	0.1	4	2.4	15	15
07	0.1	4	1.4	15	15
08	0.1	69	7.8	5	15
09	0.3	350	14.2	15	15
10	0.1	15	0.4	15	15
11	0.1	3	0.2	15	15
12	0.1	3	0.1	15	15
13	0.1	2	0.1	15	15
14	0.1	3	0.1	15	15
15	0.1	2	0.4	15	15
16	0.3	2	0.4	15	15
17	0.1	220	410.0	25	15
18	0.1	4	2.8	15	15
19	0.1	20	7.8	15	15
20	0.2	30	8.4	60	15
21	0.1	27	1.6	15	15
22	0.1	27	2.8	15	15
23	0.1	19	1.3	15	15
24	0.1	3	0.5	15	15
25	0.1	2	1.1	15	15
26	0.1	3	1.4	15	15
27	0.1	22	0.3	15	15
DS 4T1-399A	0.1	15	5.4	10	10
399B	6.2	245	450.0	60	10
399C	0.1	90	5.2	30	10
400A	0.4	27	7.4	480	10
400B	0.1	92	2.4	15	10
400C	0.2	240	4.8	30	10
400D	0.2	24	2.8	15	10
400E	0.1	3	0.2	15	10
400F	0.1	2	0.6	15	10
400G	0.1	3	0.5	15	10
400H	0.1	110	23.0	15	10
400I	0.1	6	0.5	15	10
400J	0.1	19	4.0	15	10
400K	0.1	4	0.6	15	10
400L	0.1	6	2.2	15	10
400M	0.1	75	100.0	15	10
400N	0.1	6	2.8	15	10
DS 4T1-245	0.7	38	0.2	15	15
245B	0.3	5	0.5	5	15
246	0.5	20	1.0	15	15
259	0.2	3	0.1	15	15
261	2.3	440	0.7	805	15
264	0.2	5	0.1	10	15
264B	0.3	22	0.1	10	15
264C	0.2	9	0.1	15	15
297	0.3	38	-	10	20
297A	0.4	20	-	10	20
297C	0.1	4	-	15	20
297D	1.0	22	-	15	10
314	0.1	69	-	20	10
315	7.5	320	-	255	50
317	3.4	770	-	115	20
317B	1.0	110	-	35	30
320	0.4	101	-	15	20
327	0.1	24	1.8	25	15
328	3.3	10	0.2	55	15
333	0.1	2	0.2	15	15
334	1.7	88	15.2	1525	15



LEGEND

- 8 **MIocene** LEVEL MOUNTAIN - PLATEAU BASALTS
 - 7 **TERTIARY-CRET.** SLOKO GROUP
 - a - feldspar porphyry
 - b - rhyolite dykes, stocks
 - c - basalt dykes
 - 6 **CRET. - JURASSIC** DIORITE NON-FOLIATED
 - a - diorite non-foliated dyke
 - b - albite silt
 - c - porphyritic diorite
 - 5 **TRIASSIC** DIORITE FOLIATED
 - 4 **PRE UPPER TRIASSIC** INTERMEDIATE TO MAFIC VOLCANICS
 - a - augite porphyry
 - b - tuff - thinly bedded
 - c - massive flows
 - d - lapilli tuff
 - e - chlorite schist
 - 3 **PHYLLITE**
 - a - massive pink banded limestone
 - b - siliceous siltstone
 - c - thin banded pink limestone
 - d - buff weathering limestone
 - e - mafic flows
 - 2 **PERMIAN** LIMESTONE
 - a - carbonaceous
 - b - white
 - 1 **ULTRAMAFIC**
- ALTERATION**
- C IRON CARBONATE AND QUARTZ VEIN
 - D QUARTZ STOCKWORK
 - E DOLOMITIZED
 - S SILICIFIED

GEOLOGICAL BRANCH ASSESSMENT REPORT

12,688

SYMBOLS

- COMPOSITIONAL LAYERING (50)
- PLANAR FOLIATION
- FOLD HINGE
- FAULT
- GEOLOGICAL CONTACT
- KNOWN
- ASSUMED
- PROJECTED

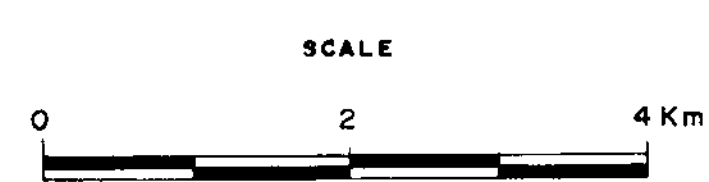
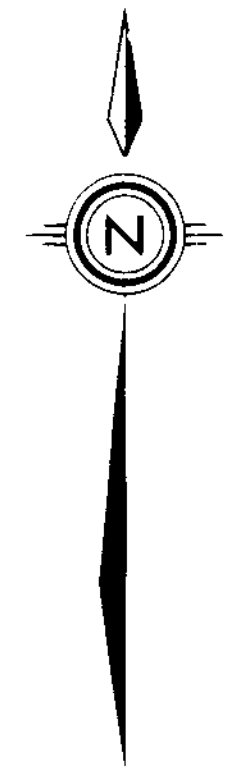
0 400 m

Chevron Canada Resources Limited
Minerals Staff

NIE & MISTY GROUPS

1984 GEOLOGY


FIGURE No.	2	PROJECT No.	M-504
DATE	SEPT. 1984	REVISIONS	SCALE 1:10,000
NTS No.			FILE No.
COMPILED BY	D.S.		

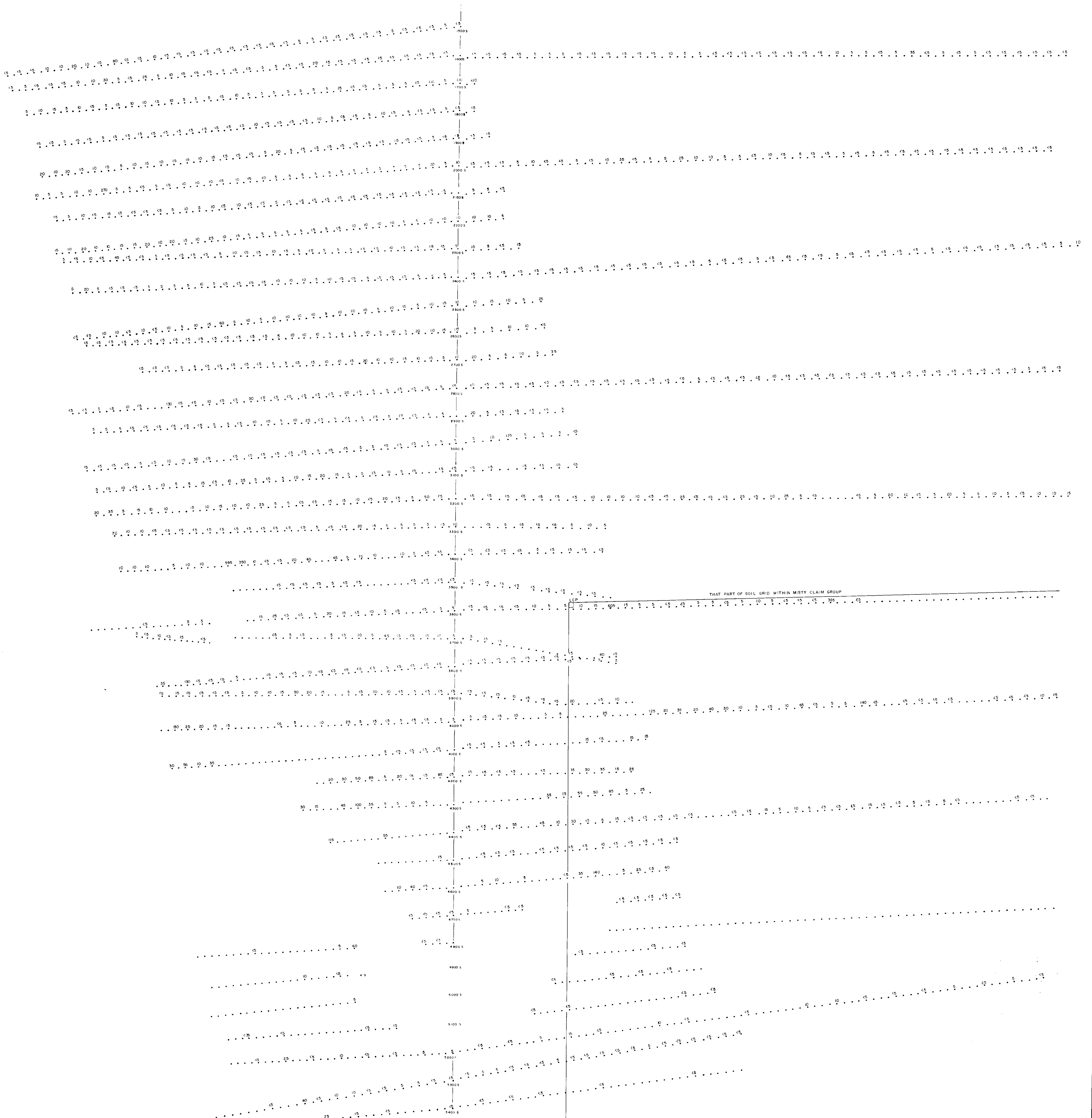
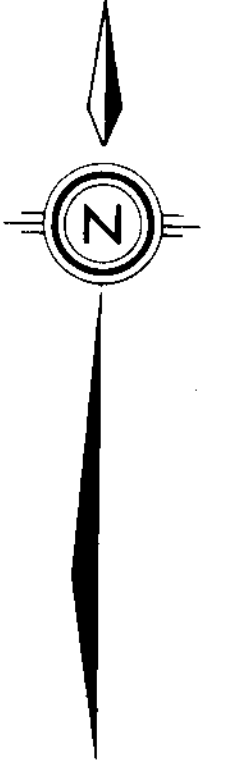


1:50,000 1984 SOIL SAMPLE

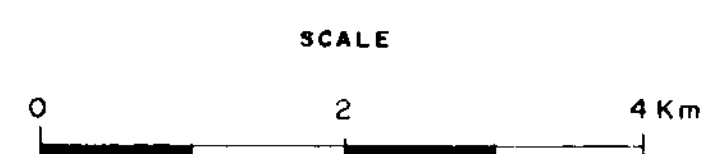
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff			
NIE GRID EAST SOIL SAMPLE LOCATIONS			
FIGURE No 3	PROJECT No M504		
DATE SEPT. 1984	REVISIONS		SCALE 1:50,000
NTS No.			FILE No.
COMPILED BY D.S.			



LEGEND
15 (Au - ppb) 1984 SOIL SAMPLE



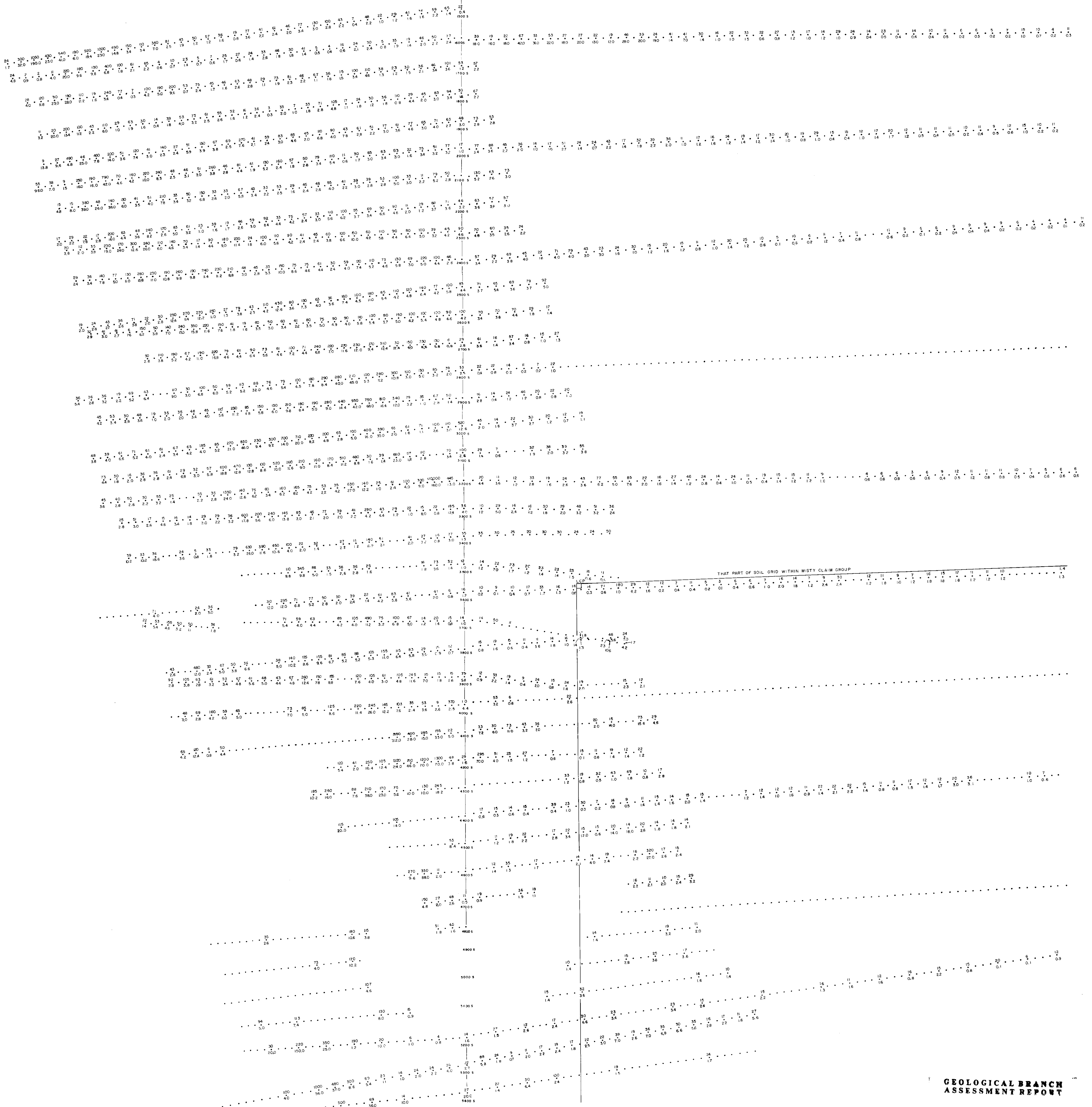
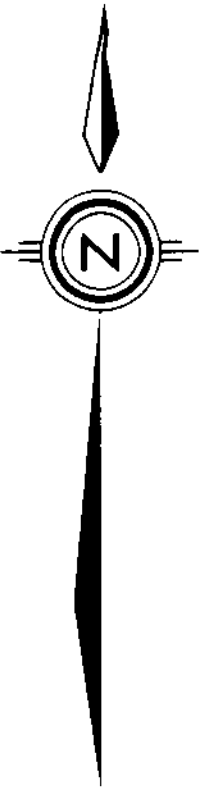
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,688

**Chevron Canada Resources Limited
Minerals Staff**

**NIE GRID EAST & WEST
SOIL GEOCHEMISTRY
Au - ppb**

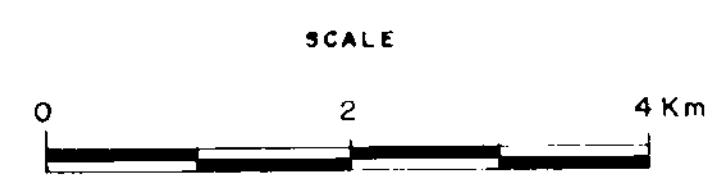
FIGURE No. 4	PROJECT No. M - 504	
DATE Sept 1984	REVISIONS	SCALE 1:50,000
NTS No.		FILE No.
COMPILED BY D.S.		



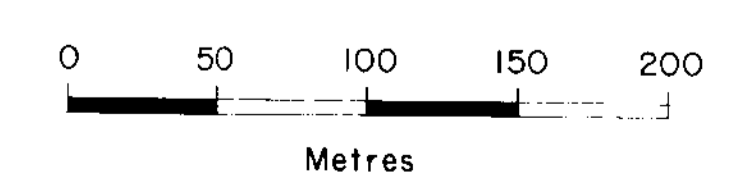
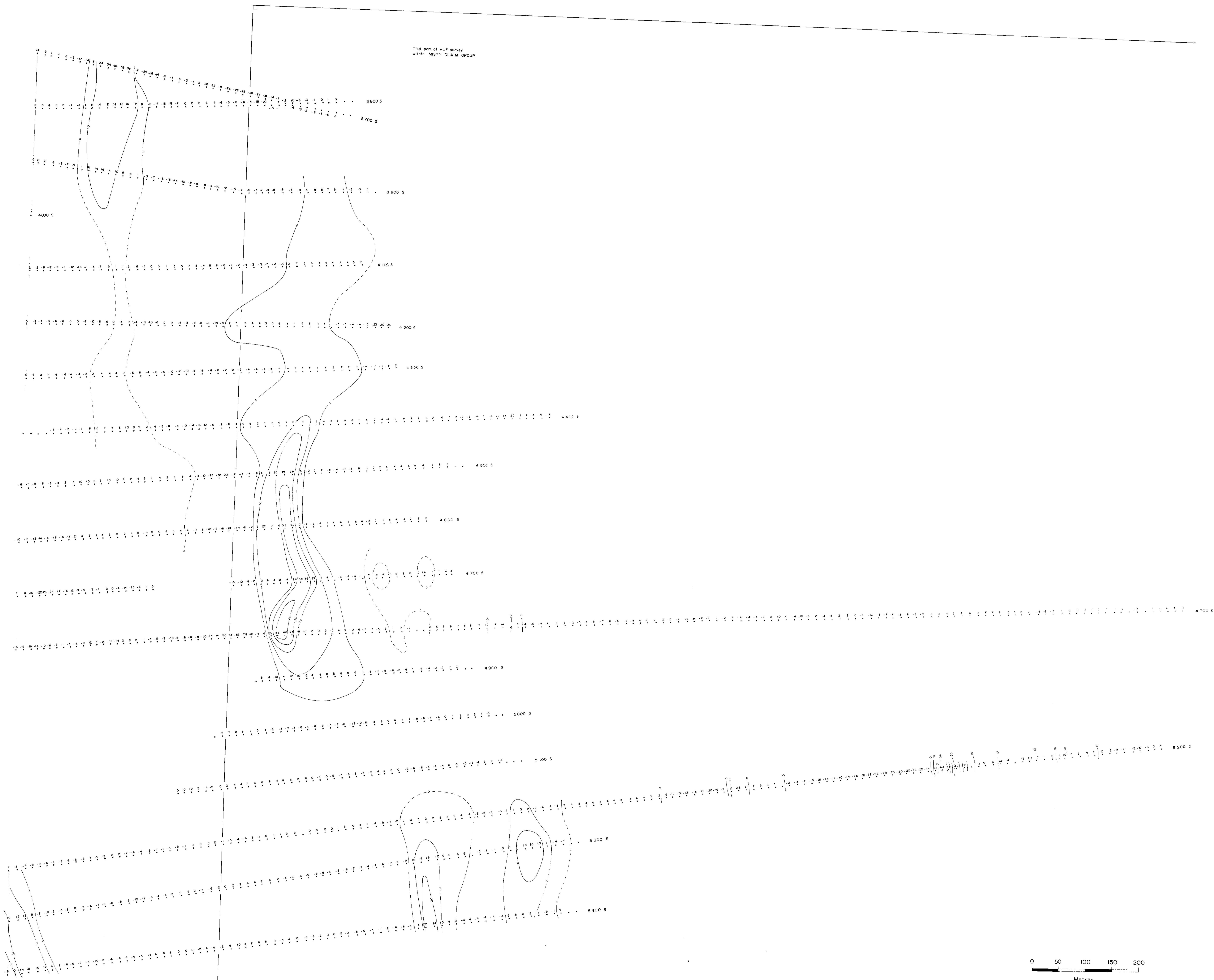
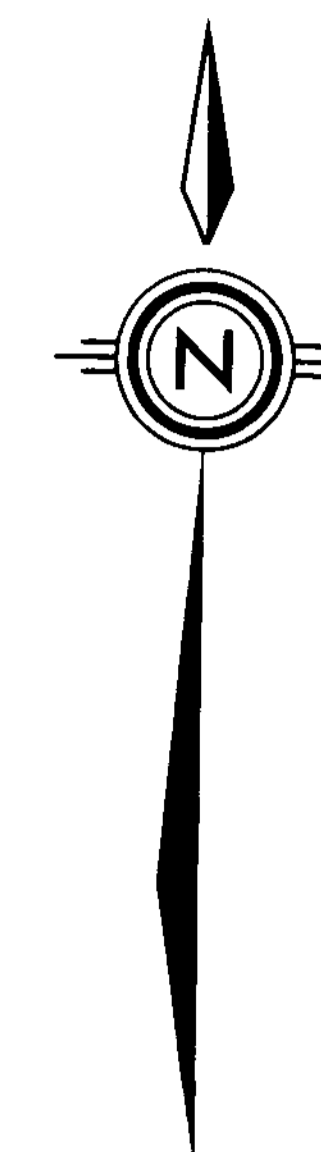
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

LEGEND
 27 (As - ppm) 1984 SOIL SAMPLE
 56 (Sb - ppm)




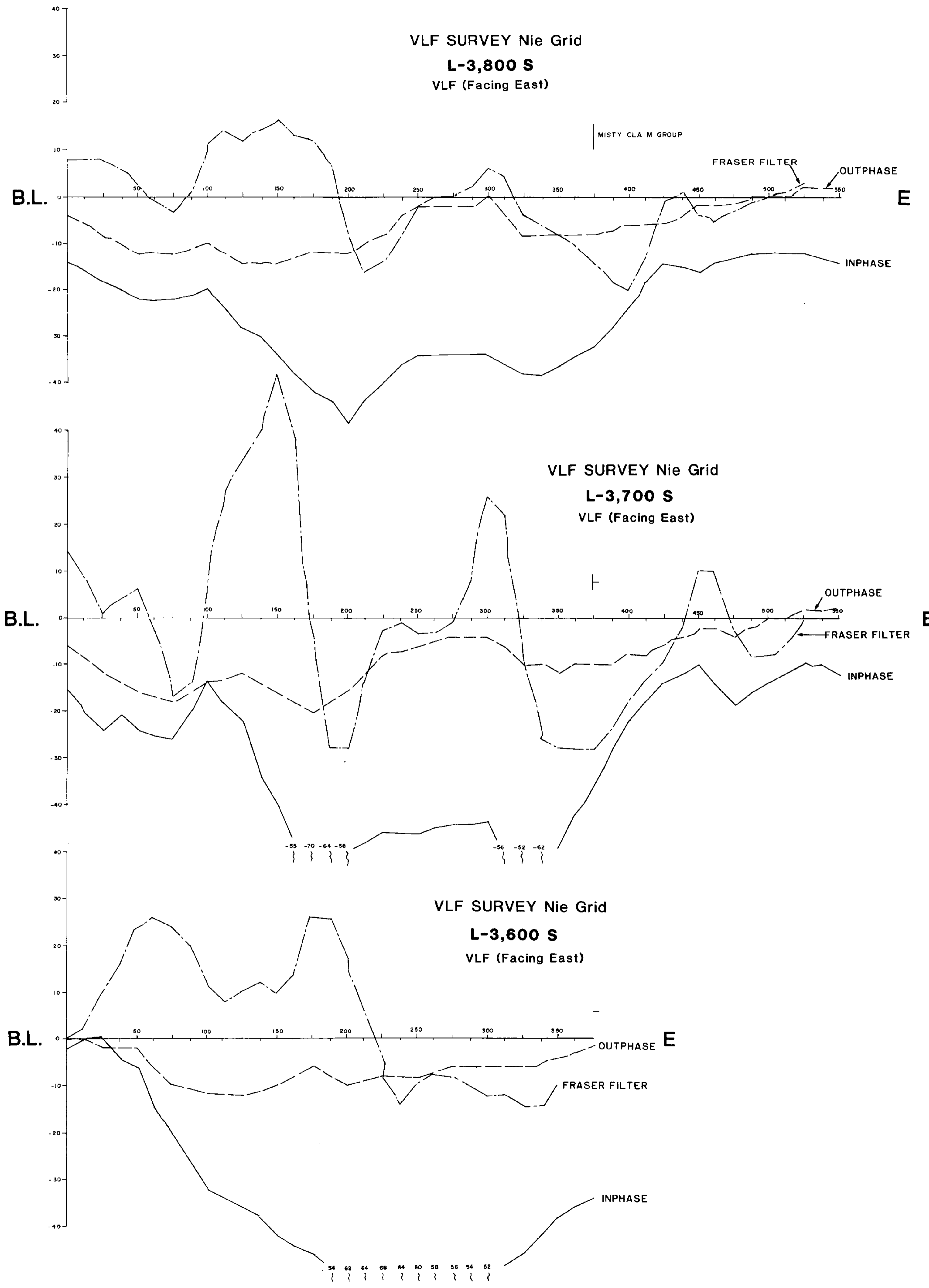
Chevron Canada Resources Limited Minerals Staff		
NIE GRID EAST & WEST		
SOIL GEOCHEMISTRY As, Sb - ppm		
FIGURE No. 5	PROJECT No. M-504	
DATE Sept. 1984	REVISIONS	SCALE 1:50,000
NTS No.		FILE No.
COMPILED BY D.S.		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff			
NIE CLAIM EAST FRASER FILTER VLF CONTOUR MAP			
FIGURE No	6	PROJECT No	M504
DATE	Oct. 1984	REVISIONS	
N.T.S. No.			FILE No.
COMPILED BY			



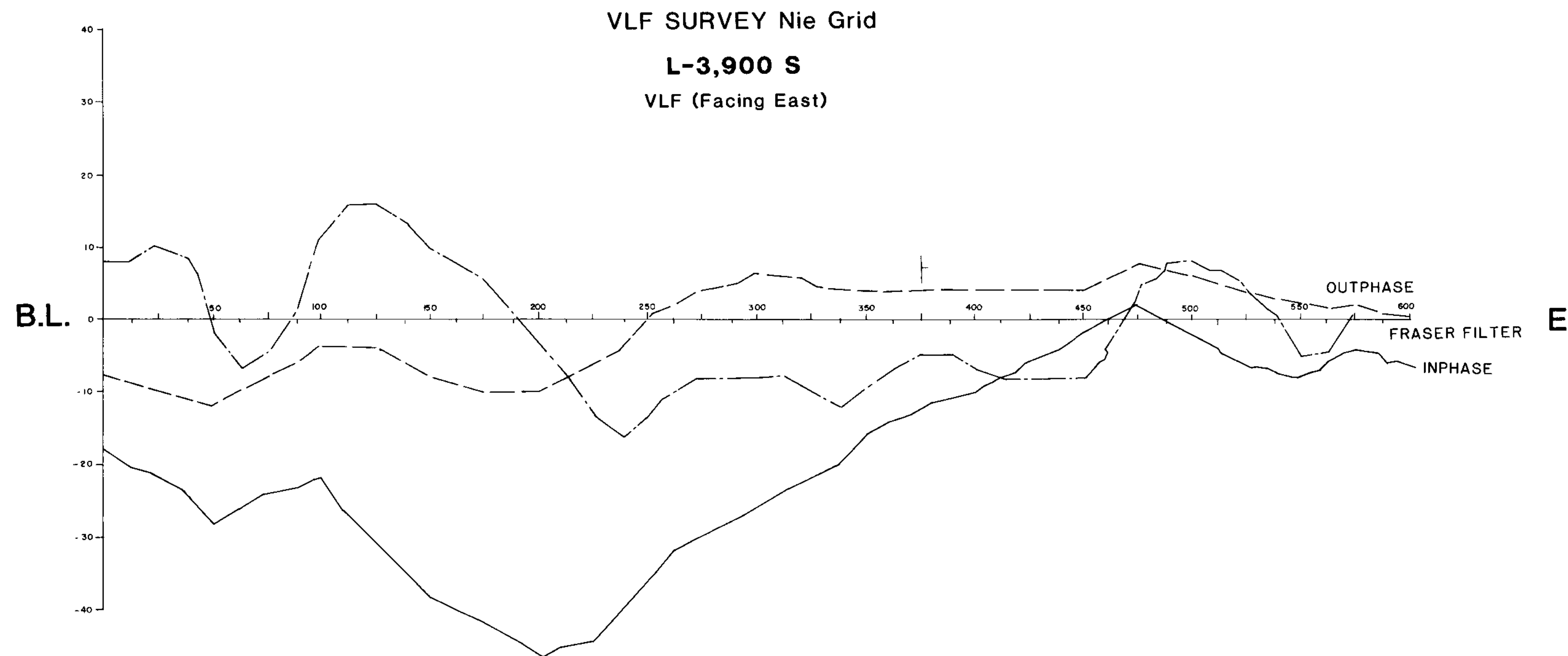
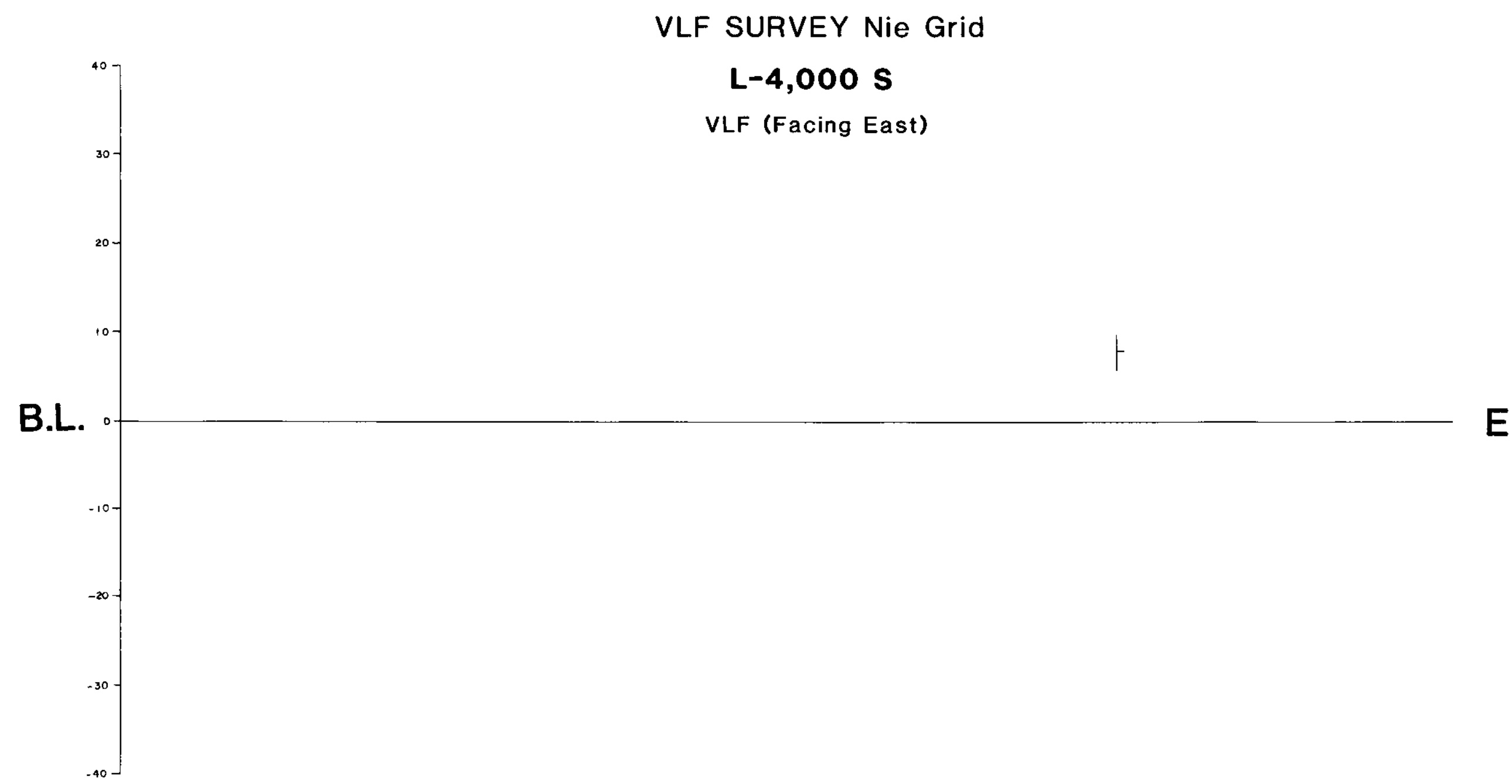
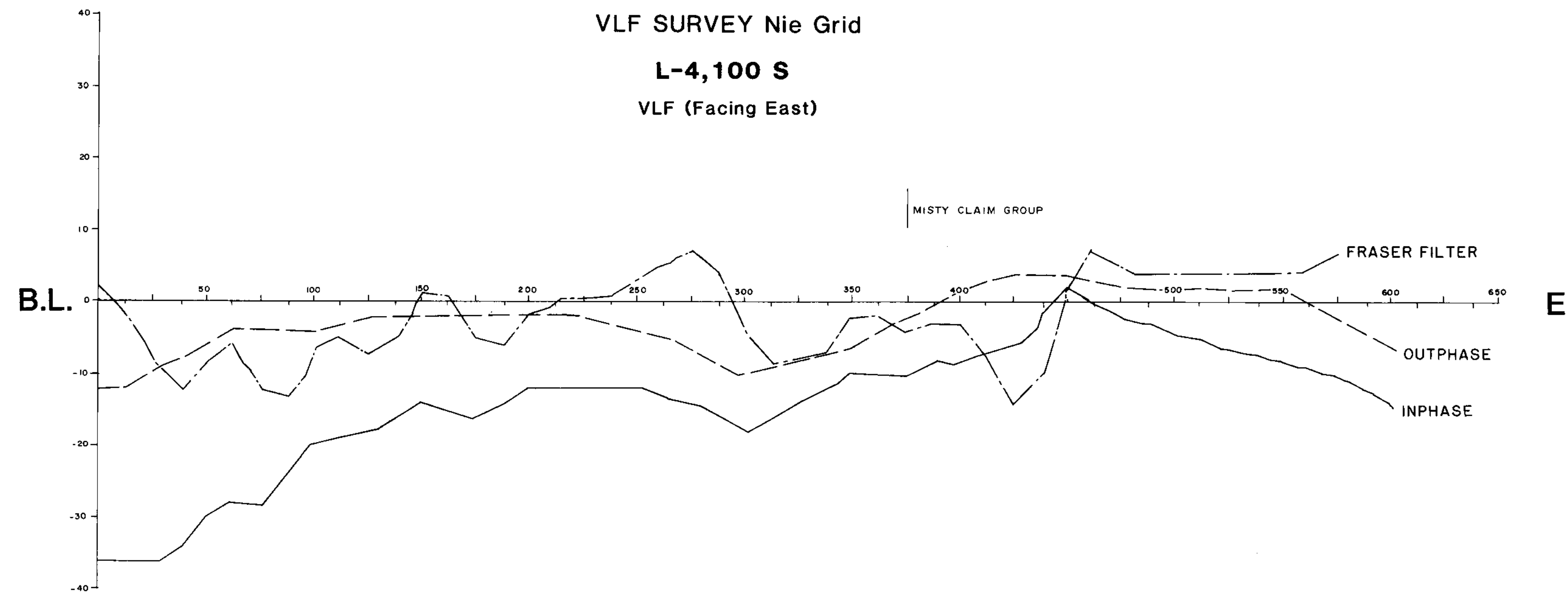
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited
Minerals Staff

**MISTY GROUP
VLF PROFILES**

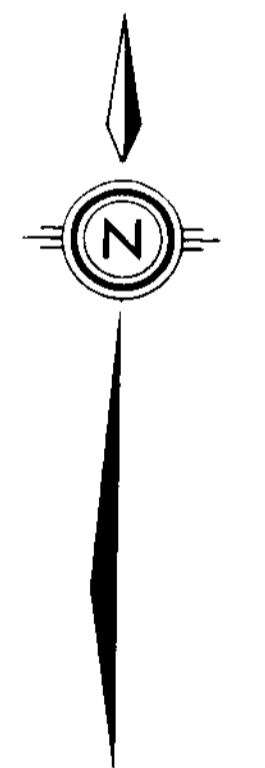
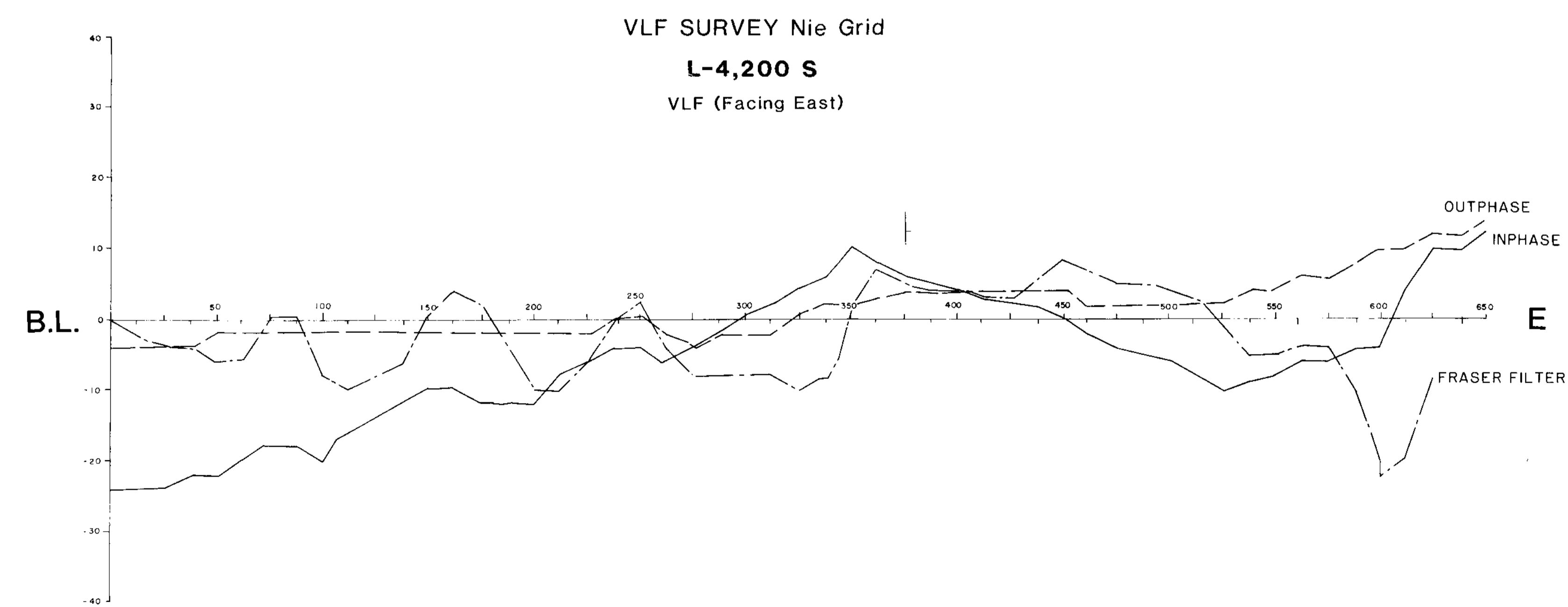
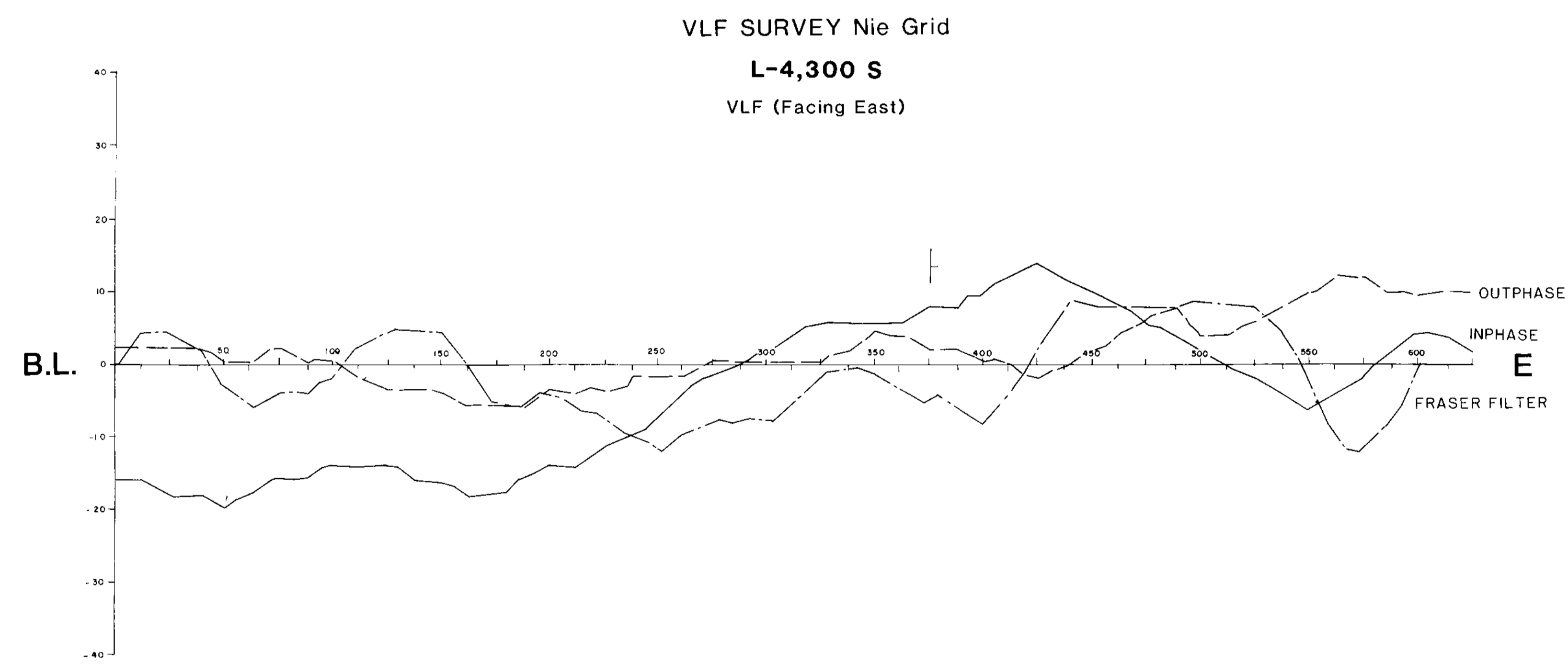
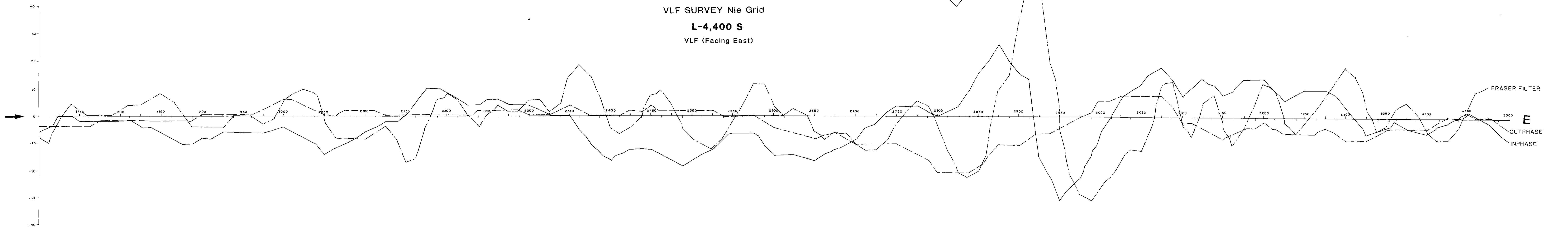
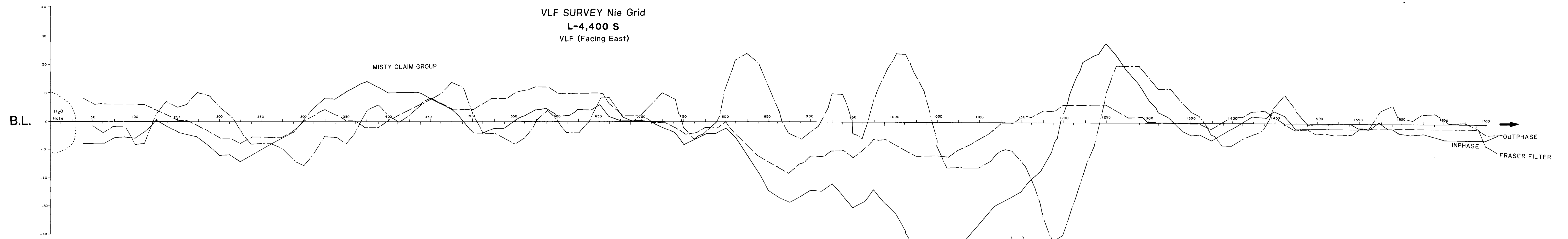
FIGURE No. 7a	PROJECT No. M504
DATE OCT. 1984	REVISIONS
NTS No.	SCALE 1:1666.6
COMPILED BY	FILE No.



**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

12,688

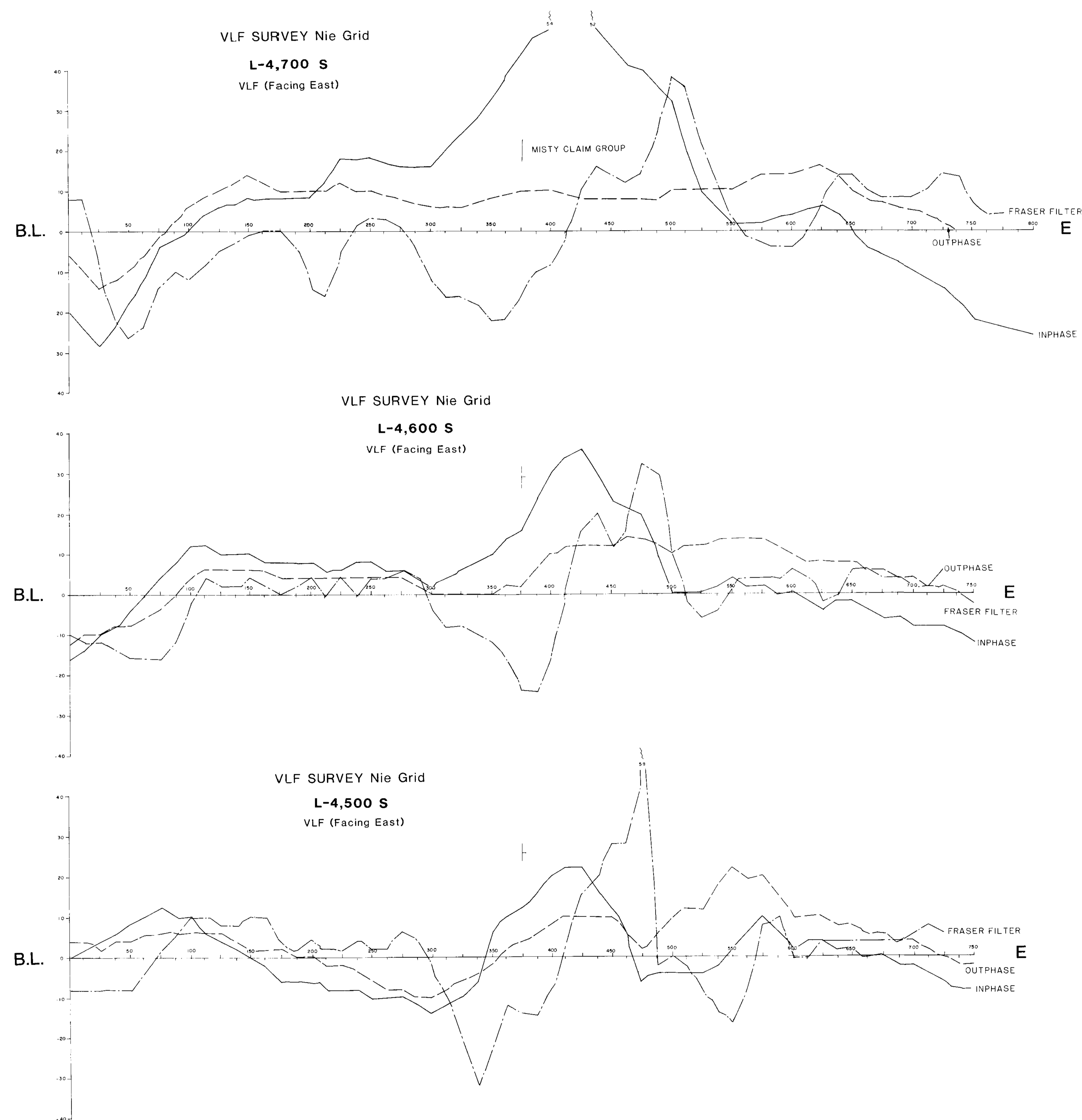
Chevron Canada Resources Limited Minerals Staff			
MISTY GROUP VLF PROFILES			
FIGURE No. 7b	PROJECT No. M504		
DATE OCT. 1984	REVISIONS	SCALE 1:666.6	
NTS No.		FILE No.	
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT


12,688

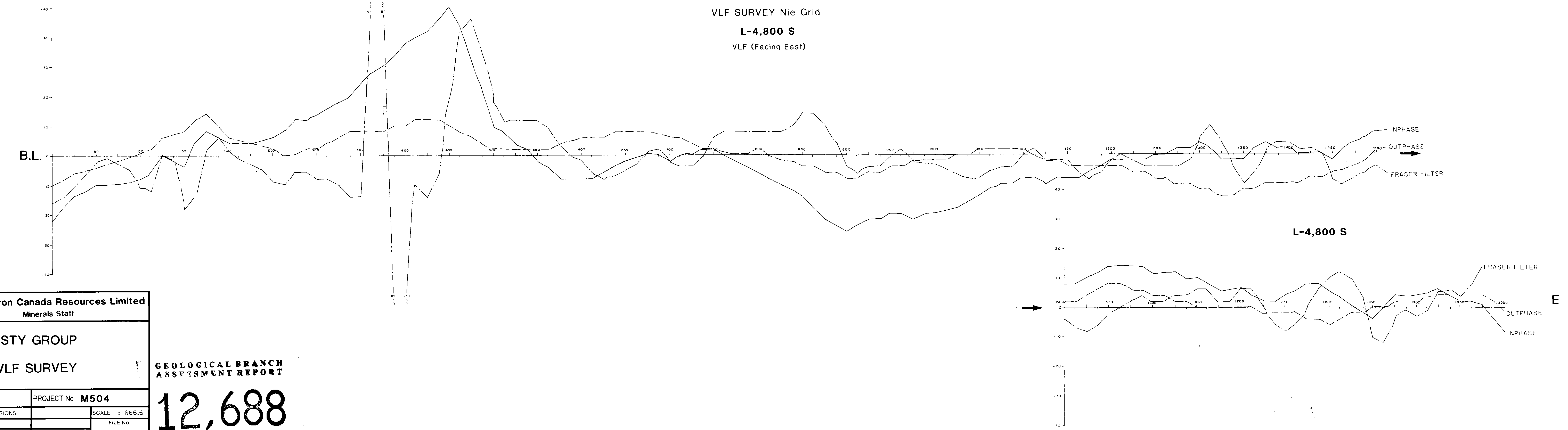
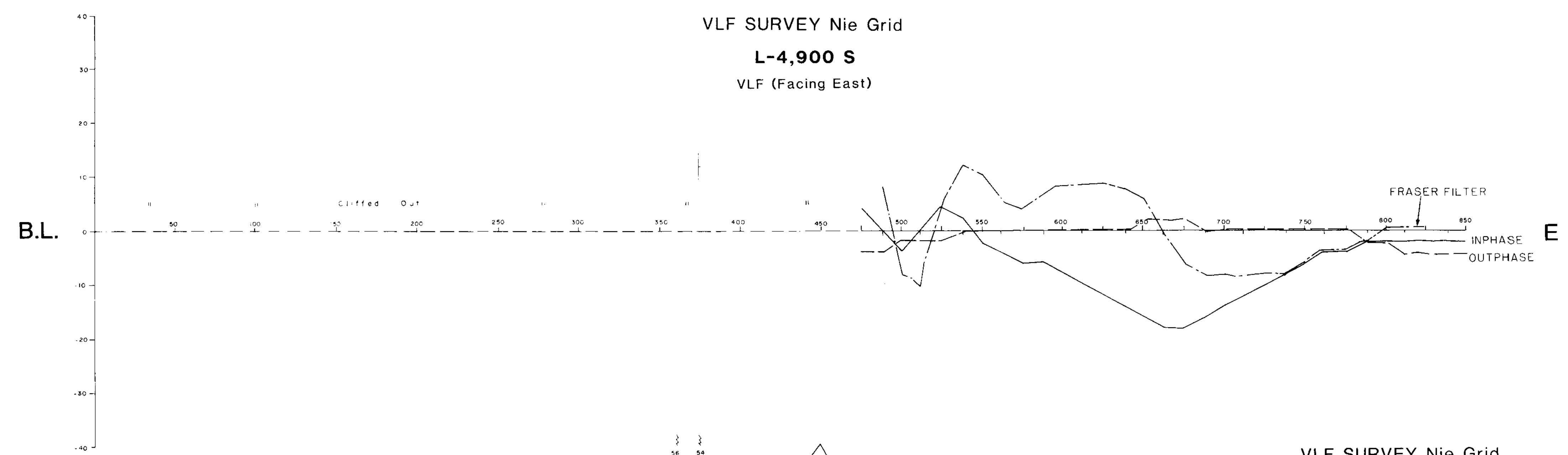
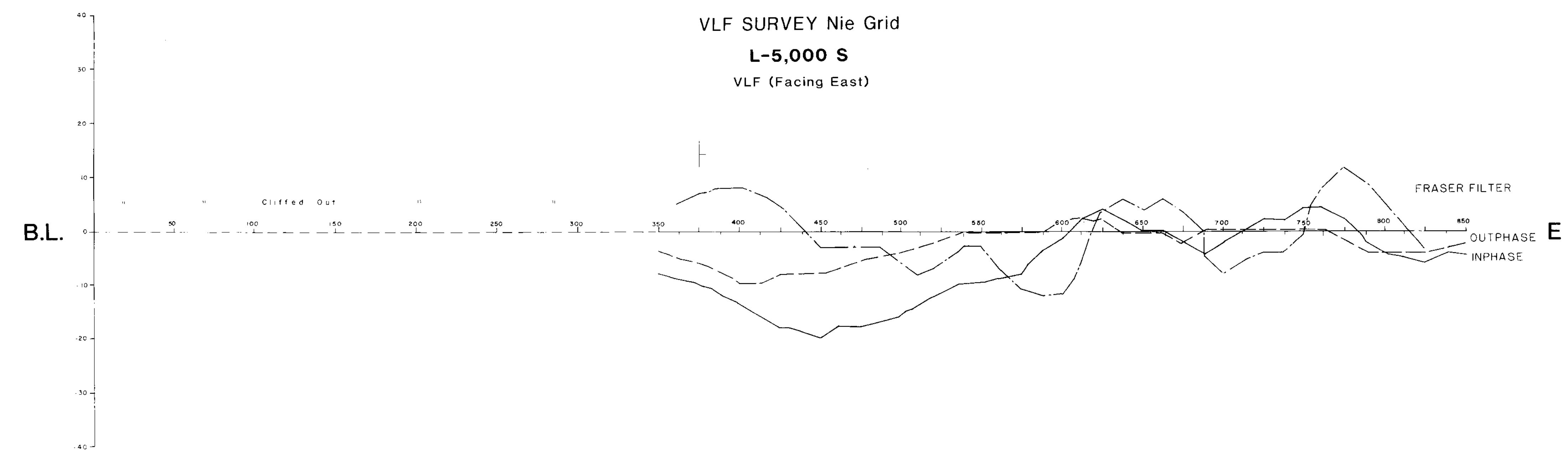
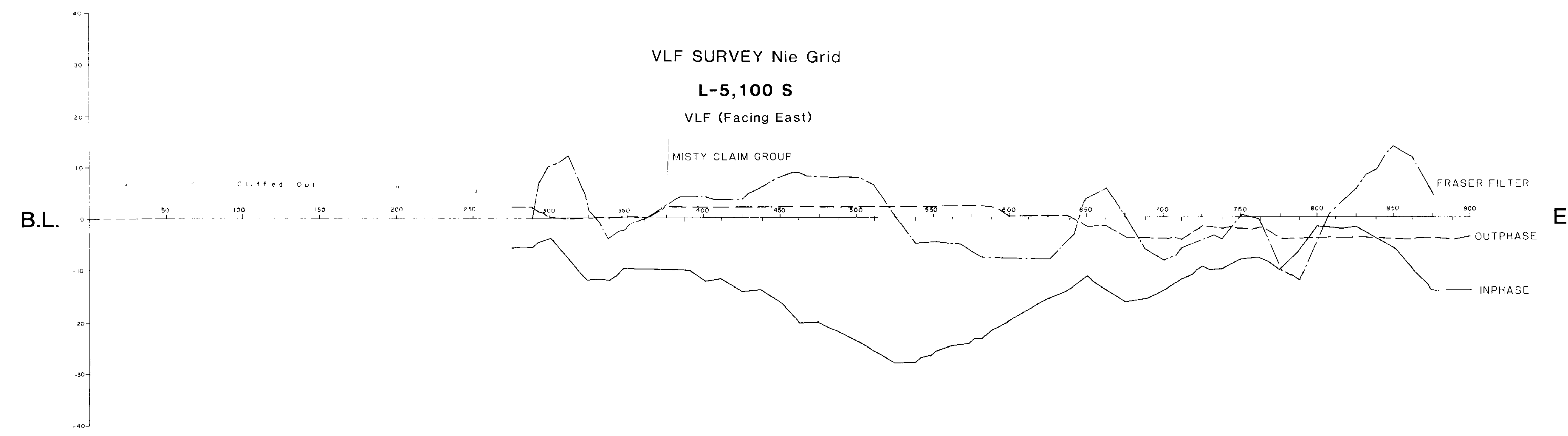
Chevron Canada Resources Limited Minerals Staff	
MISTY GROUP VLF SURVEY	
FIGURE No 7c	PROJECT No M504
DATE OCT. 1984	REVISIONS
NTS No	SCALE 1:1666.6
COMPILED BY	FILE No.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff			
MISTY GROUP VLF SURVEY			
FIGURE No. 7 d	PROJECT No. M504		
DATE OCT. 1984	REVISIONS		SCALE 1:1666.6
NTS No.			FILE No.
COMPILED BY			

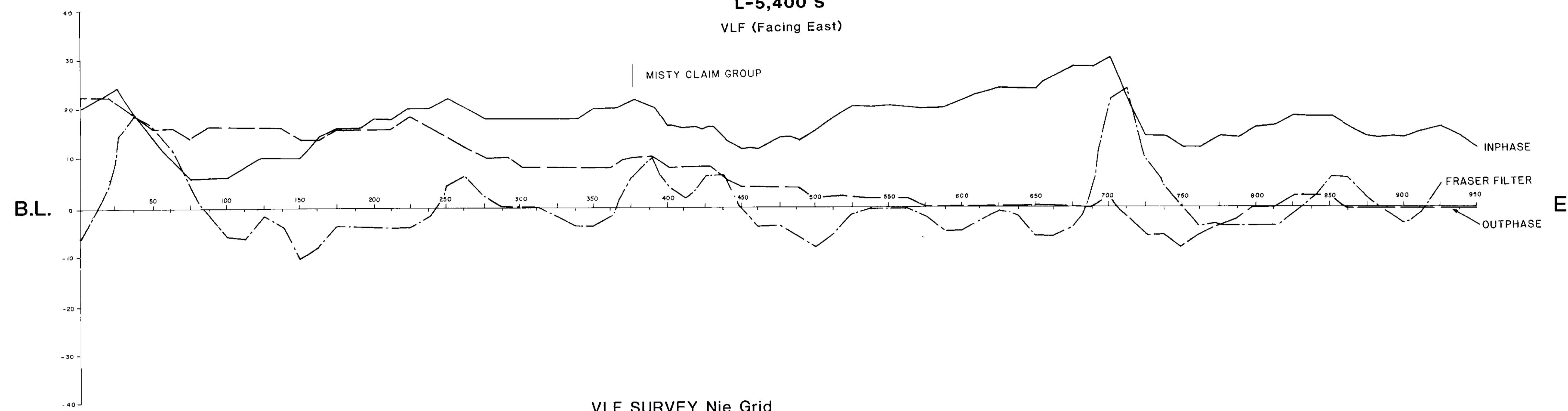


Chevron Canada Resources Limited Minerals Staff			
MISTY GROUP VLF SURVEY			
FIGURE No. 7e		PROJECT No. M504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	12,688
NTS No.	FILE No.		
COMPILED BY			

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

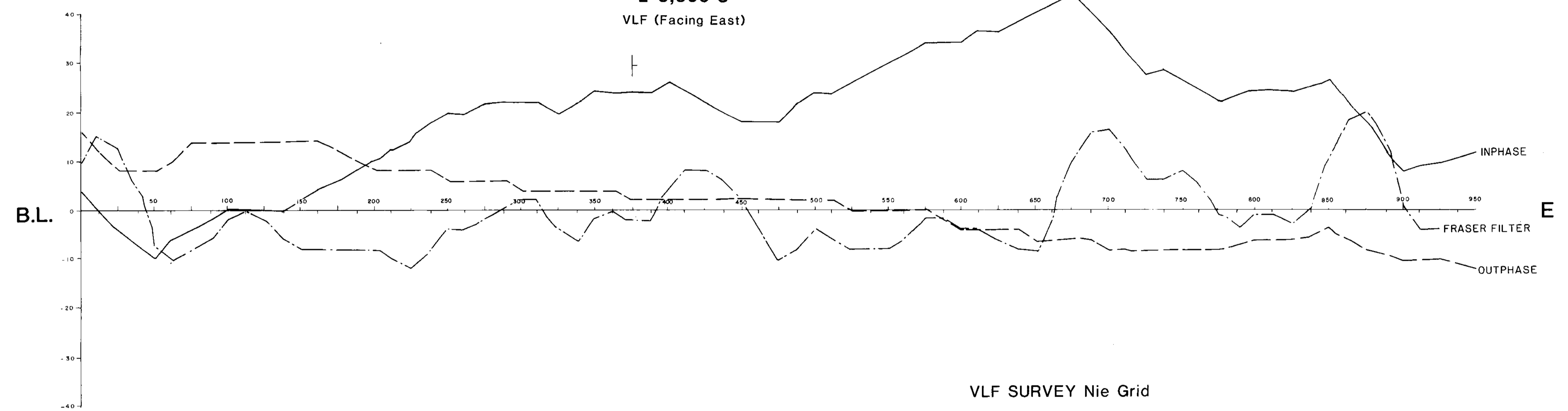
VLF SURVEY Nie Grid

L-5,400 S
VLF (Facing East)



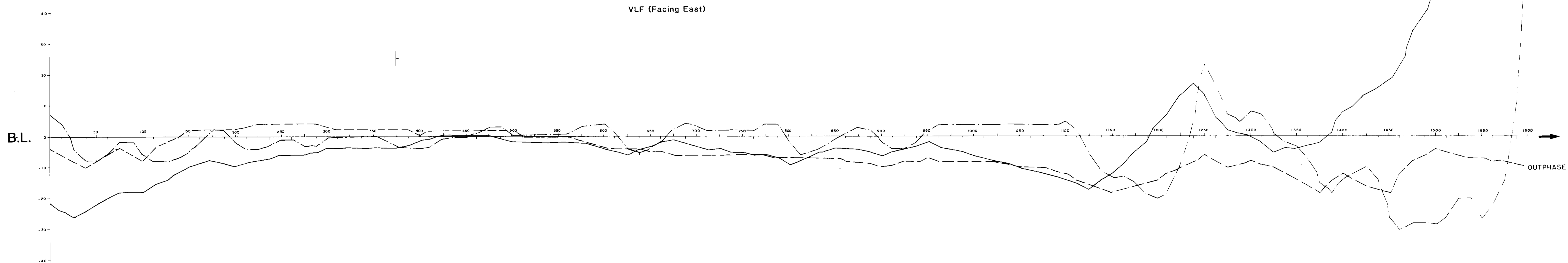
VLF SURVEY Nie Grid

L-5,300 S
VLF (Facing East)

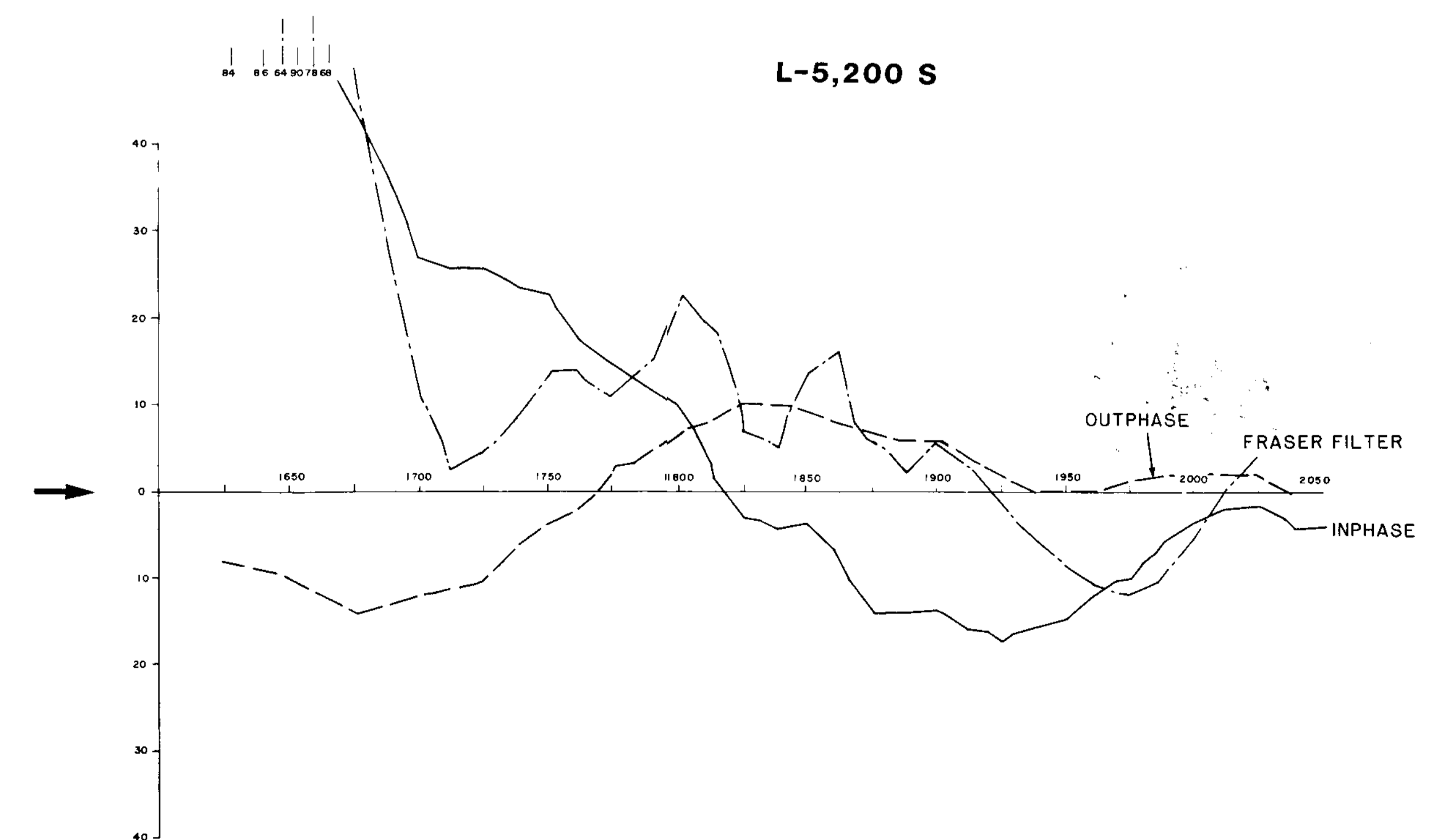


VLF SURVEY Nie Grid

L-5,200 S
VLF (Facing East)



L-5,200 S



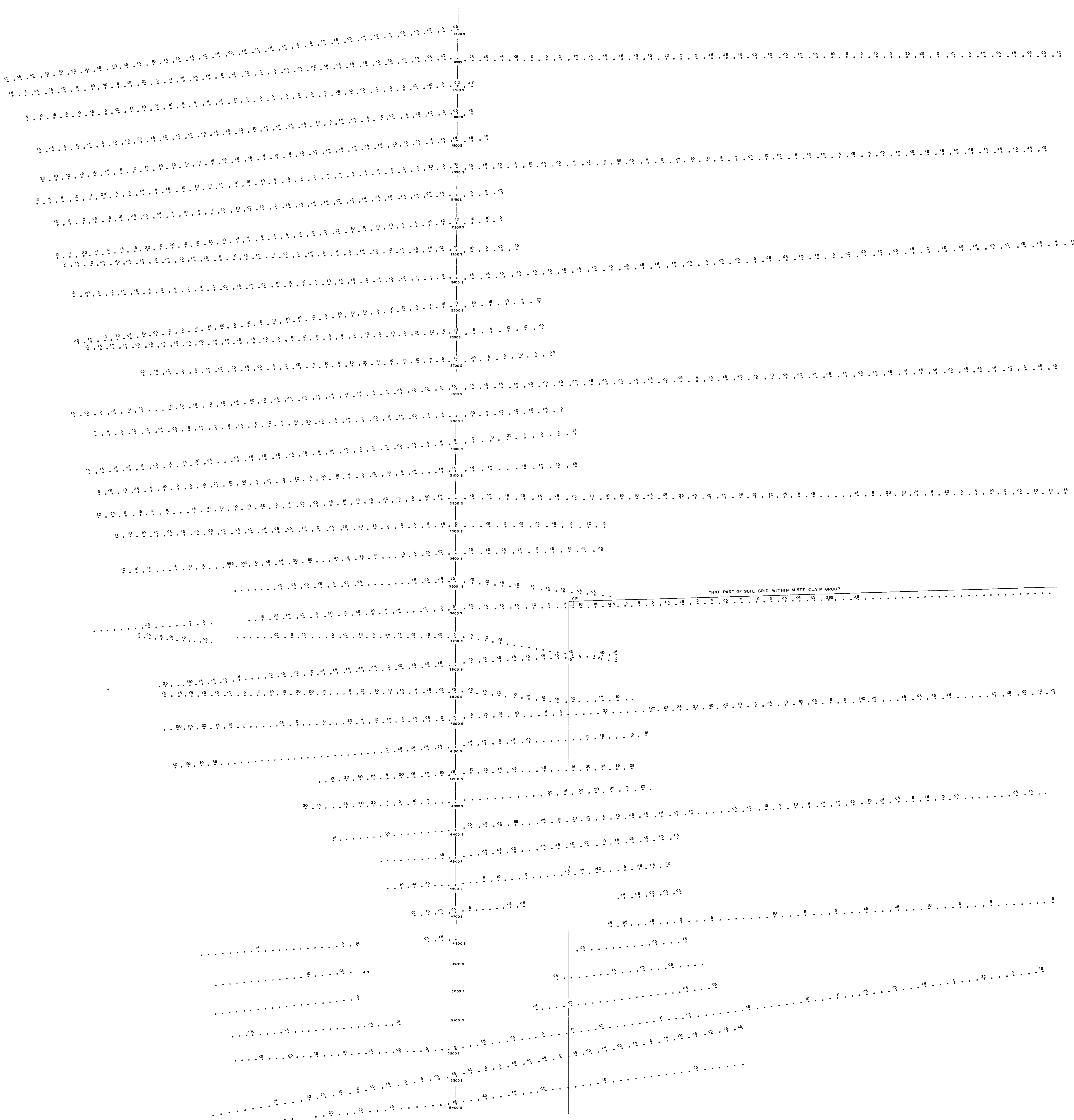
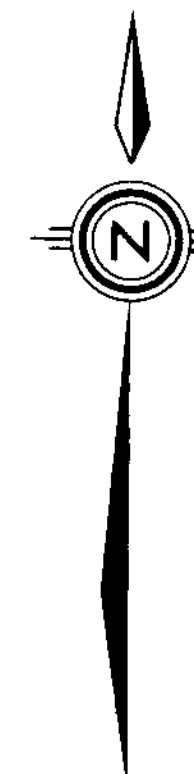
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

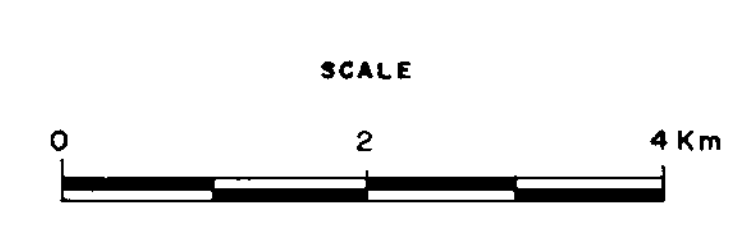
Chevron Canada Resources Limited
Minerals Staff

MISTY GROUP
VLF SURVEY

FIGURE No. 71	PROJECT No. M504
DATE OCT. 1984	REVISIONS
NTS No.	SCALE 1:1666.6
COMPILED BY	FILE No.




LEGEND
● (Au - ppb) 1984 SOIL SAMPLE



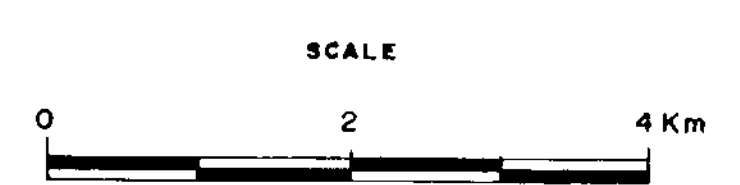
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff		
NIE GRID EAST & WEST SOIL GEOCHEMISTRY Au - ppb		
FIGURE No 5	PROJECT No M - 504	
DATE Sept. 1984	REVISIONS	SCALE 1 : 50,000
NTS No.		FILE No.
COMPILED BY D.S.		



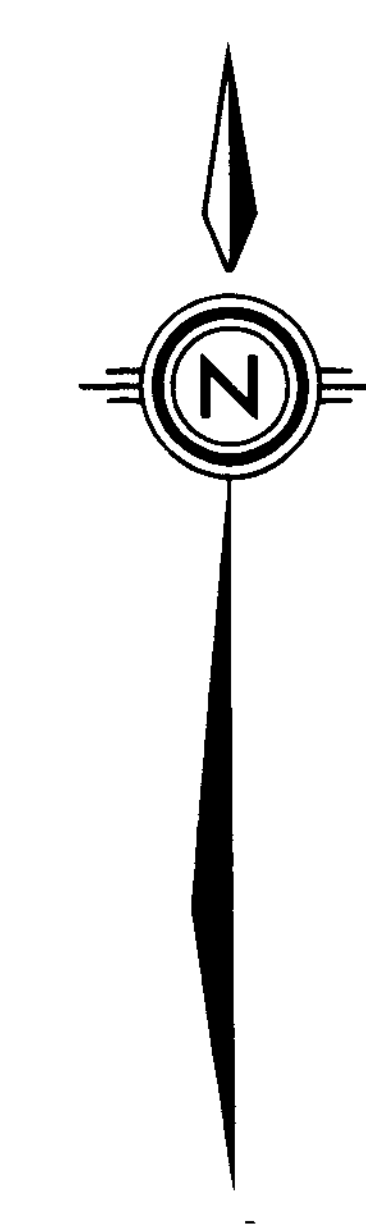
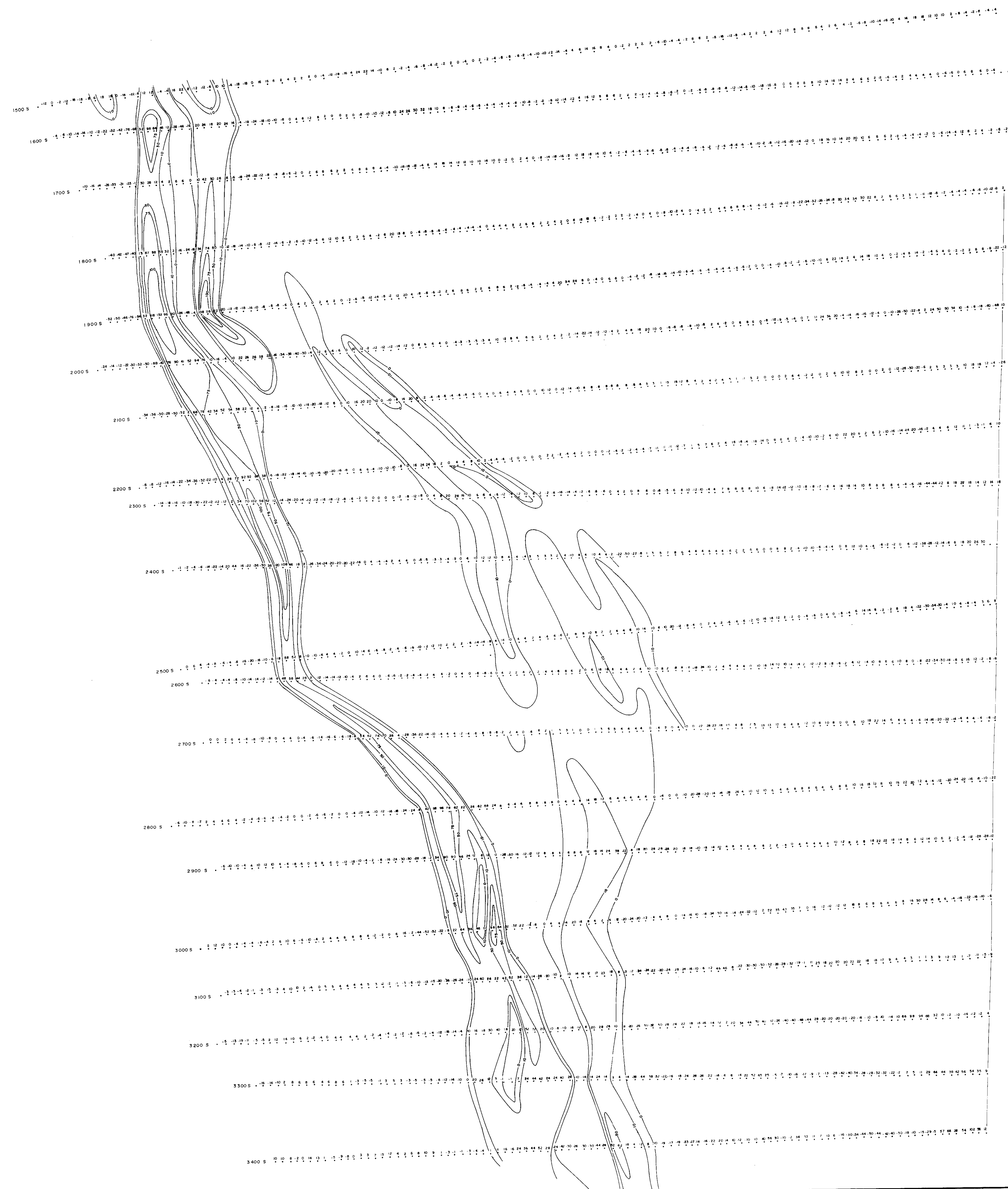
LEGEND
● 27 (As - ppm)
● 56 (Sb - ppm) 1984 SOIL SAMPLE



Chevron Canada Resources Limited
Minerals Staff


NIE GRID EAST & WEST
SOIL GEOCHEMISTRY
As, Sb - ppm

FIGURE No. 8	PROJECT No. M-504
DATE Sept. 1984	REVISIONS
NTS No.	SCALE 1:50,000
COMPILED BY D.S.	FILE No.

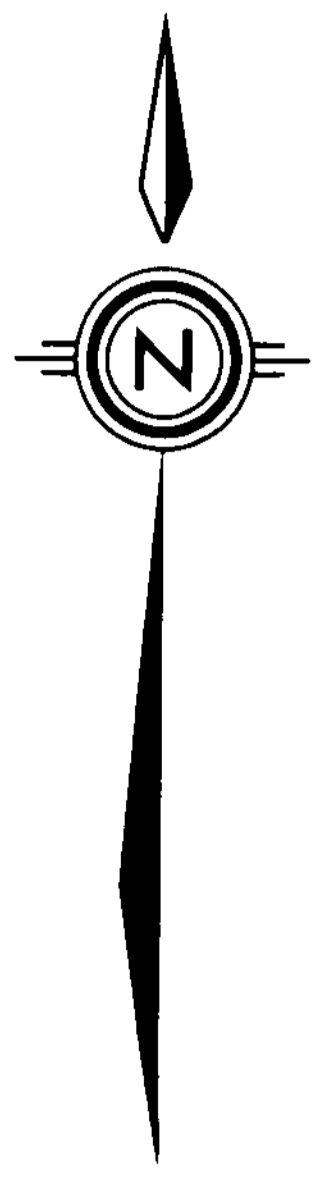
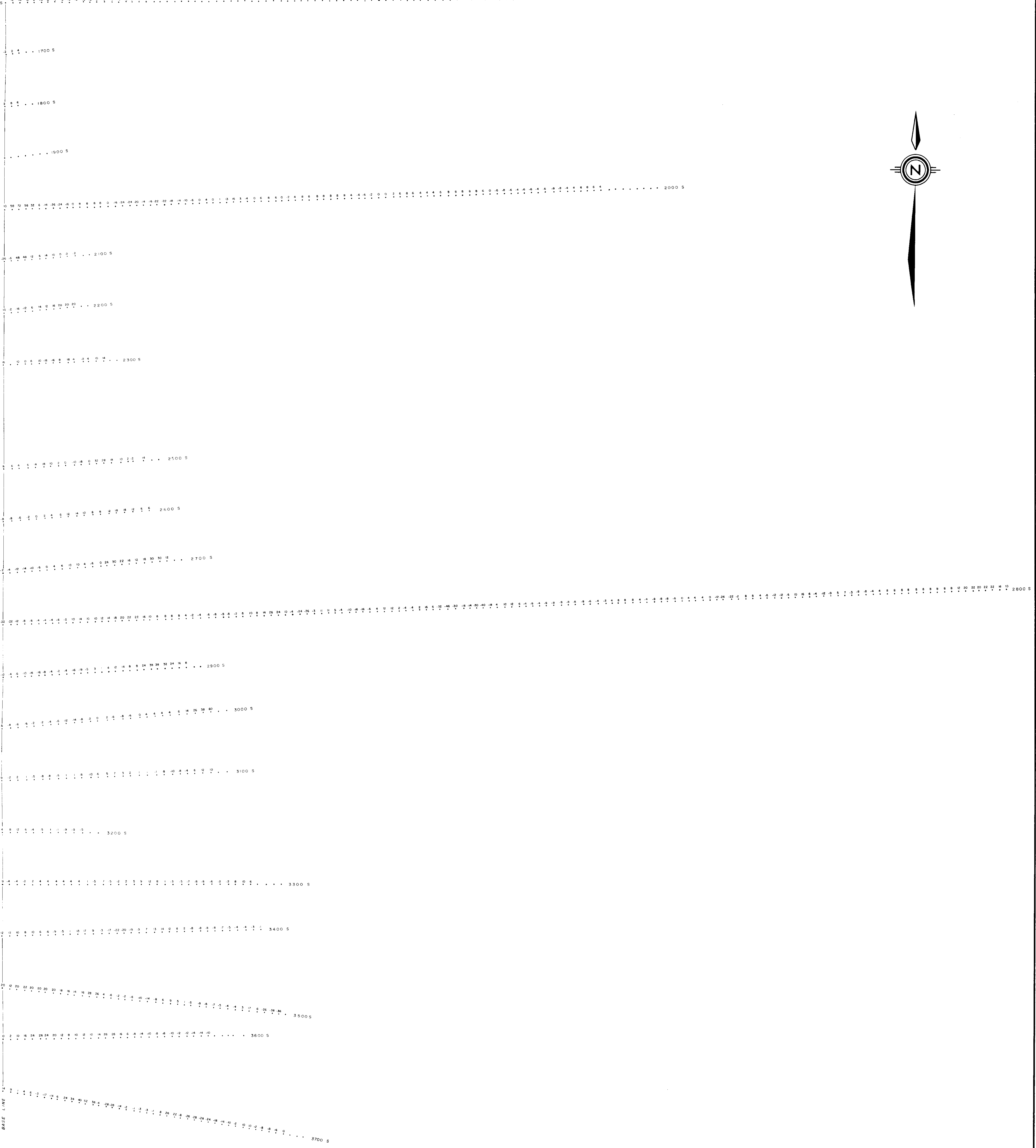


GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688


 Chevron Standard Limited Minerals Staff	
NIE CLAIM WEST VLF CONTOUR MAP	
FIGURE No. 7A	PROJECT No. M - 504
DATE Sept. 1984	REVISIONS
NTS No.	FILE No.
COMPILED BY D.S.	

BASE LINE



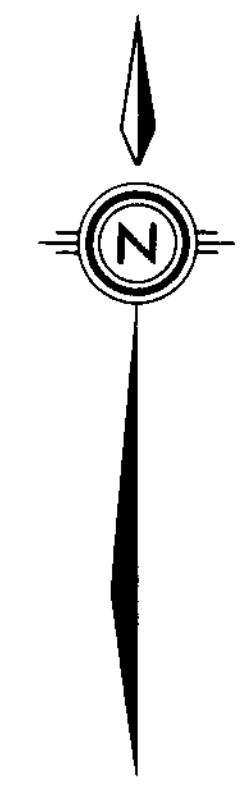
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff		
NIE CLAIM EAST FRASER FILTER VLF CONTOUR MAP		
FIGURE No 7B	PROJECT No M 504	SCALE 1:2,500
DATE OCT. 1984	REVISIONS	FILE No
NTS No		
COMPILED BY		


05-104

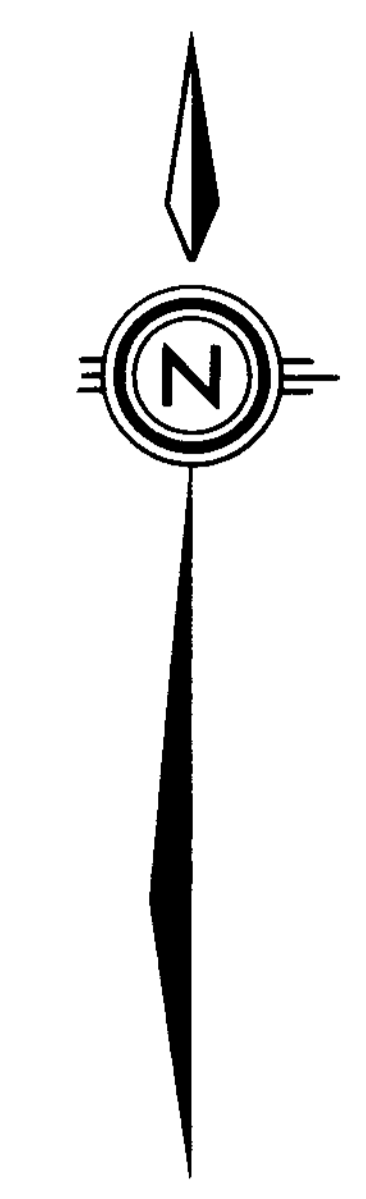
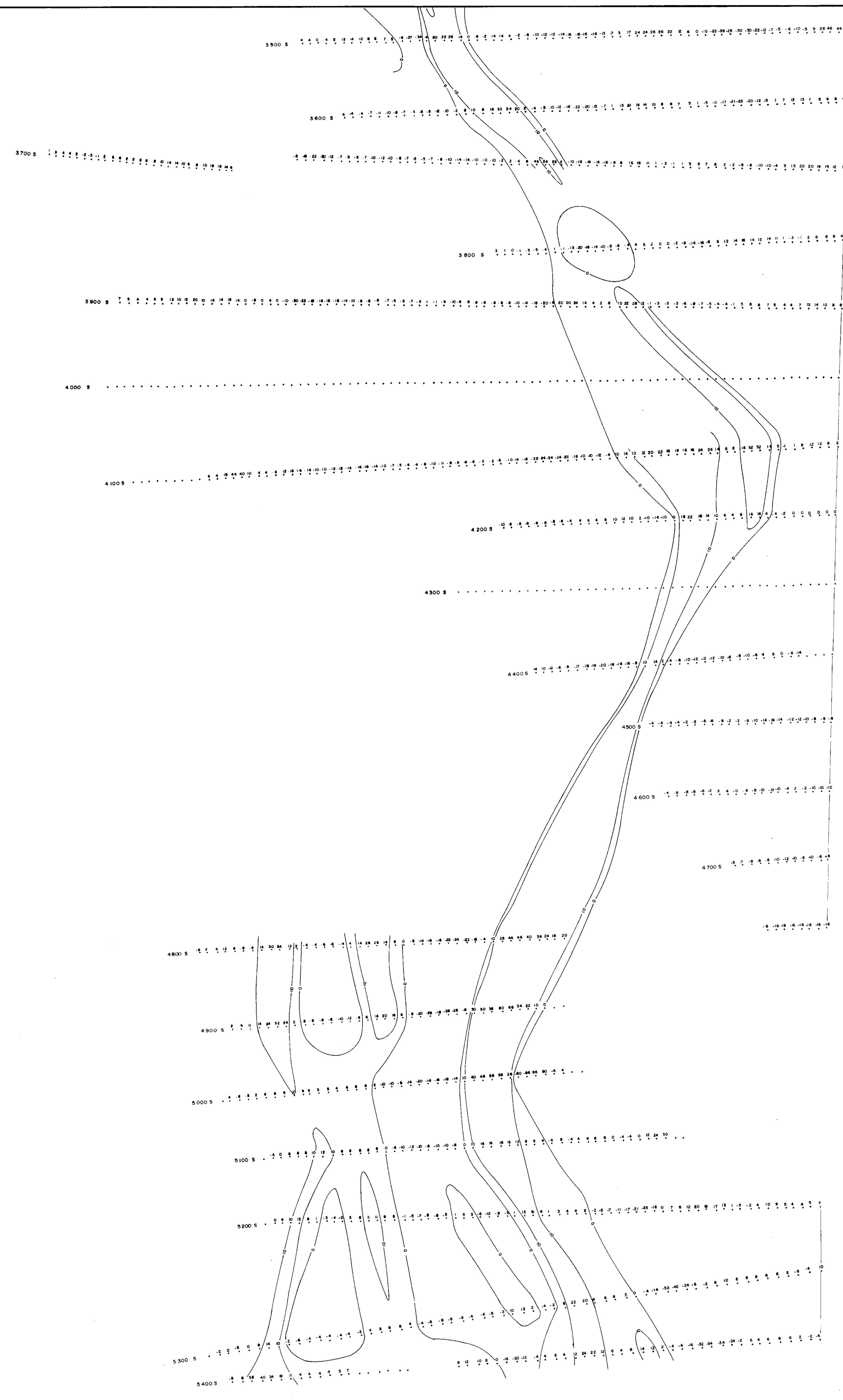
..... 16 18 18 12 20 24 24 -16 -2 -14 -14 -10 -2 -18 14 14 -12 -18 -4 2 -4 6 34 38 18 6 2 0 -2 -10 -20 -23 -21 -19 -17 -16 -15 -15 -21 -27 -30 -38 -36 -16 6 2 -16 -14 4 3 -13 -11 5 12 12 10 8 8 8 4 -4 -10 -12 -12 -14 -16 -18 -24 -17 7 15 15 -10 -52 -56 -24 -8 -8 -2 8 10 8 10 14 20 20 22 2 -6 -4 0 8 8 2 0 L 1600 S



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**


12,688

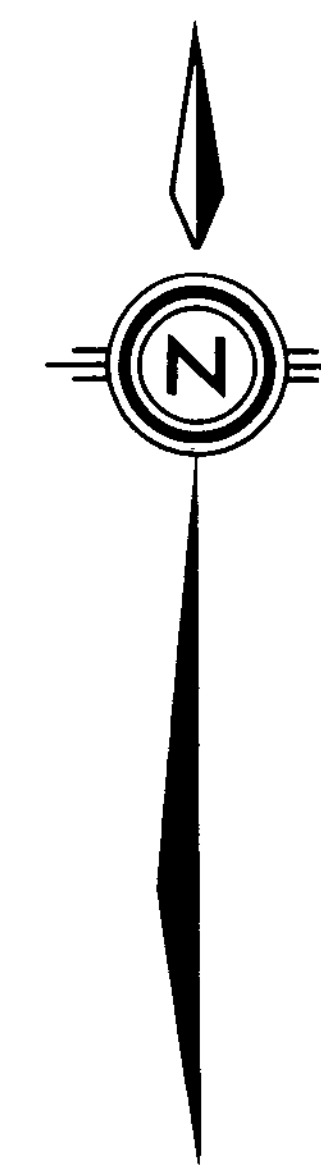
 Chevron Canada Resources Limited Minerals Staff		
NIE CLAIM EAST FRASER FILTER VLF CONTOUR MAP		
FIGURE No. 7C	PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:2,500
NTS No.		FILE No.
COMPILED BY		



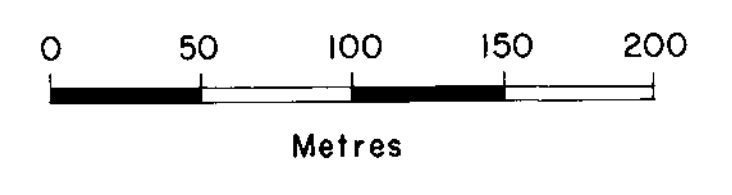
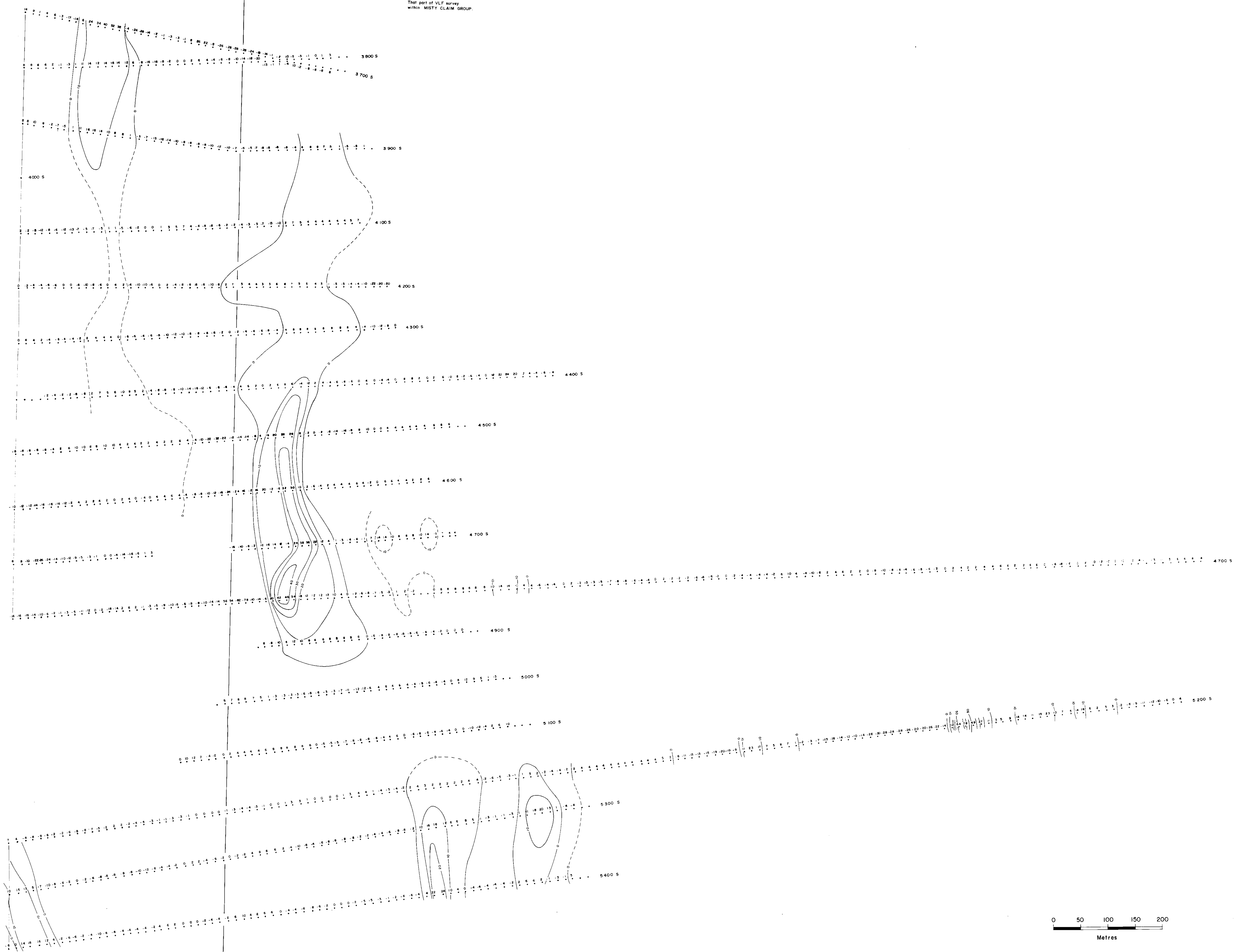
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Standard Limited Minerals Staff	
NIE CLAIM WEST VLF CONTOUR MAP	
FIGURE No. 7D	PROJECT No. M - 504
DATE Sep 1984	REVISIONS
NTS No.	SCALE 1 : 2,500
COMPILED BY D.S.	FILE No.



That part of VLF survey
within MISTY CLAIM GROUP.



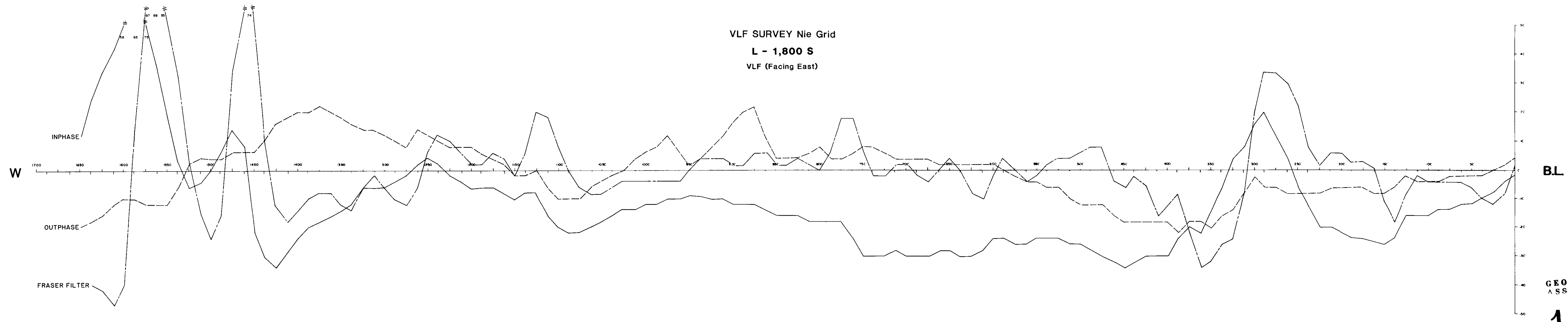
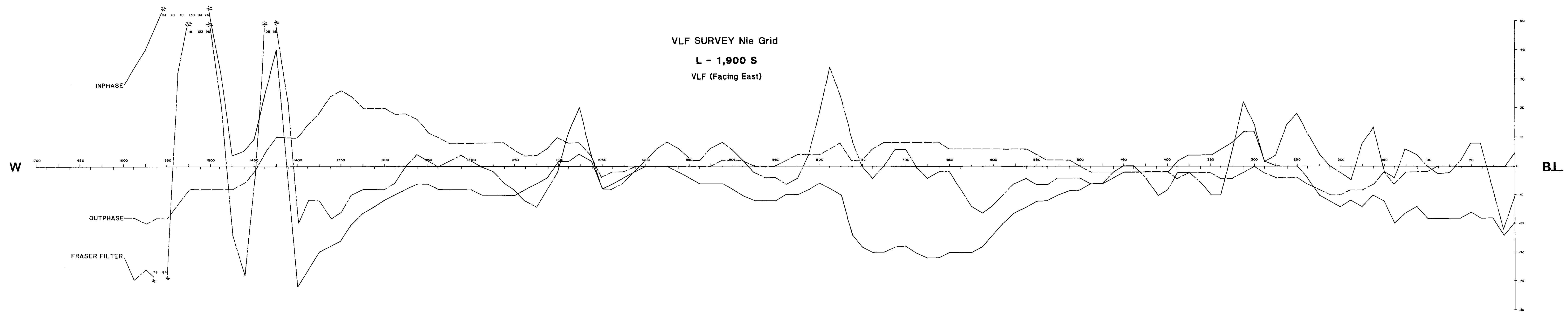
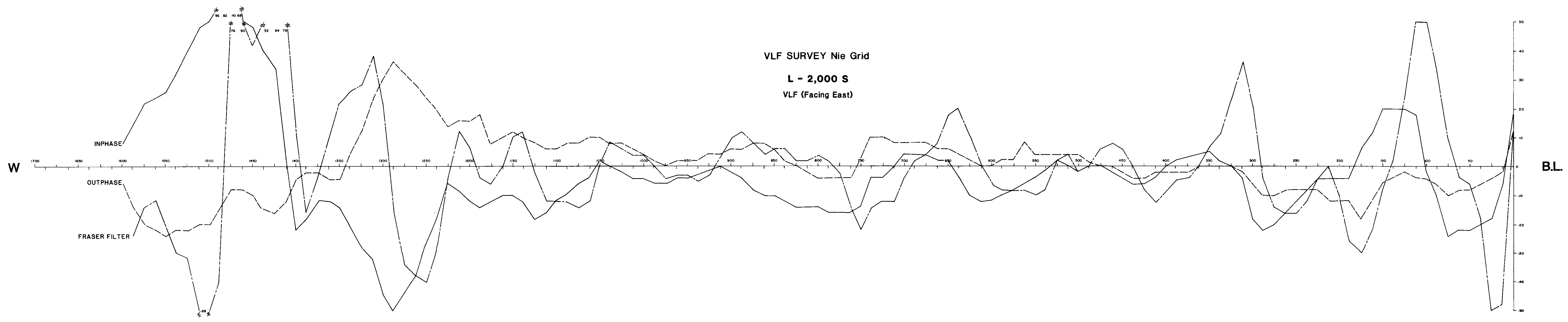
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 **Chevron Canada Resources Limited**
Minerals Staff

NIE CLAIM EAST
FRASER FILTER
VLF CONTOUR MAP

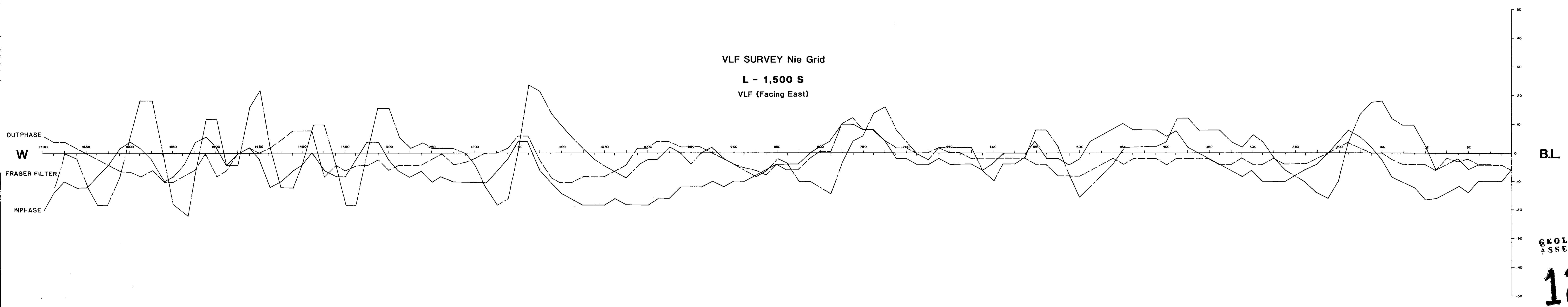
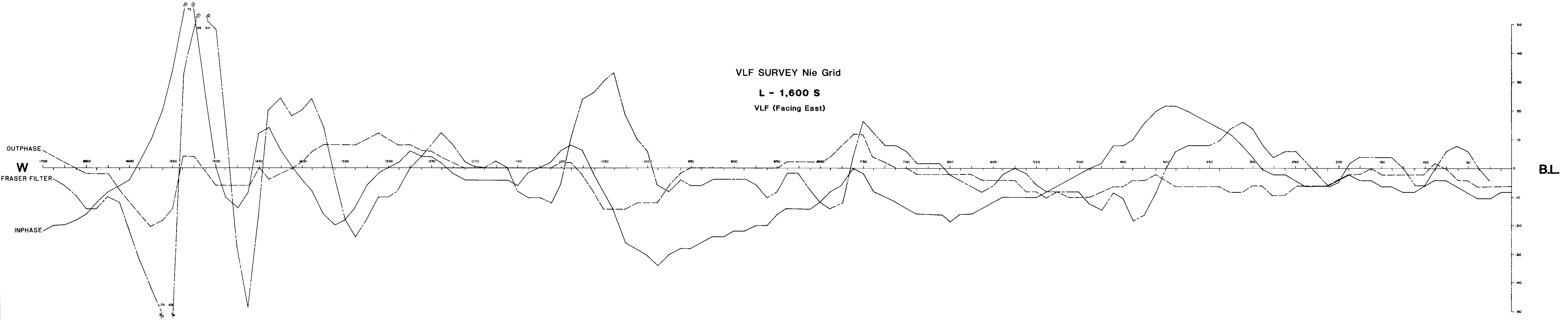
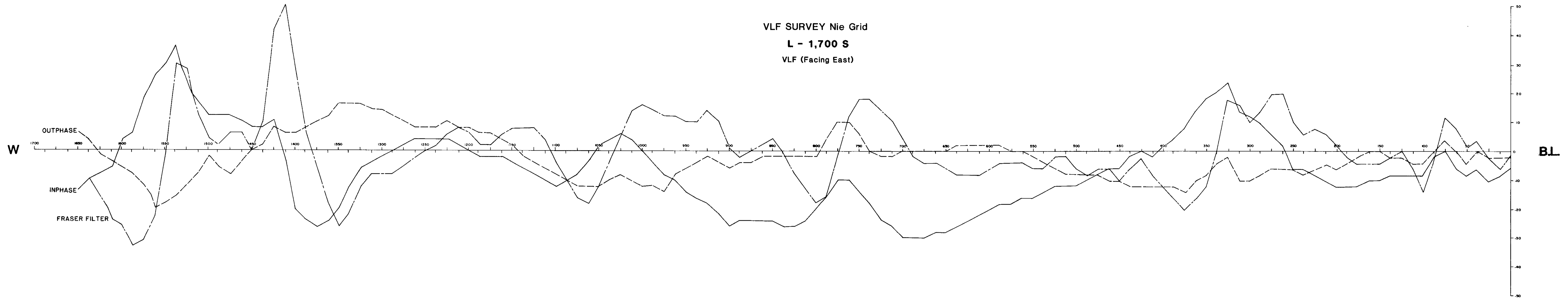
FIGURE No. 7E	PROJECT No. M504	
DATE Oct. 1984	REVISIONS	SCALE 1:2,500
NTS No.		FILE No.
COMPILED BY		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

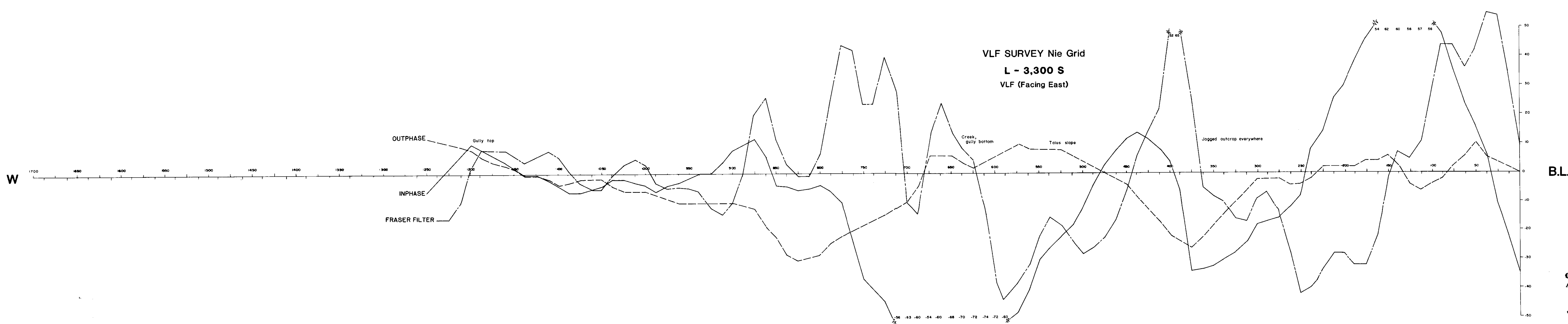
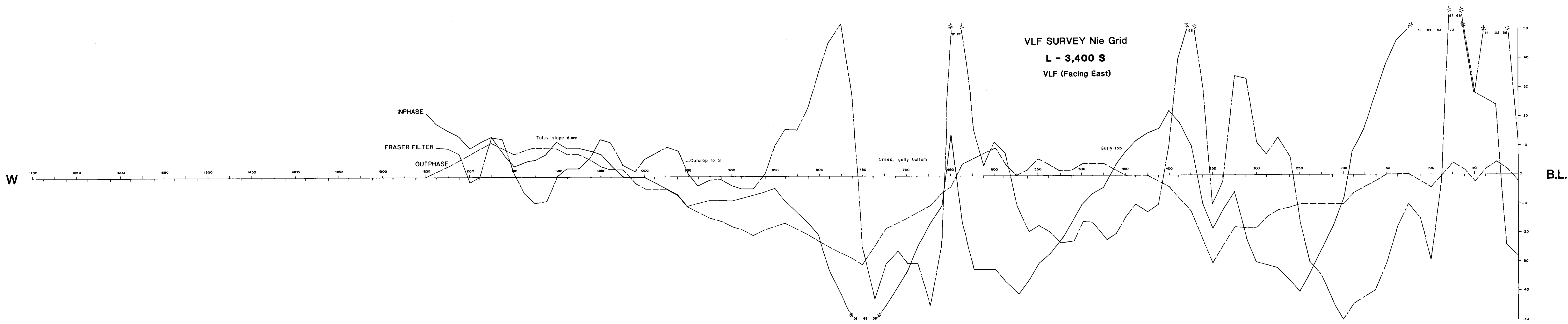
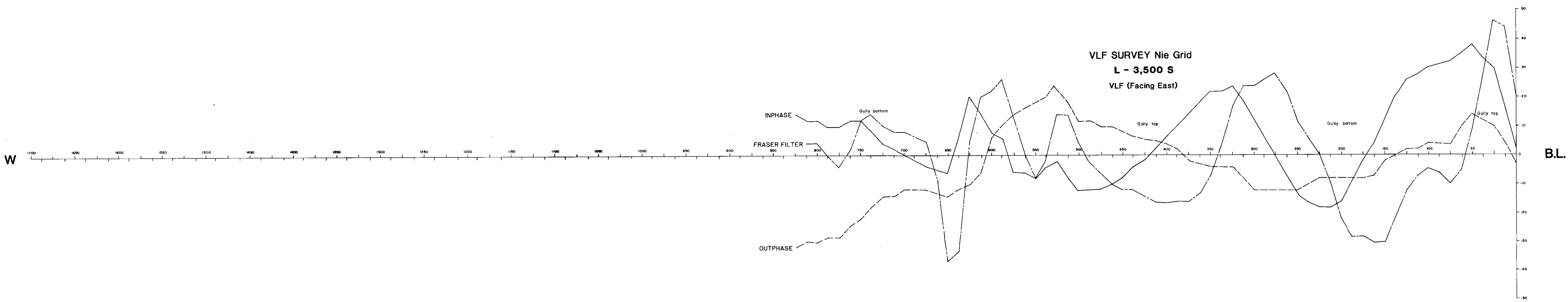
Chevron Canada Resources Limited Minerals Staff		
NIE GROUP W.		
VLF PROFILES		
FIGURE No 8B	PROJECT No M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6
NTS No		FILE No
COMPILED BY		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

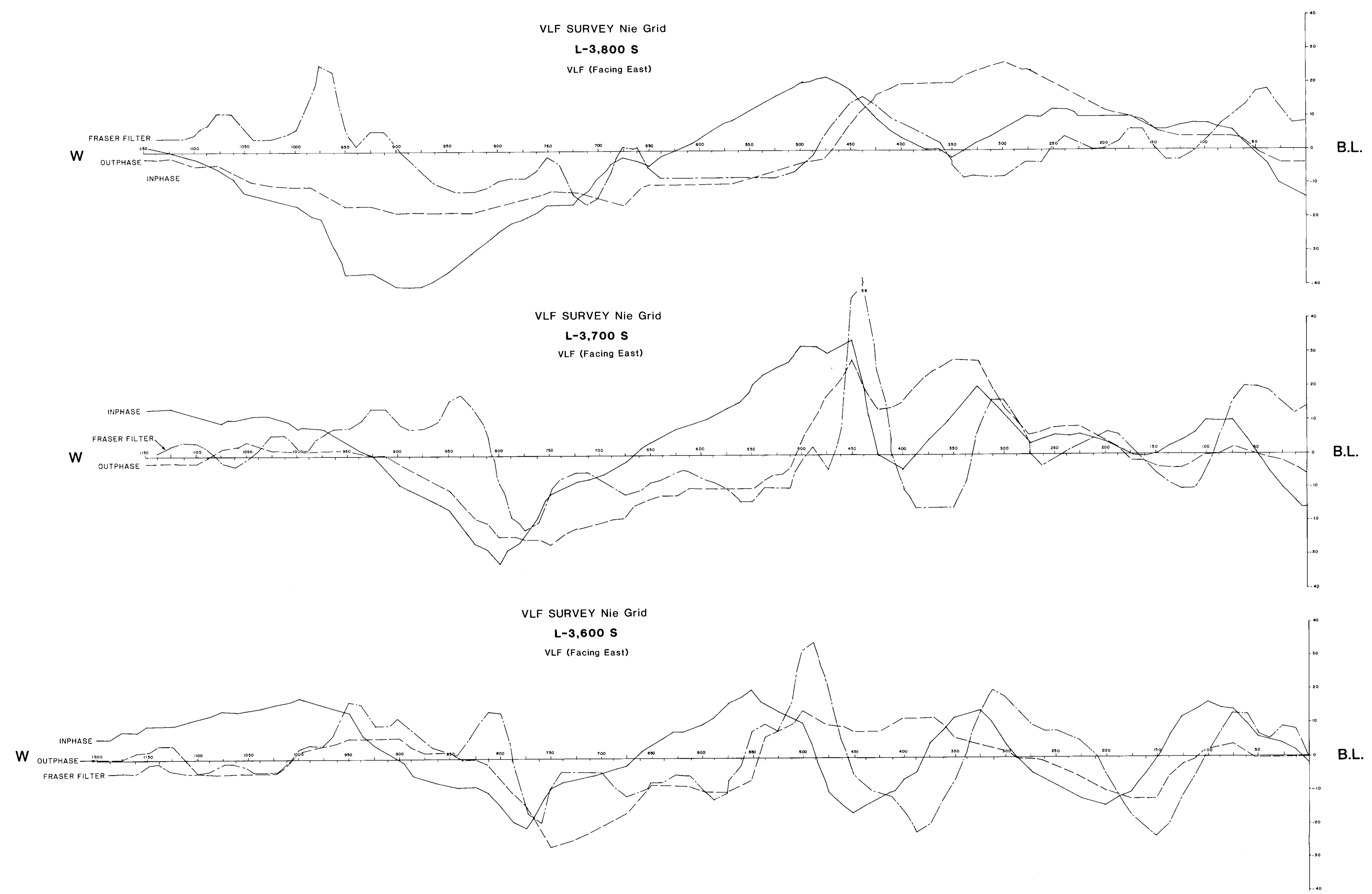
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W. VLF PROFILES			
FIGURE No. 8A	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No.		FILE No.	
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W. VLF PROFILES			
FIGURE No. 8G		PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No.		FILE No.	
COMPILED BY			

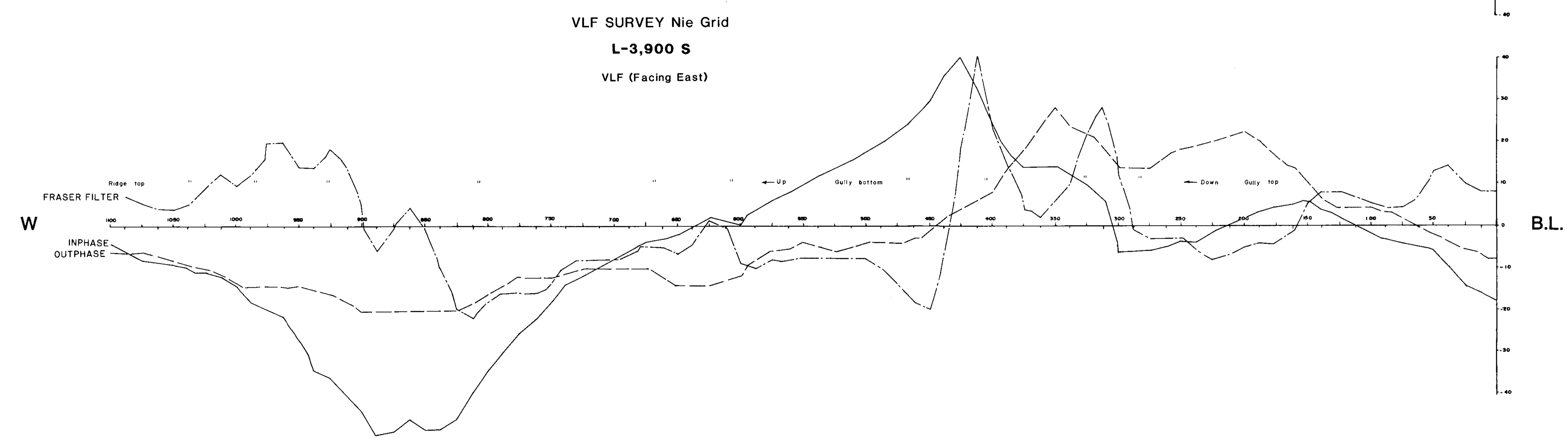
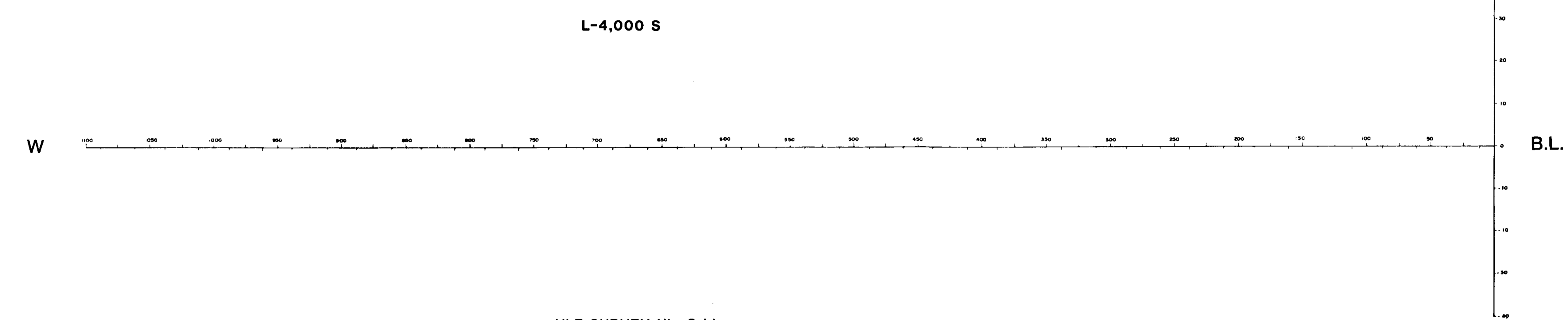
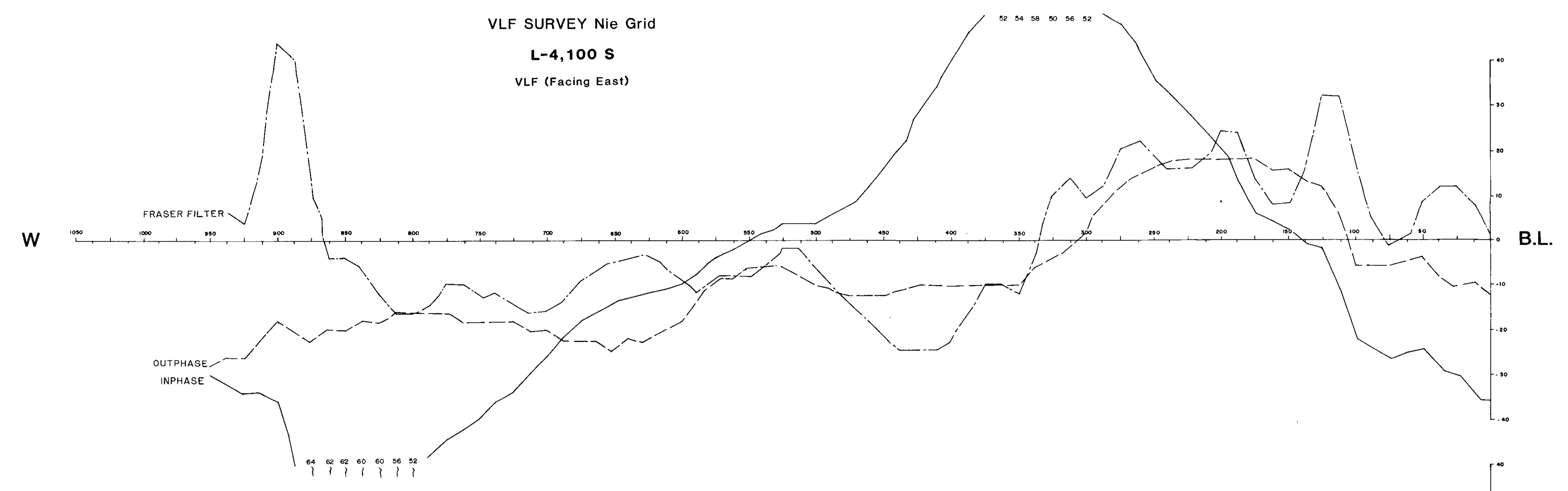


GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited Minerals Staff		
NIE GROUP W. VLF PROFILES		
FIGURE No 8H	PROJECT No M504	SCALE 1:1666.6
DATE OCT. 1984	REVISIONS	FILE No.
NTS No.		
COMPILED BY		

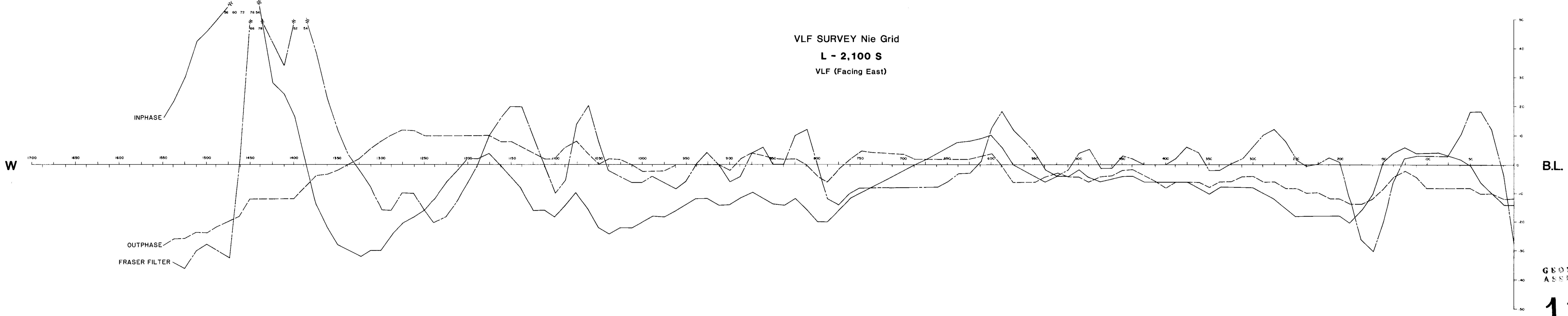
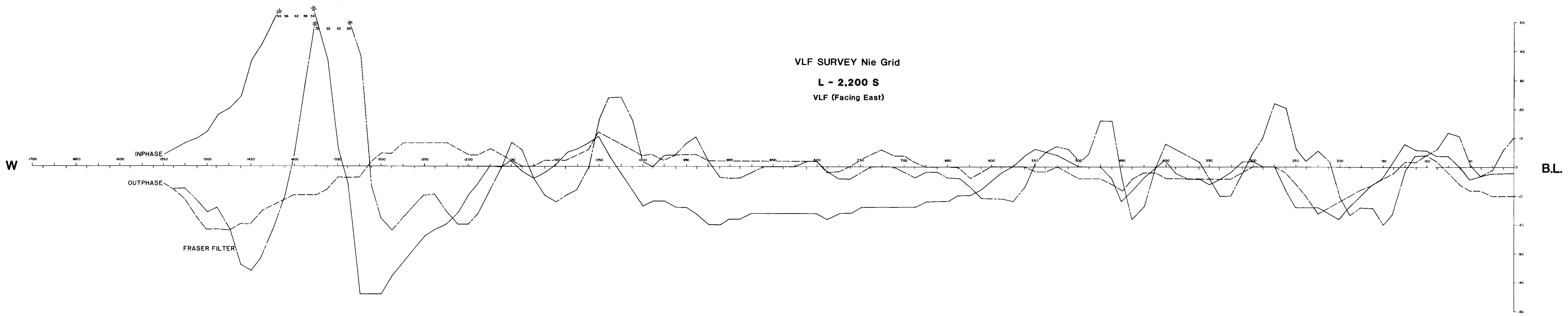
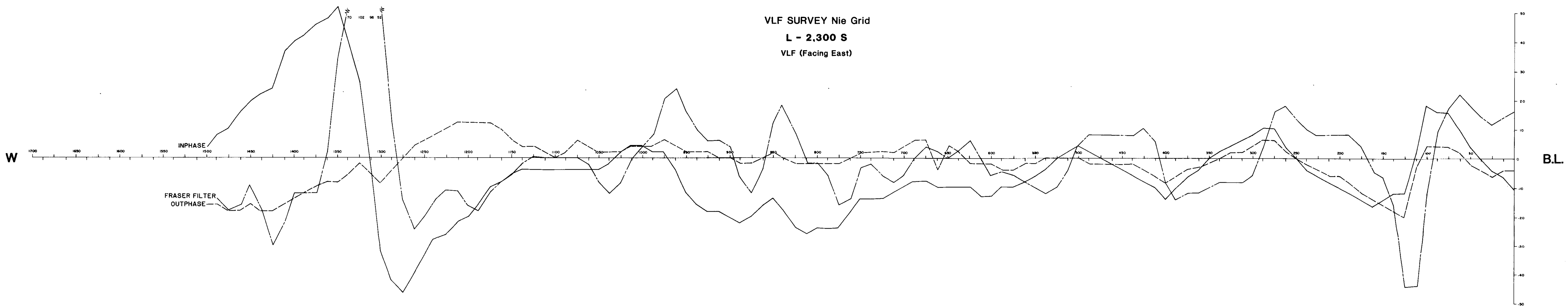
500-11742-02



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

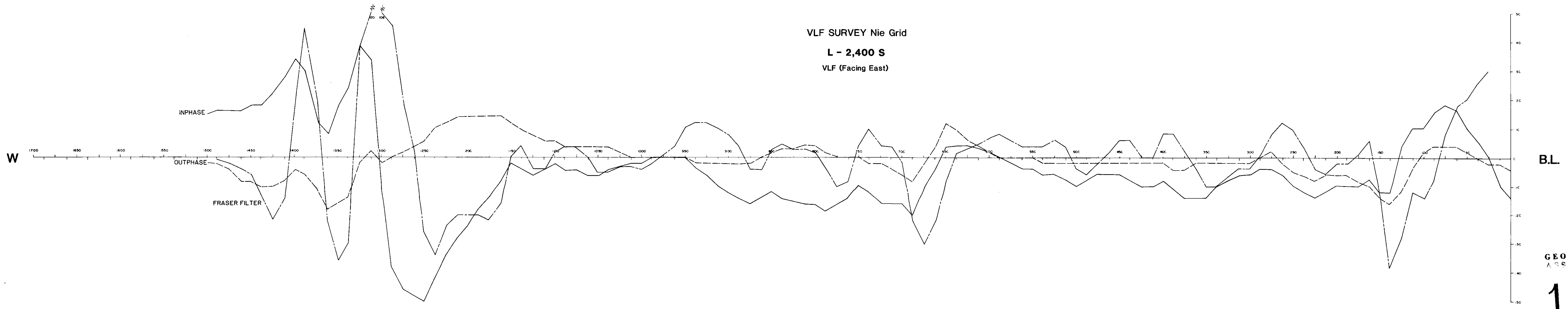
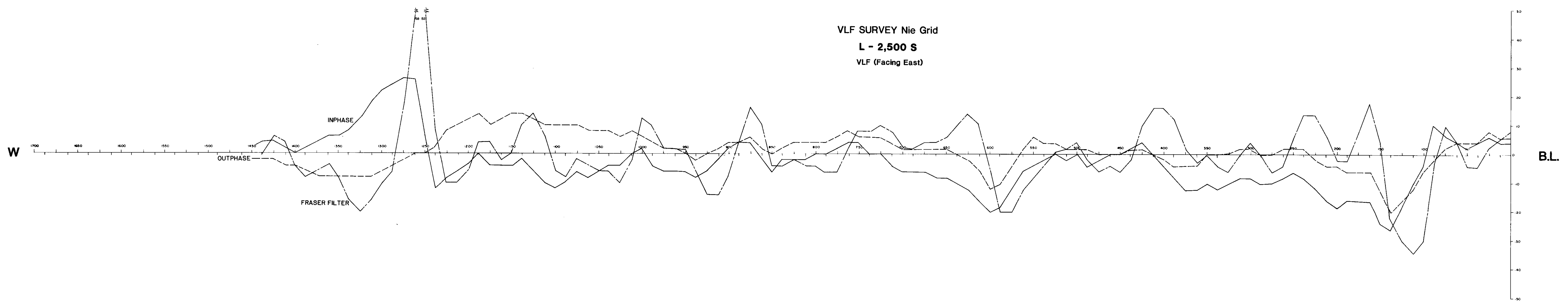
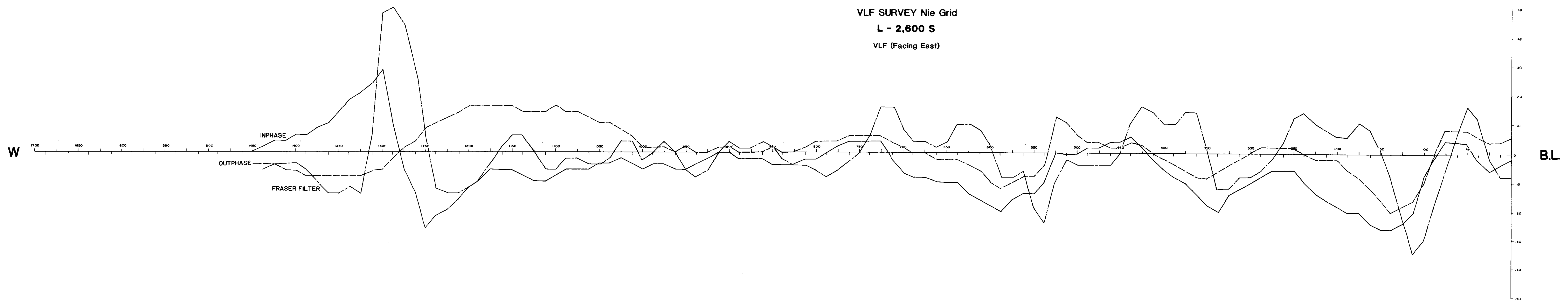
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W.			
VLF PROFILES			
FIGURE No. 81	PROJECT No. M504		SCALE 1:1666,6
DATE OCT, 1984	REVISIONS	FILE No.	
NTS No.	COMPILED BY		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

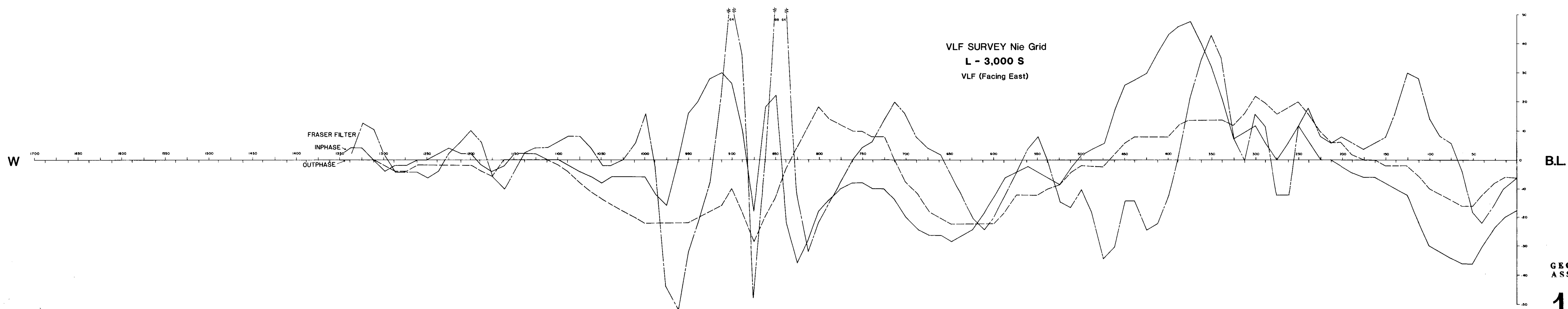
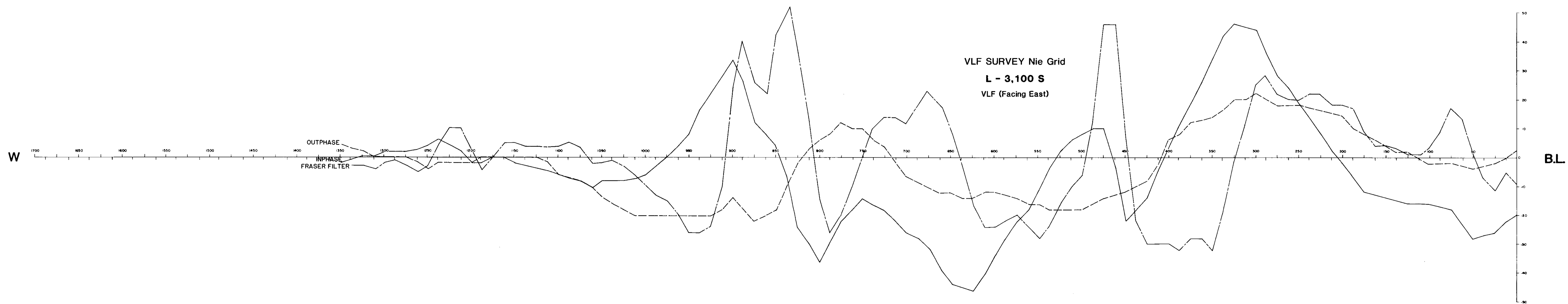
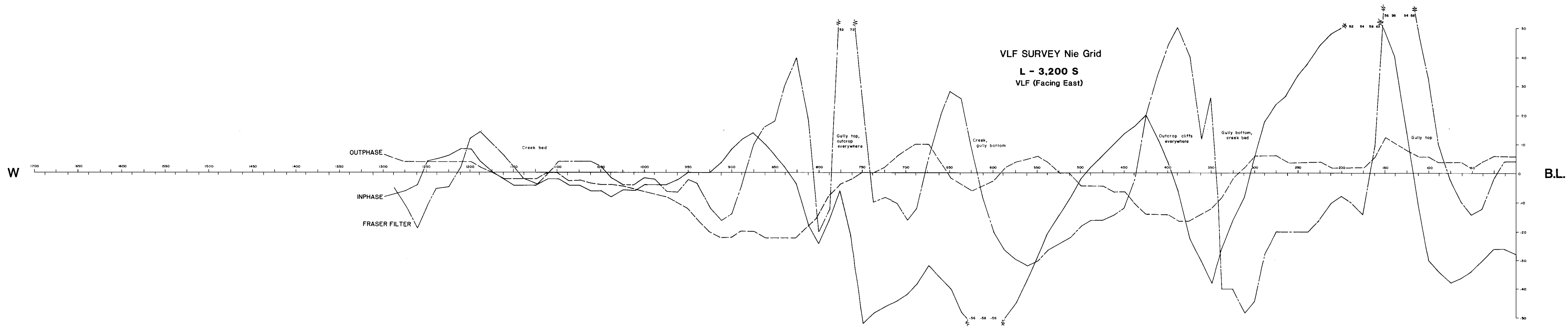
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W. VLF PROFILES			
FIGURE No 8C		PROJECT No M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.8	FILE No
NTS No			
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

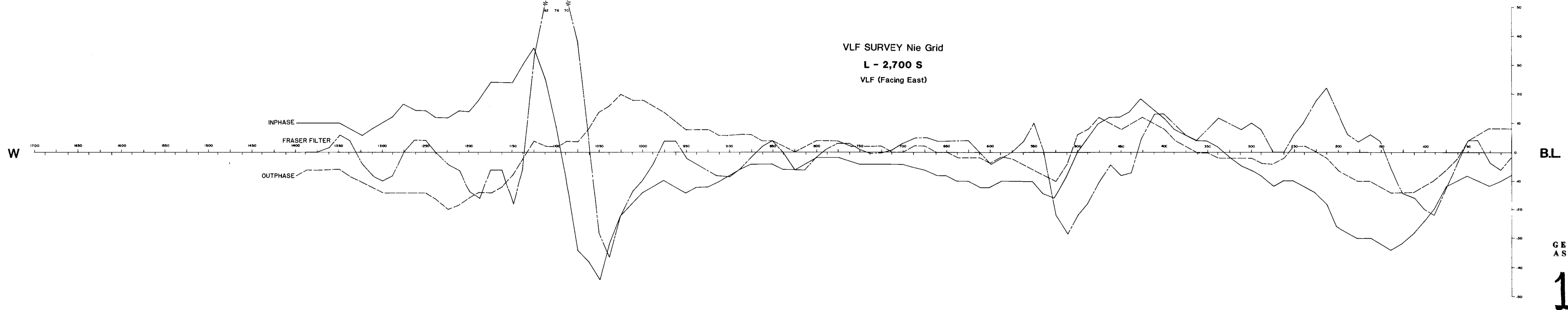
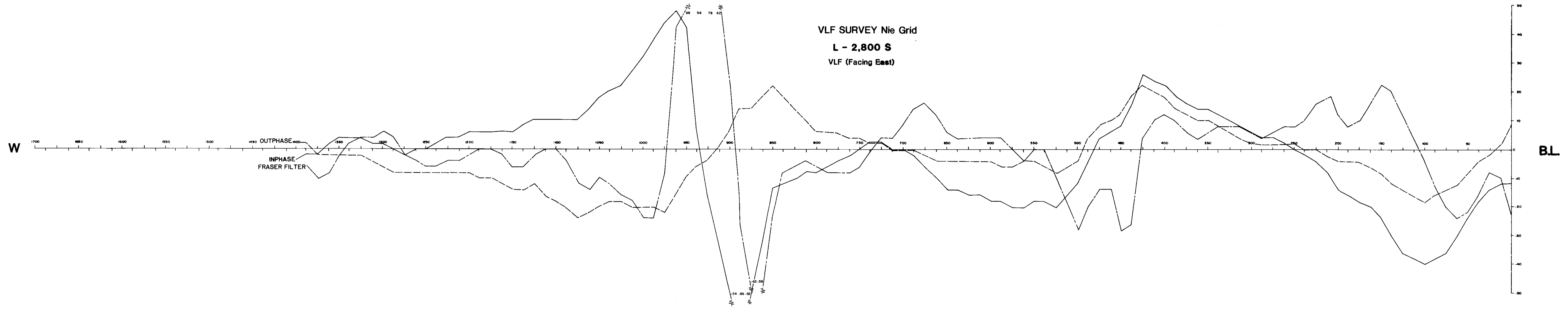
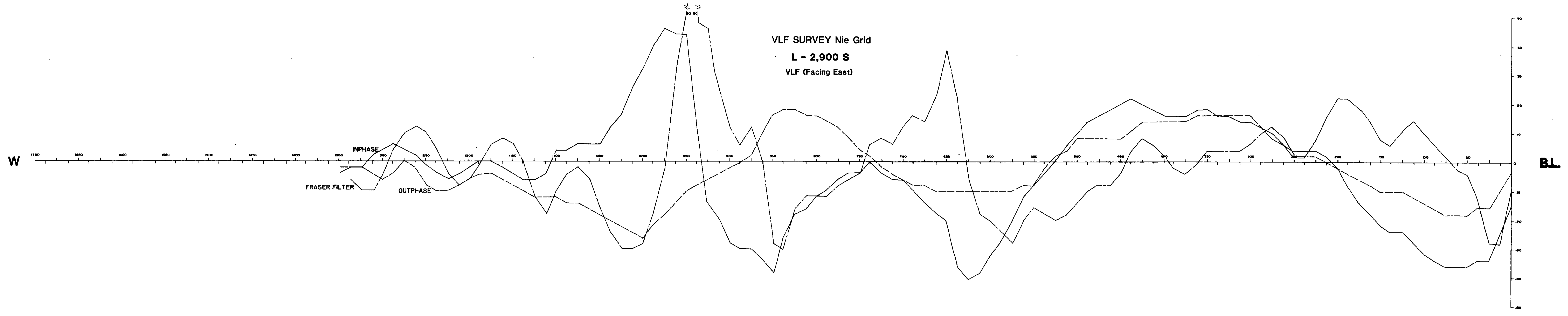
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W.			
VLF PROFILES			
FIGURE No 8D	PROJECT No M 504		SCALE 1:1666.6
DATE OCT. 1984	REVISIONS	FILE No	
NTS No			
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

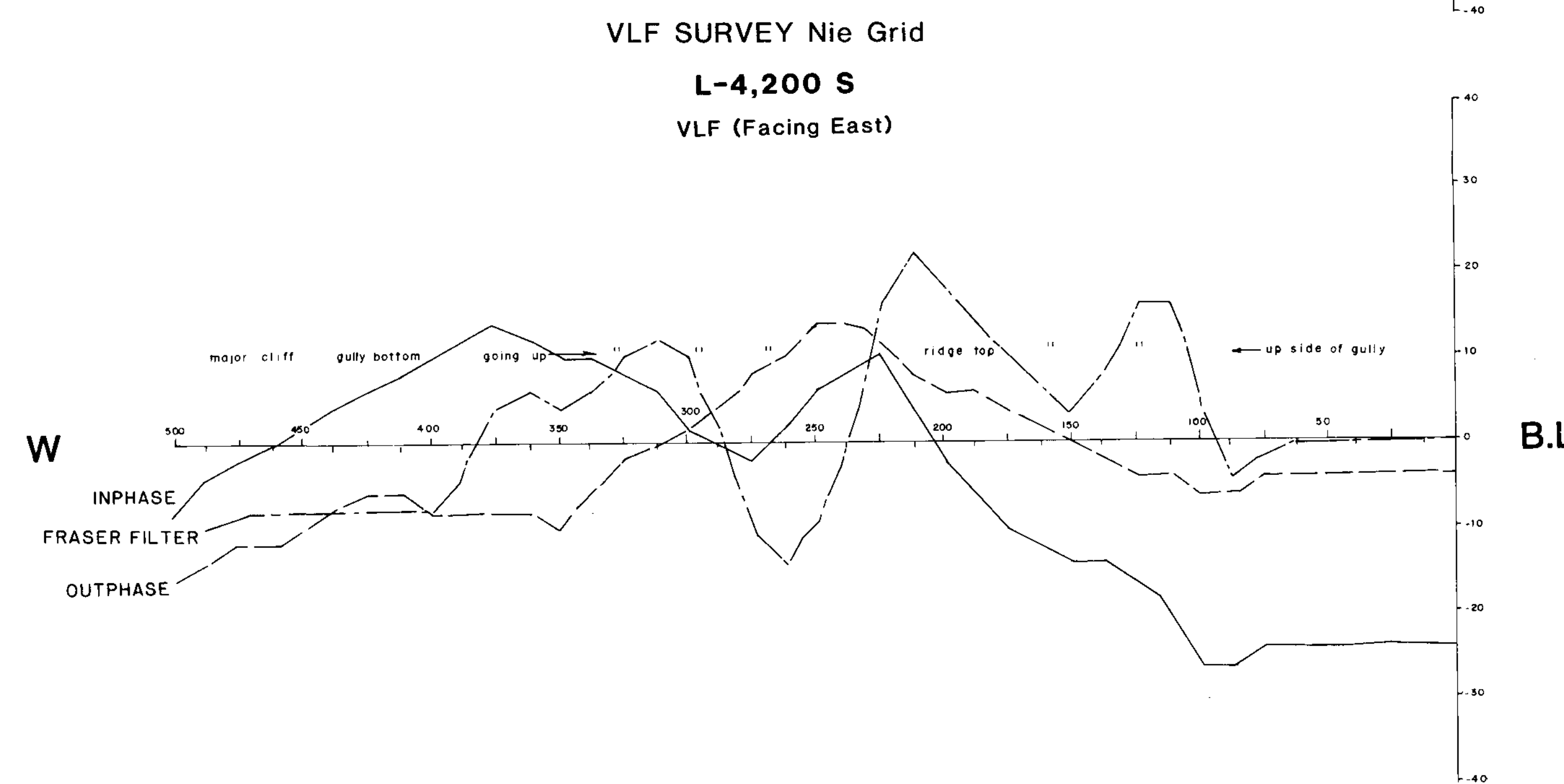
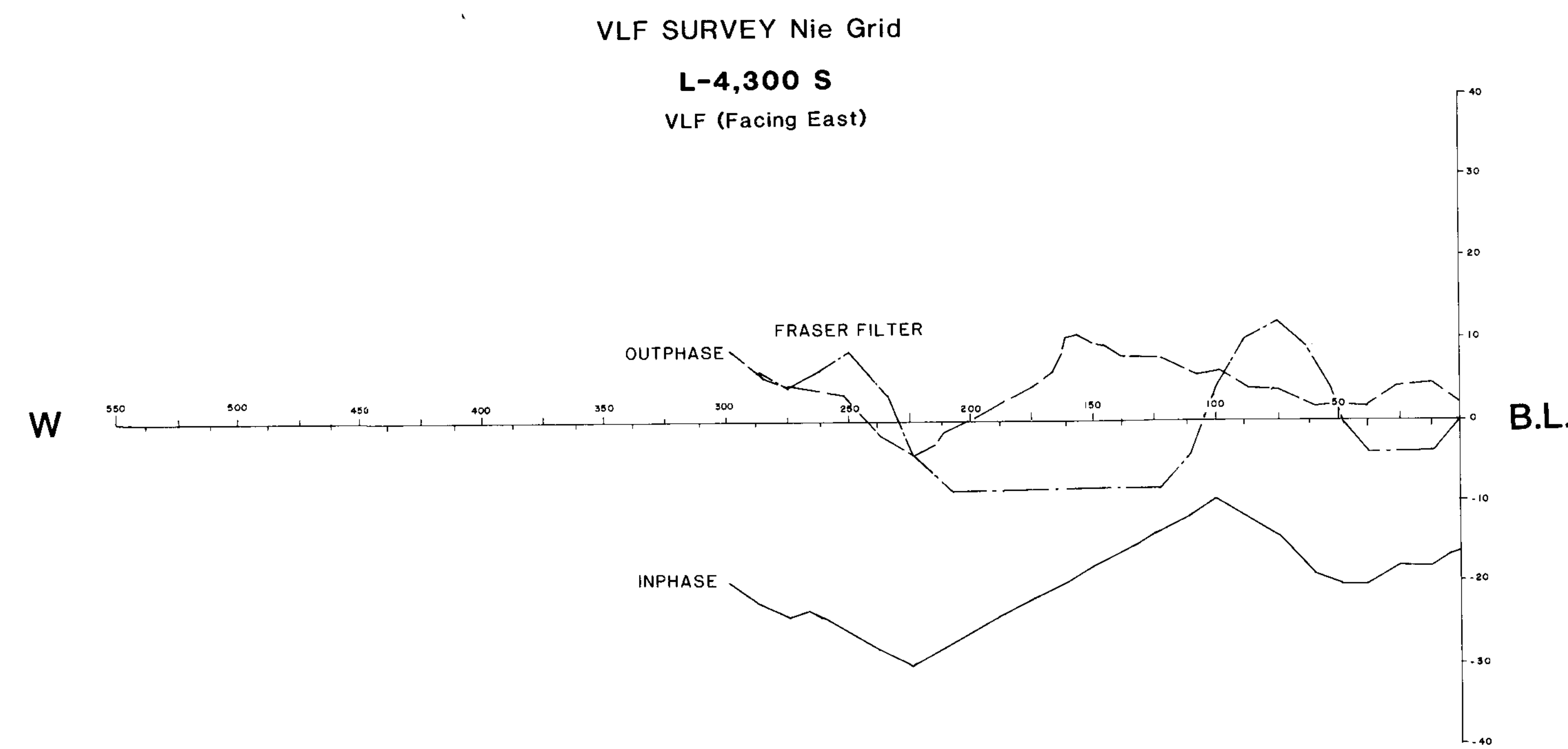
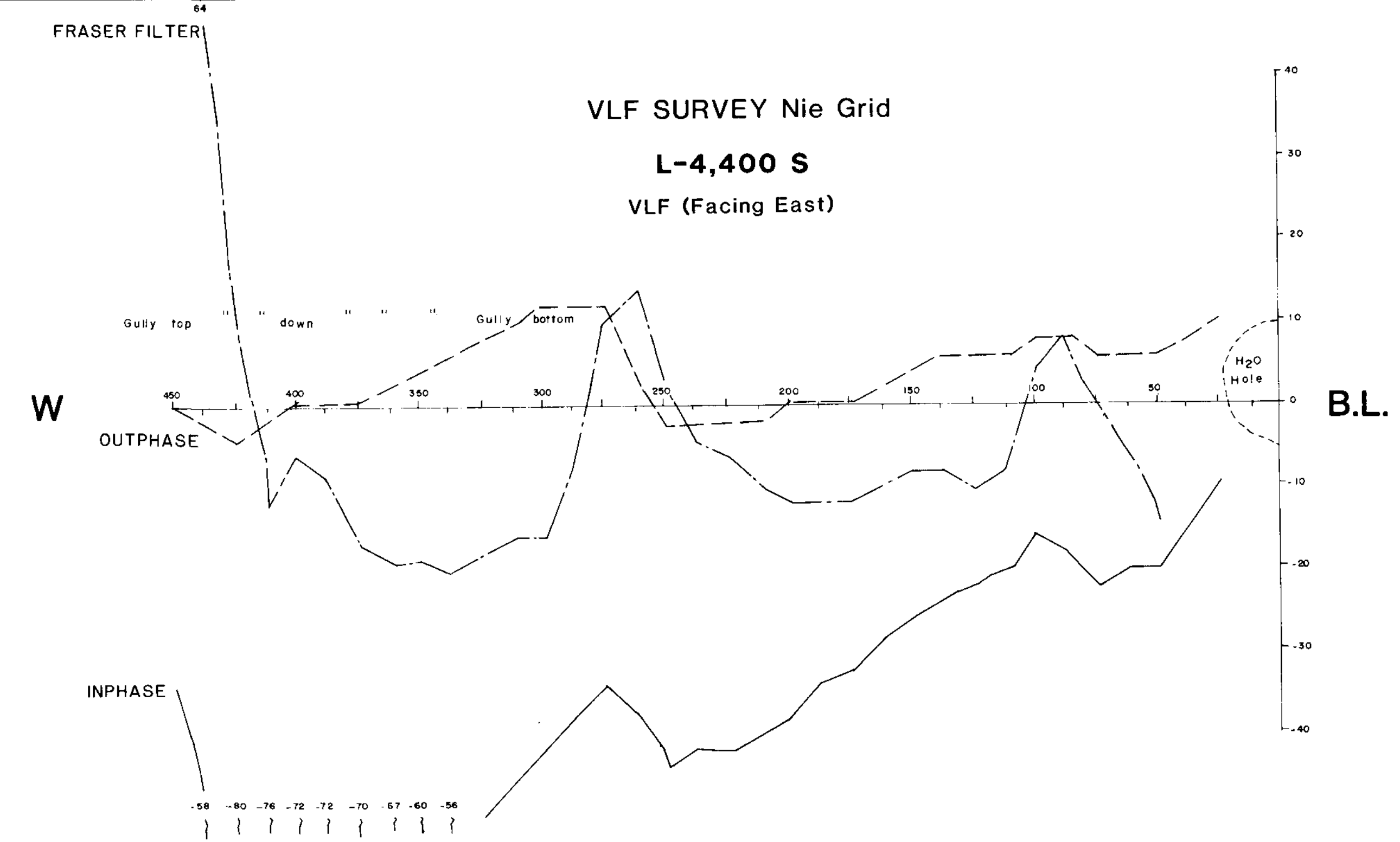
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP W. VLF PROFILES			
FIGURE No. 8F	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS		SCALE 1:1666.6
NTS No.			FILE No.
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

NIE GROUP W. VLF PROFILES			
FIGURE No. 8E	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	FILE No.
NTS No.			
COMPILED BY			



GEOLOGICAL BRANCH
 ASSESSMENT REPORT

12,688

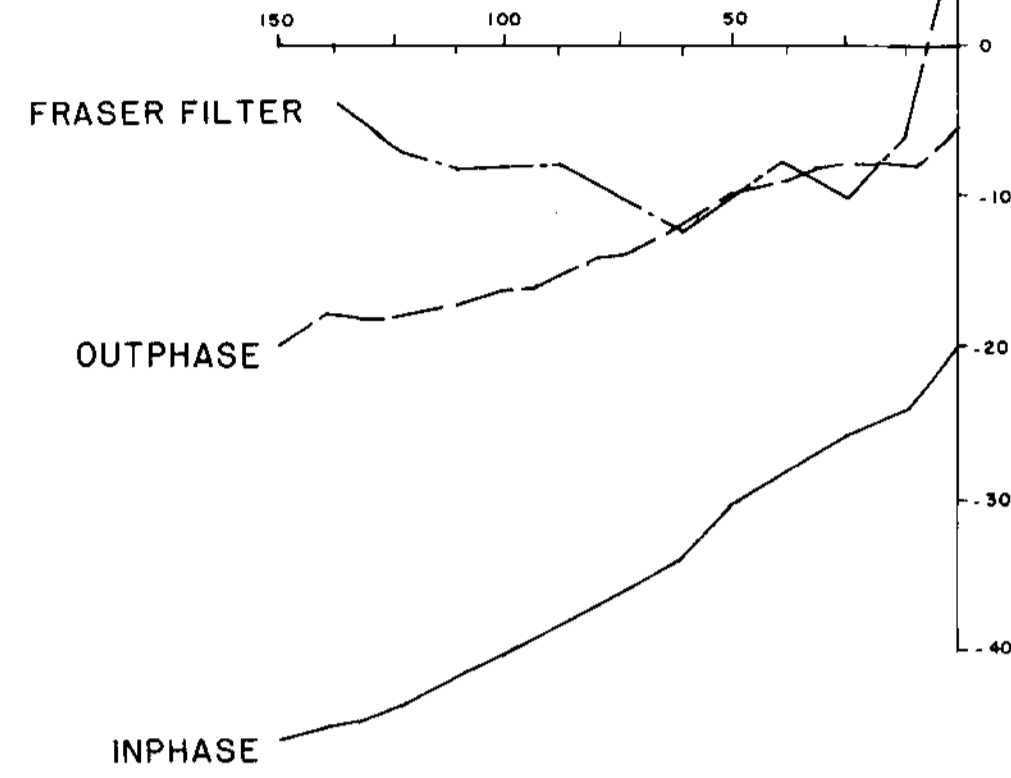
Chevron Canada Resources Limited Minerals Staff	
NIE GROUP W. VLF PROFILES	
FIGURE No 8J	PROJECT No M504
DATE OCT. 1984	REVISIONS
NTS No	FILE No
COMPILED BY	

VLF SURVEY Nie GridVLF

L-4,700 S

VLF (Facing East)

W



B.L.

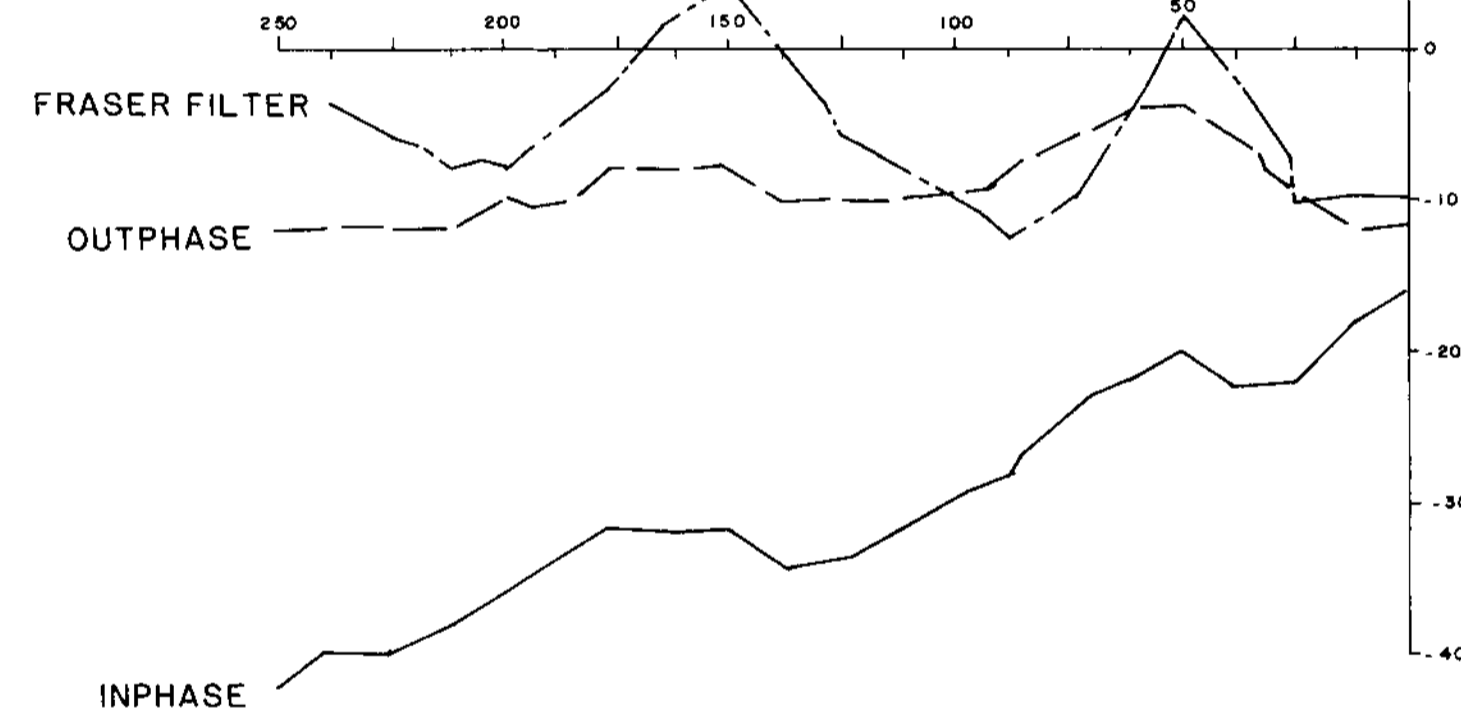


VLF SURVEY Nie Grid

L-4,600 S

VLF (Facing East)

W



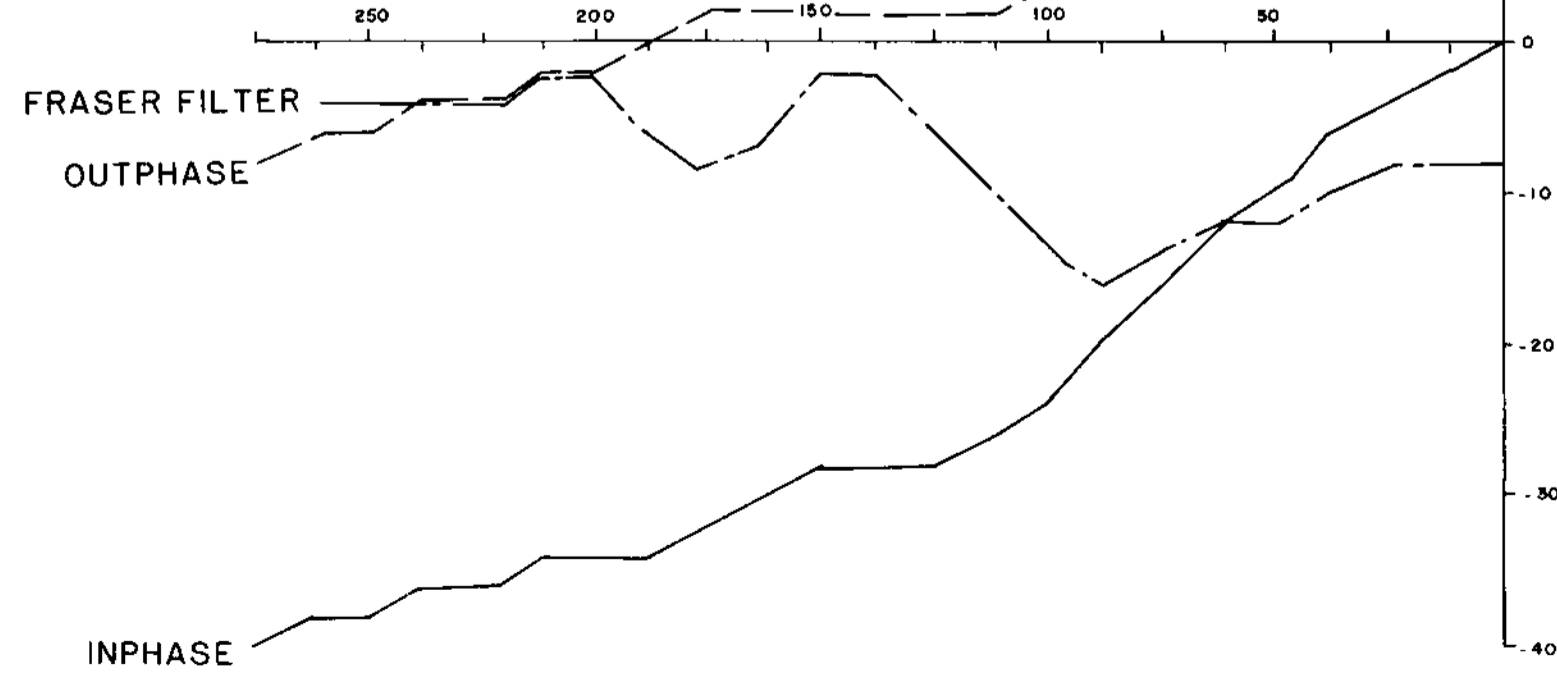
B.L.

VLF SURVEY Nie Grid

L-4,500 S

VLF (Facing East)

W



B.L.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited
Minerals Staff

NIE GROUP W.

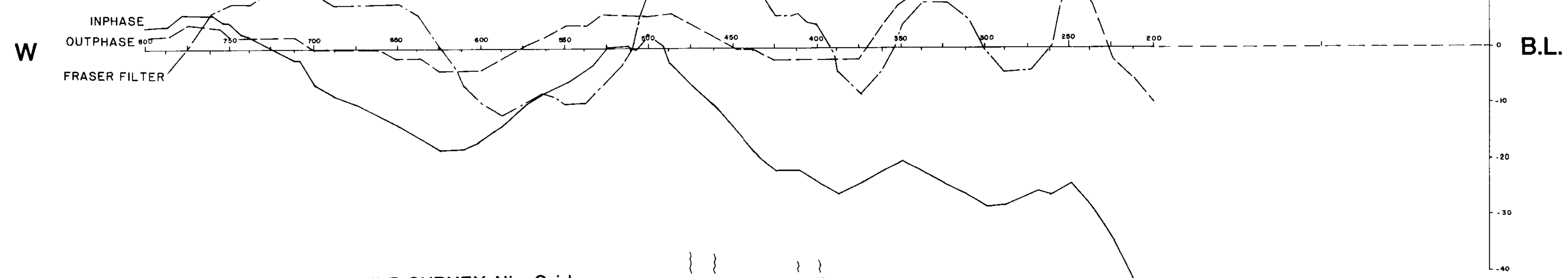
VLF PROFILES

FIGURE No. 8K	PROJECT No. M504
DATE OCT. 1984	REVISIONS
NTS No.	FILE No.
COMPILED BY	

VLF SURVEY Nie Grid

L-5,100 S

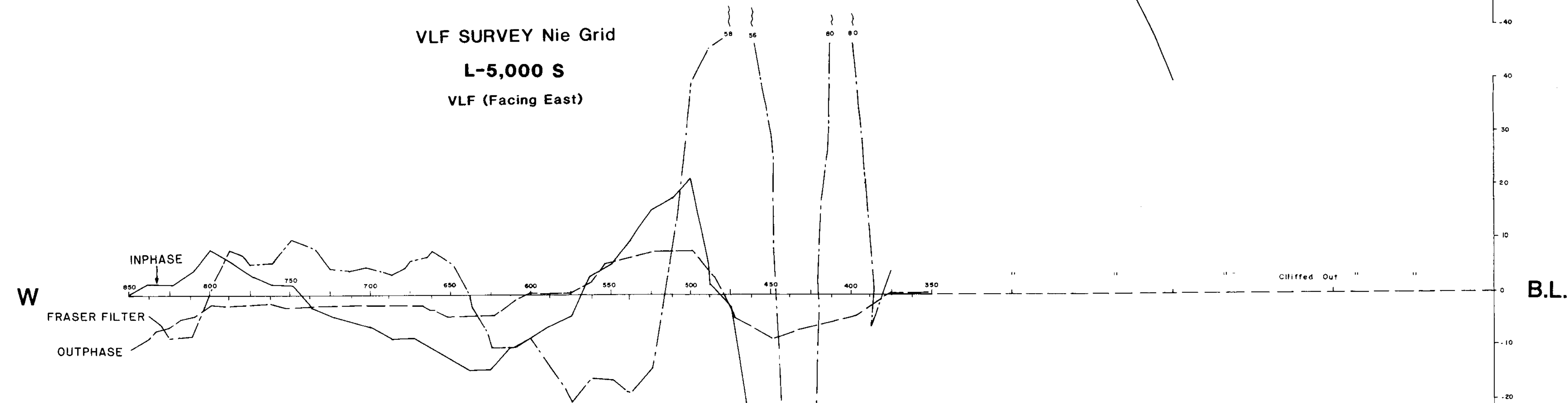
VLF (Facing East)



VLF SURVEY Nie Grid

L-5,000 S

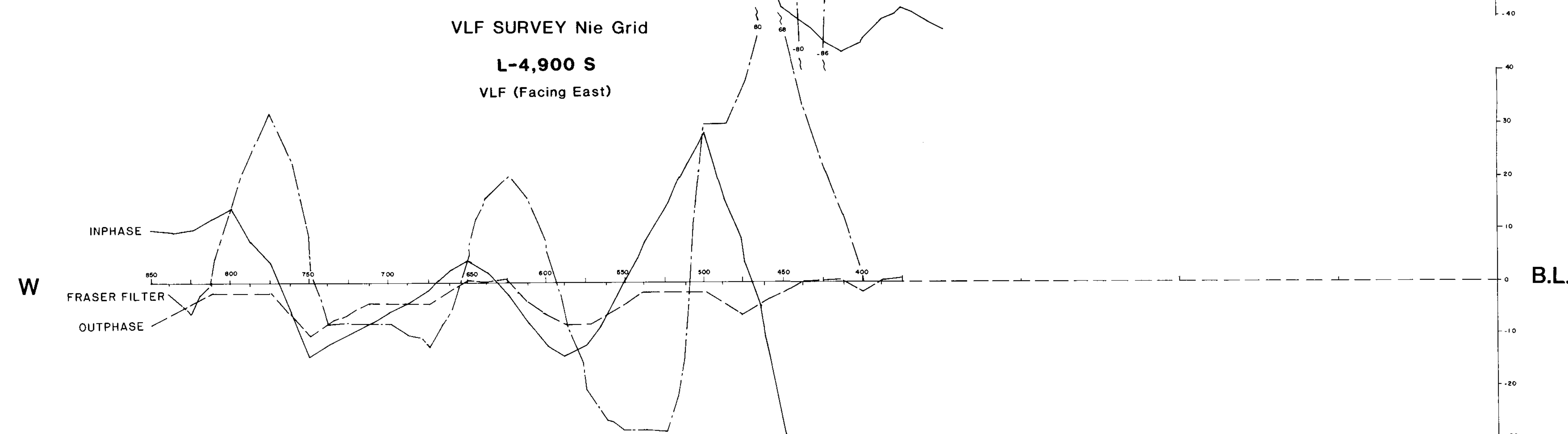
VLF (Facing East)



VLF SURVEY Nie Grid

L-4,900 S

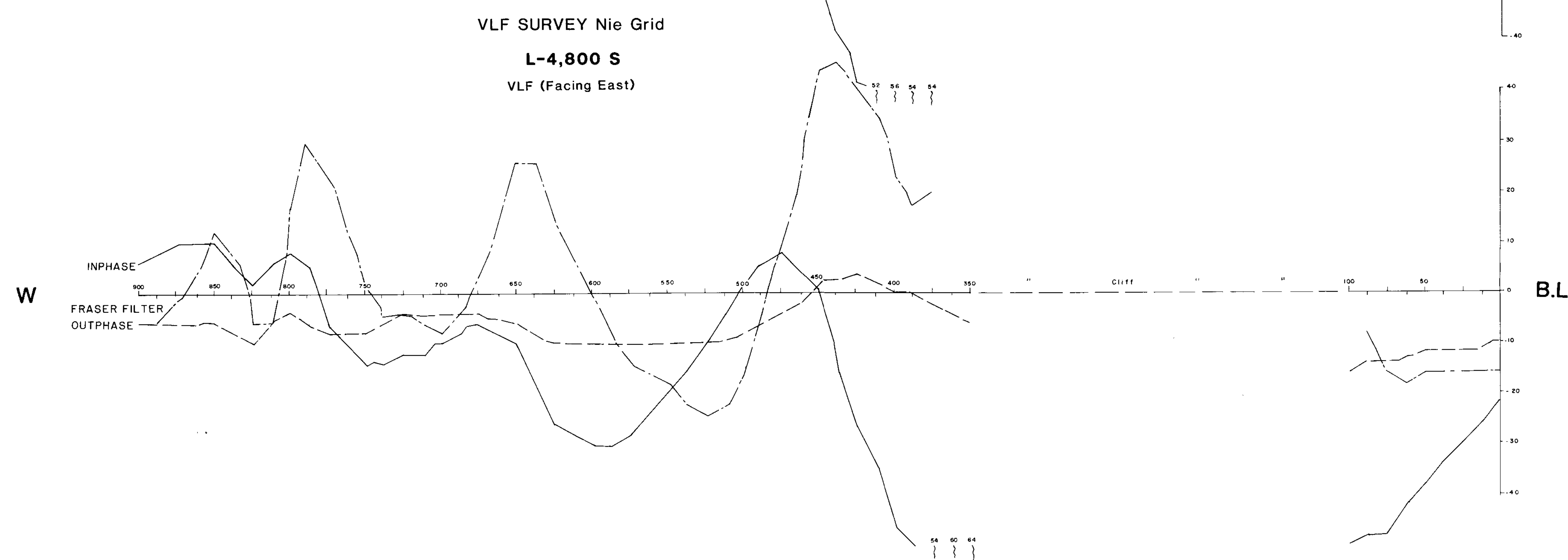
VLF (Facing East)



VLF SURVEY Nie Grid

L-4,800 S

VLF (Facing East)



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited
Minerals Staff

NIE GROUP W.

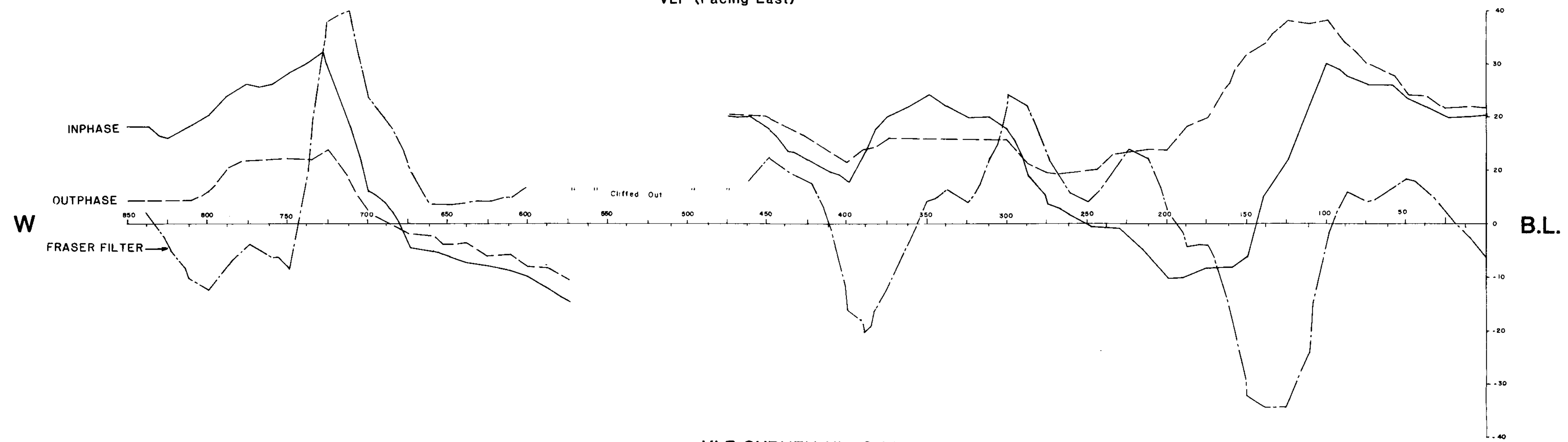
VLF PROFILES

FIGURE No	8L	PROJECT No	M504
DATE	OCT. 1984	REVISIONS	SCALE 1:1666.6
NTS No			FILE No
COMPILED BY			

VLF SURVEY Nie Grid

L-5,400 S

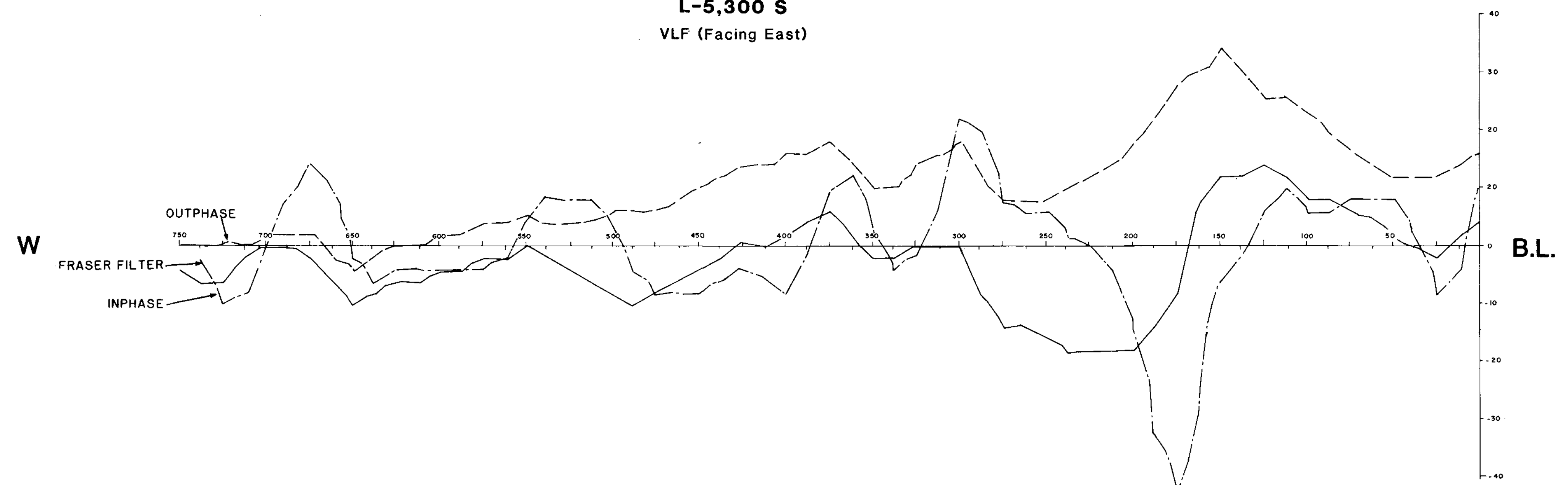
VLF (Facing East)



VLF SURVEY Nie Grid

L-5,300 S

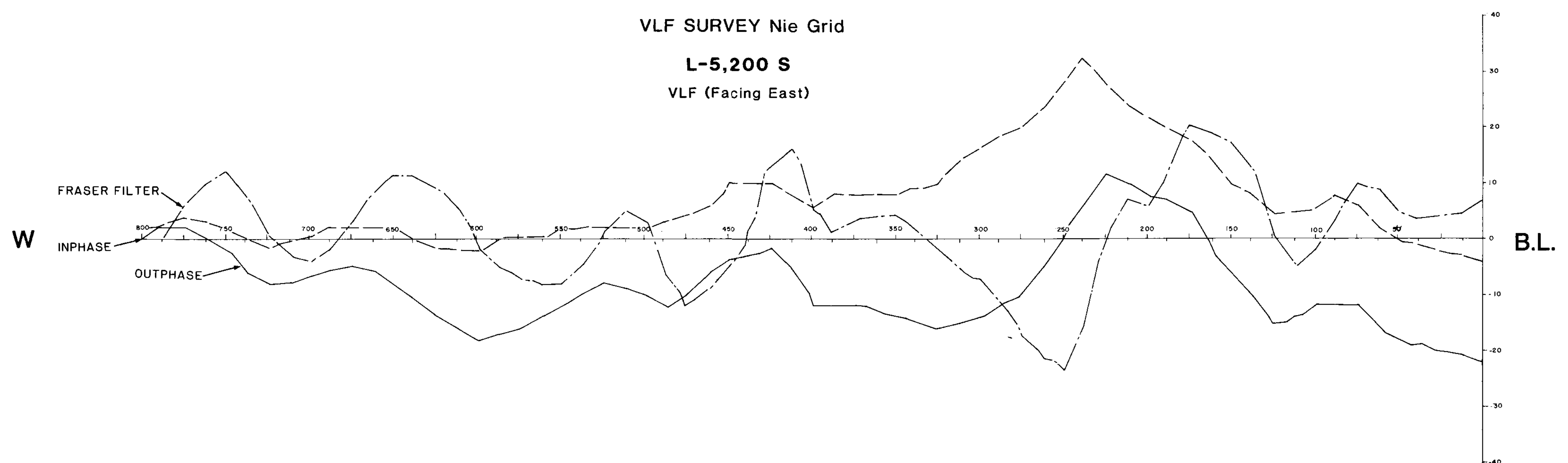
VLF (Facing East)



VLF SURVEY Nie Grid

L-5,200 S

VLF (Facing East)



GEOLOGICAL BRANCH
ALIGNMENT REPORT

12,688

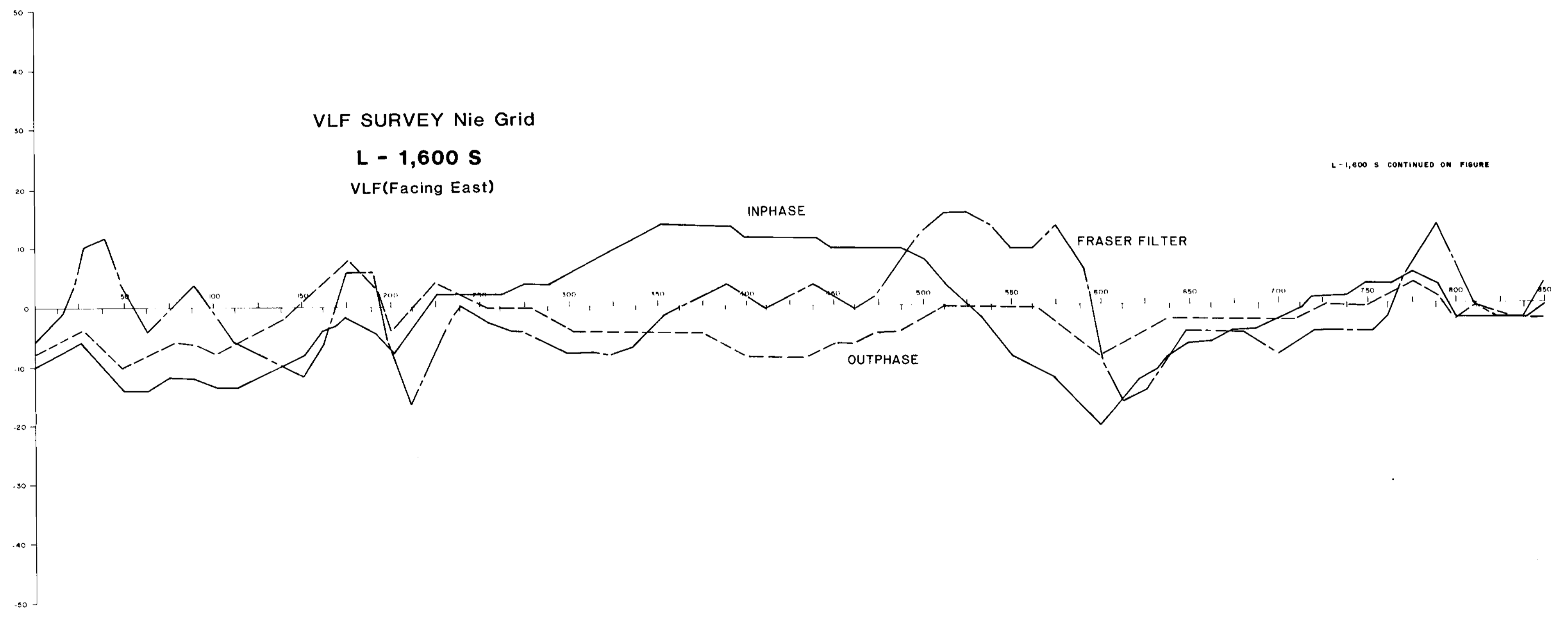
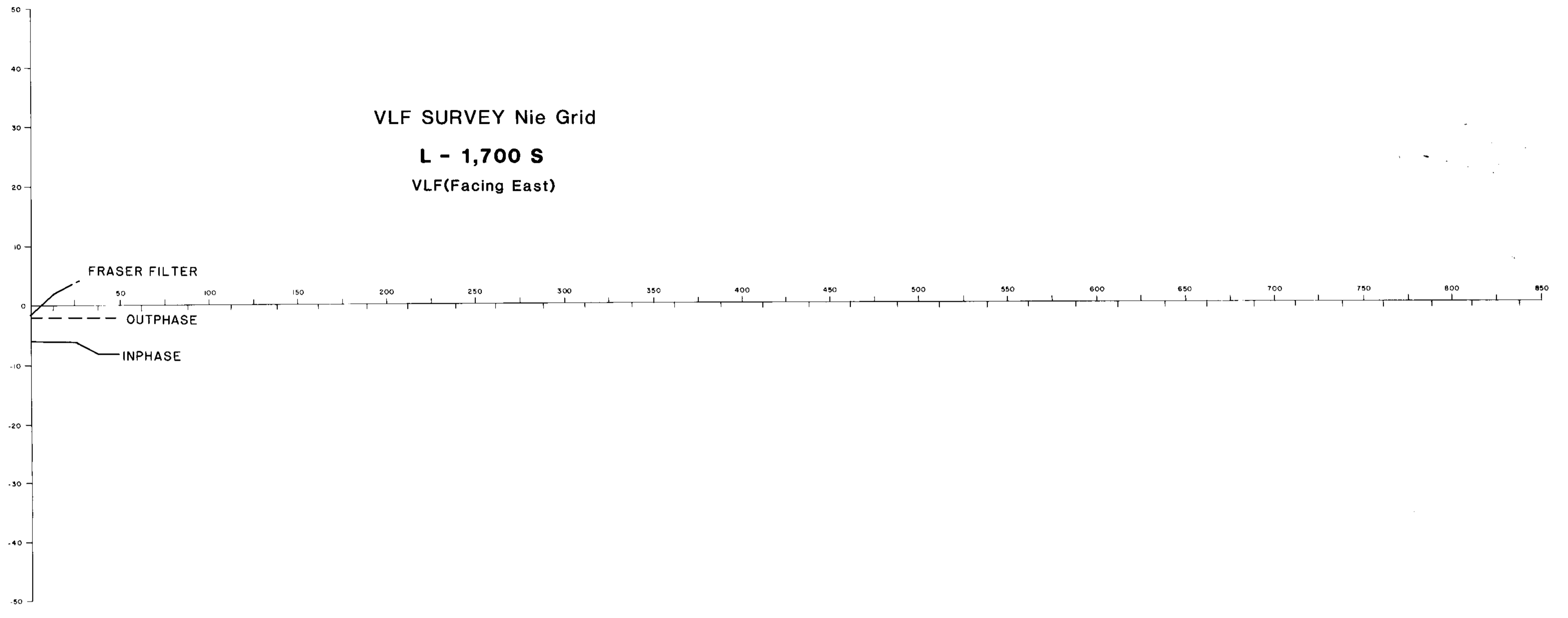
 Chevron Canada Resources Limited
Minerals Staff

NIE GROUP W.

VLF PROFILES

FIGURE No	8M	PROJECT No	M504
DATE	OCT, 1984	REVISIONS	SCALE 1:1666.6
NTS No			FILE No
COMPILED BY			

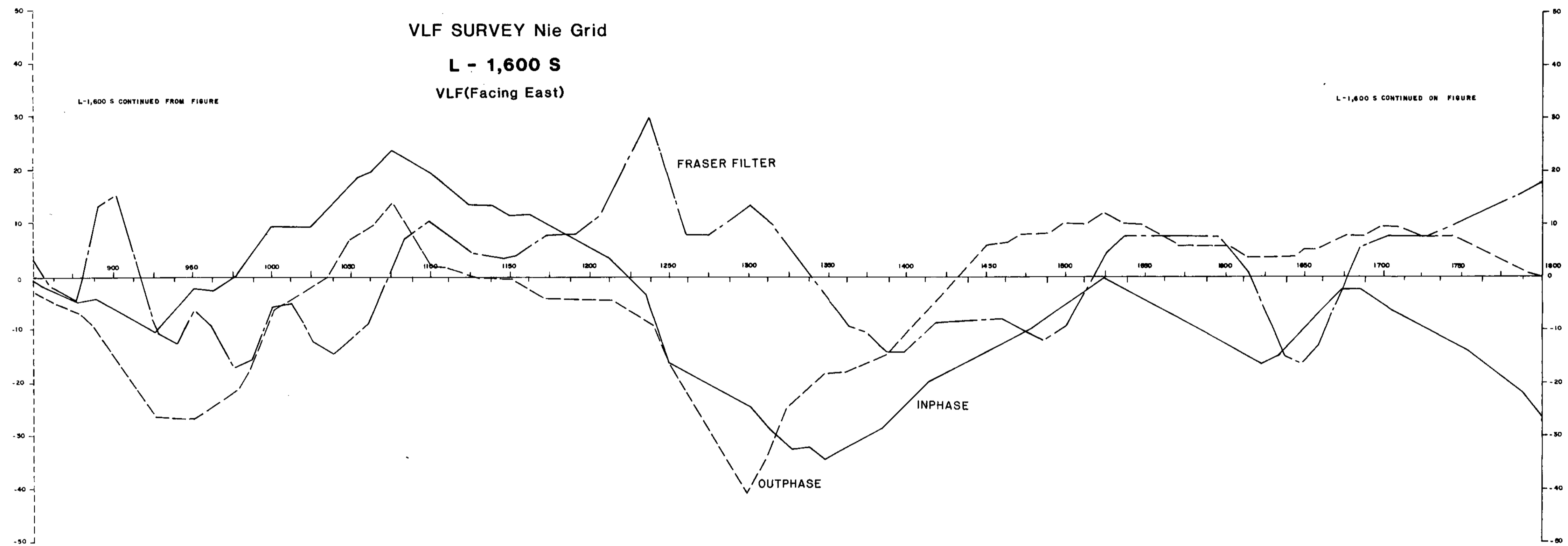
12,688



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

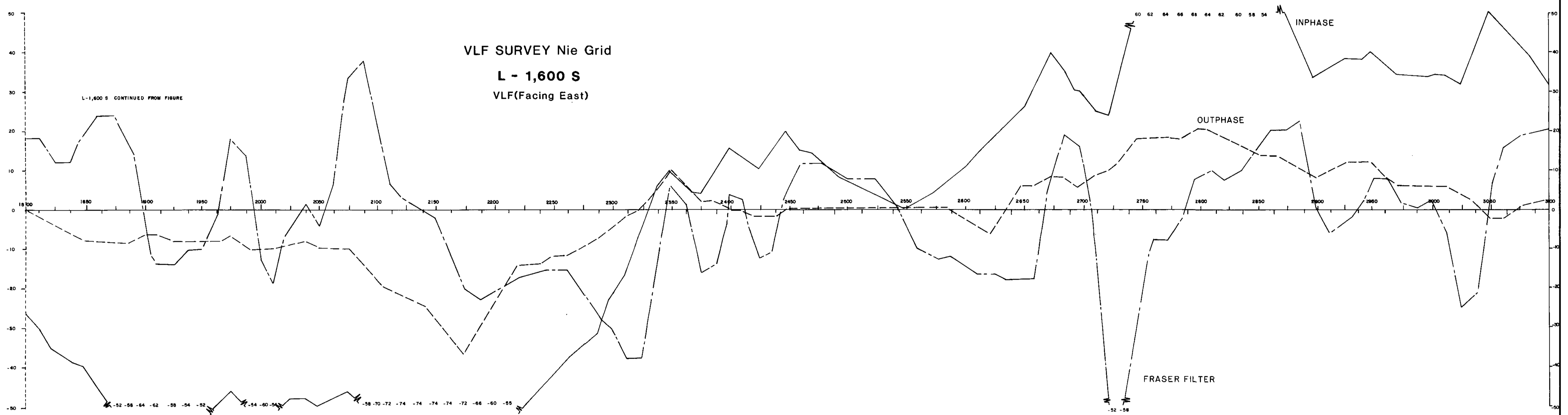
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No 9A		PROJECT No M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No			FILE No
COMPILED BY			



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,688

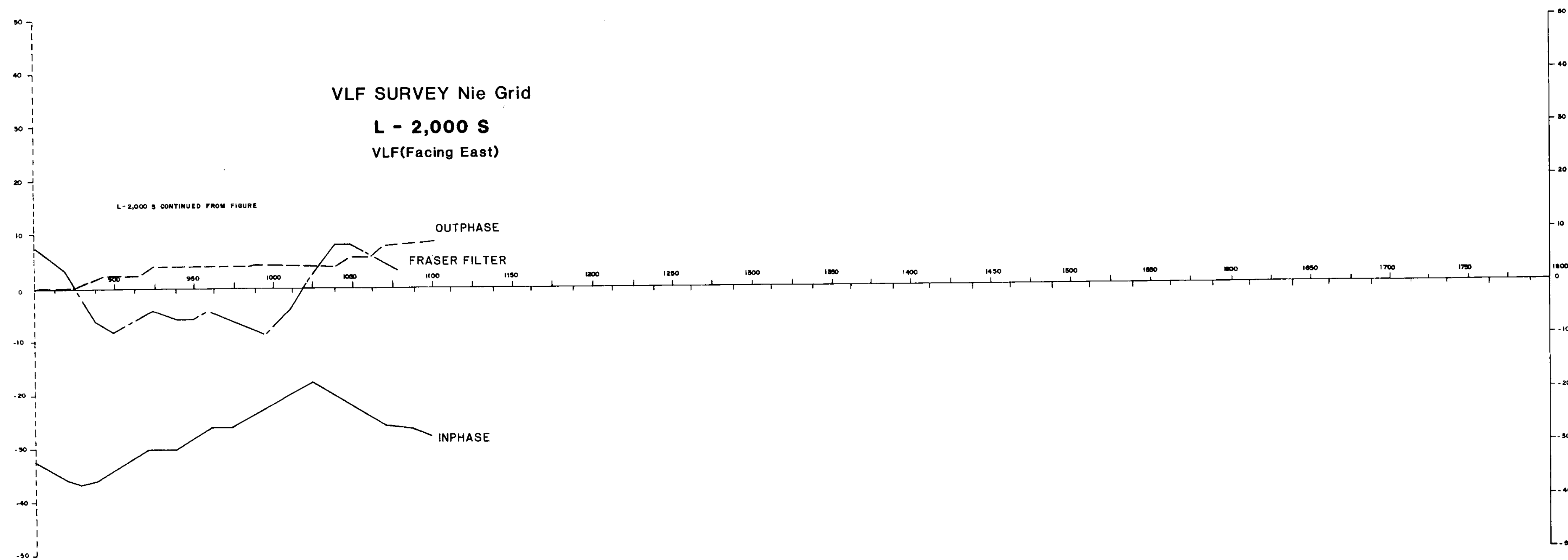
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No. 9B		PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No.		FILE No.	
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

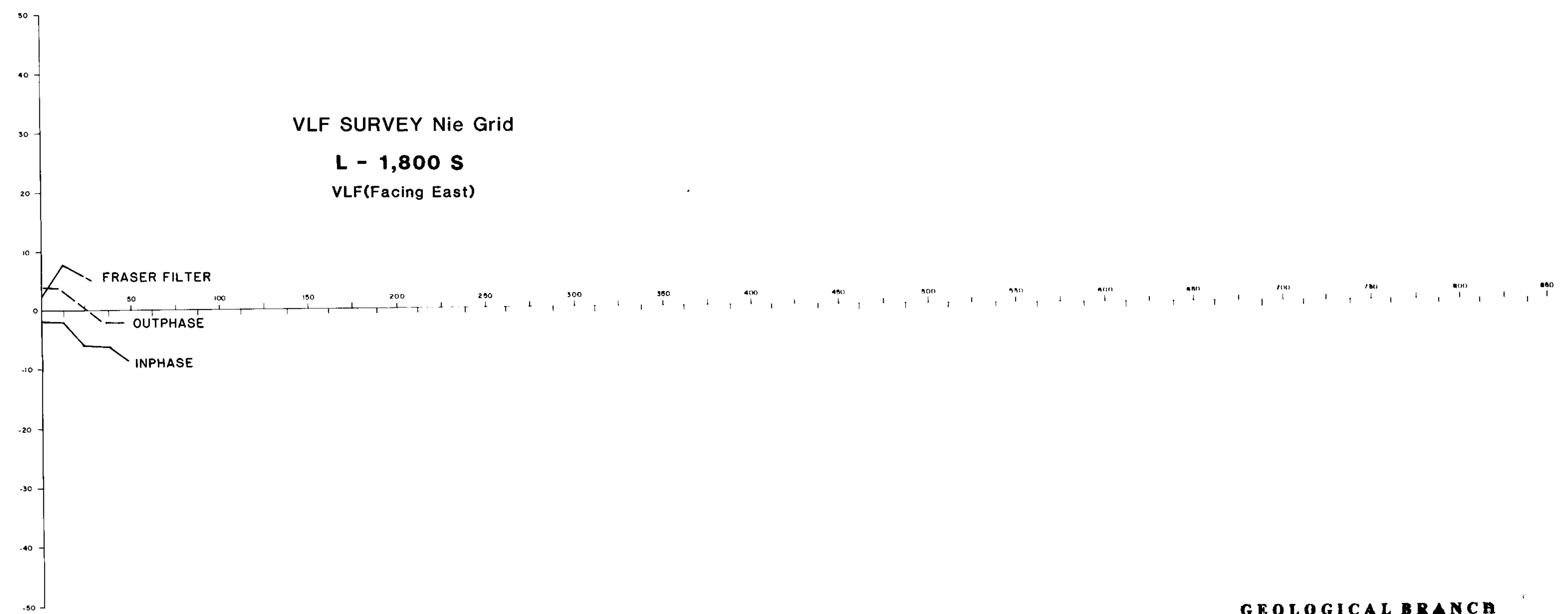
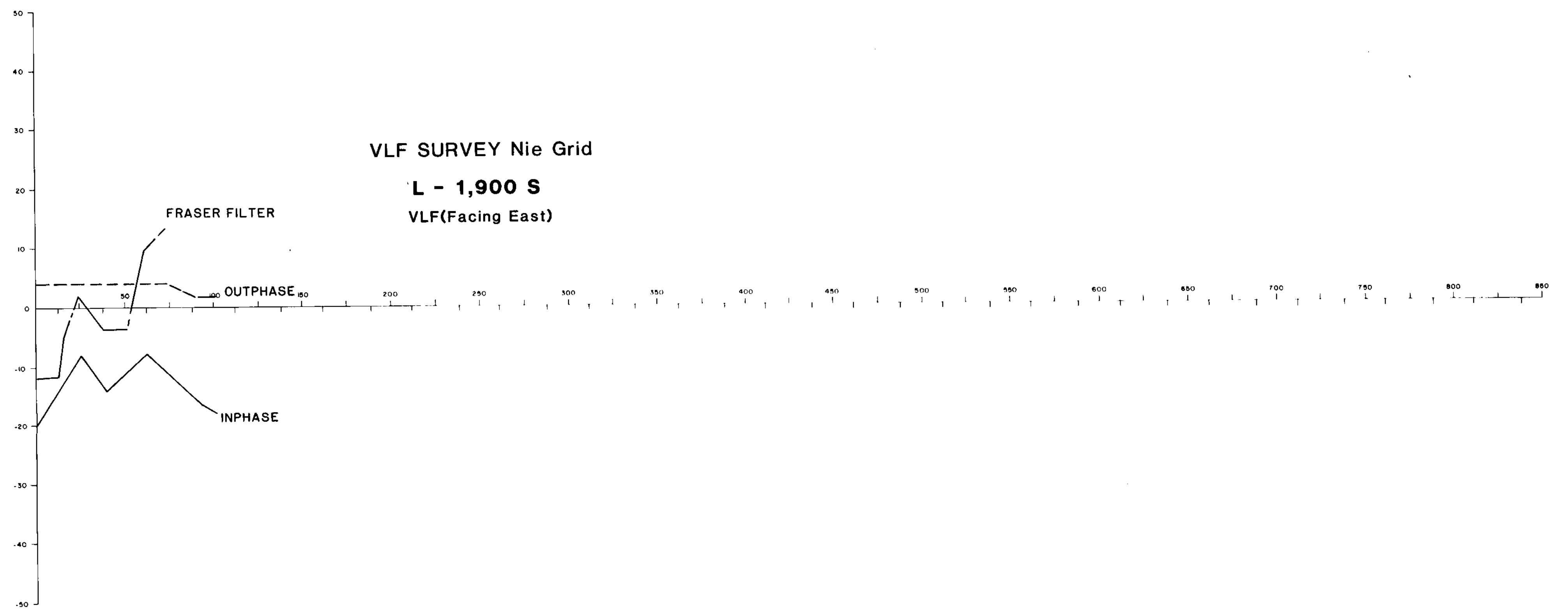
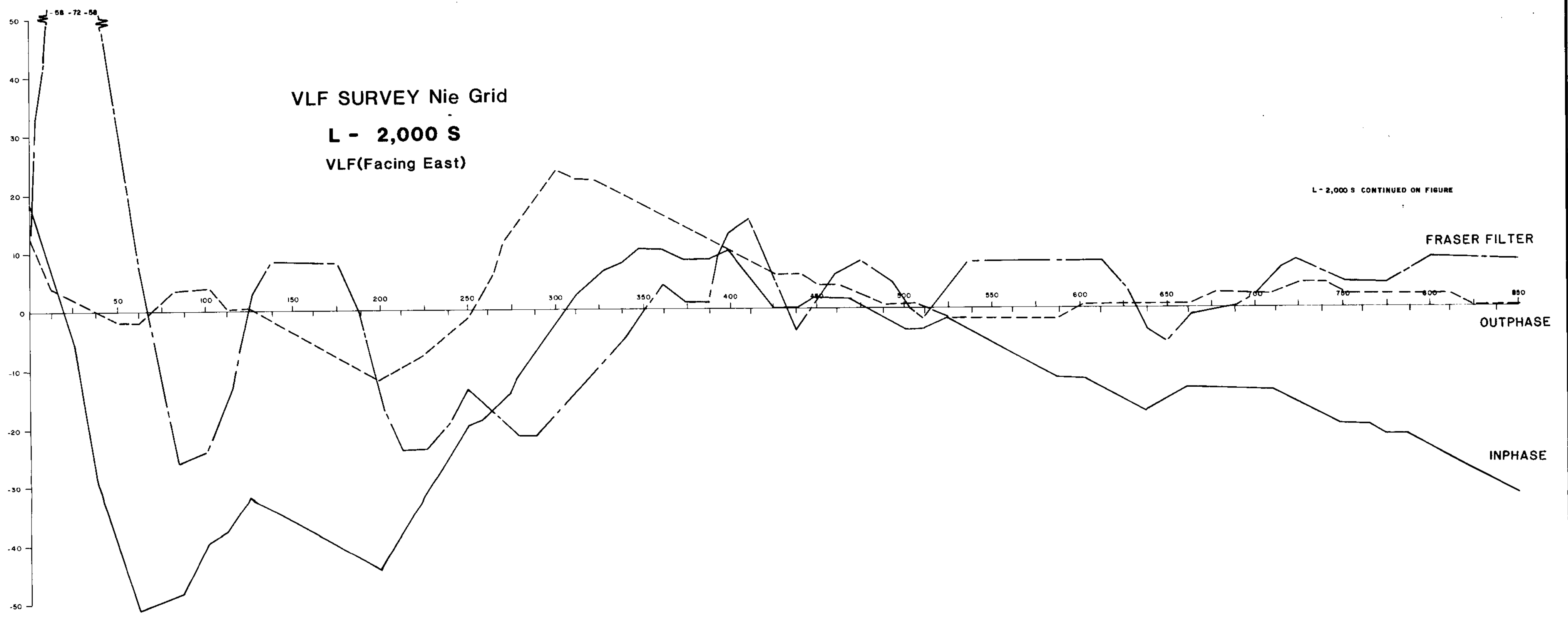
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No. 9C		PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1566.6	
NTS No.		FILE No.	
COMPILED BY			



GEOLOGICAL BRANCH
REPLY REPORT

12,688

Chevron Canada Resources Limited Minerals Staff		
NIE GROUP E.		
VLF PROFILES		
FIGURE No. 9D	PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6
MTS No.		FILE No.
COMPILED BY		



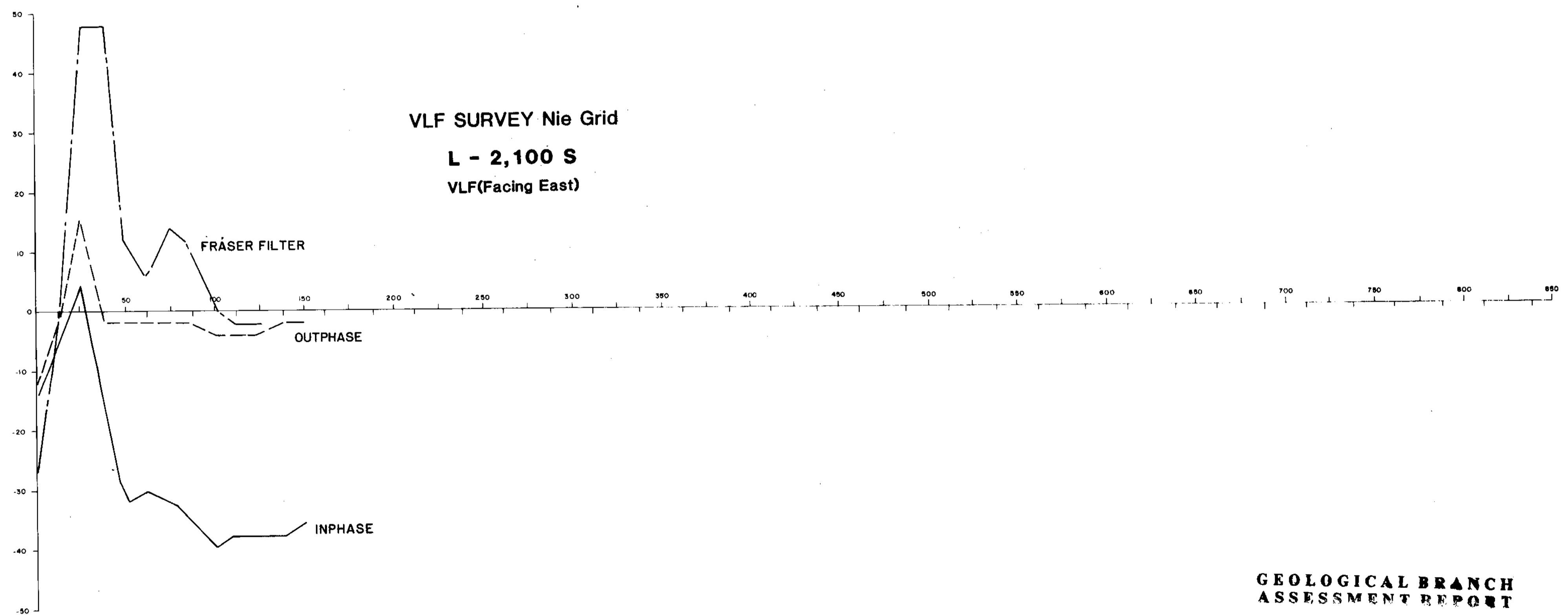
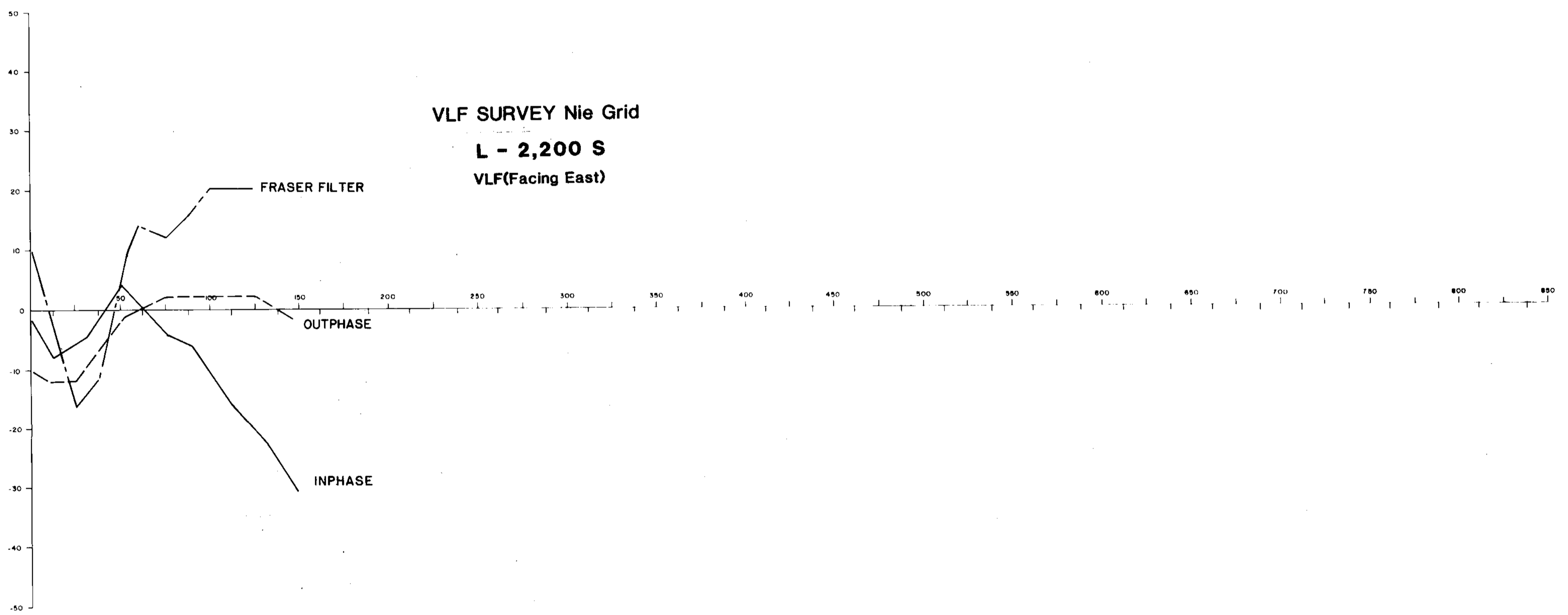
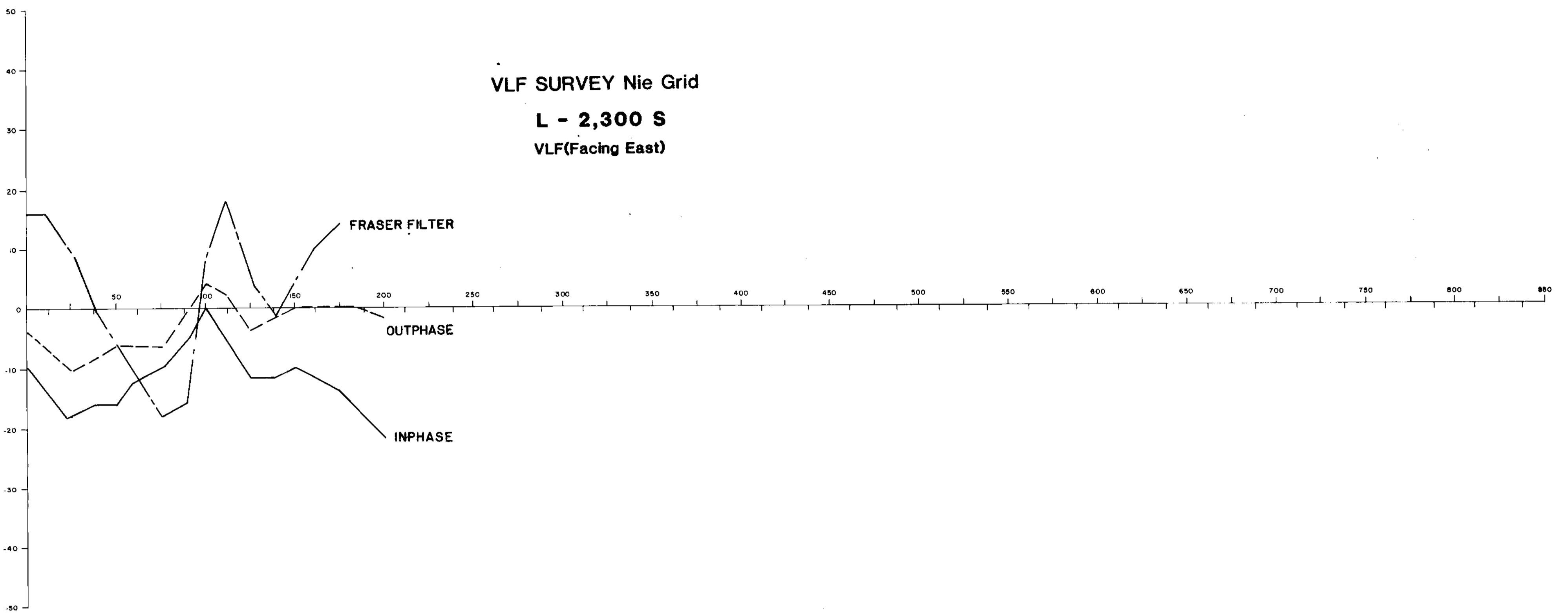
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited
Minerals Staff

NIE GROUP E.
VLF PROFILES

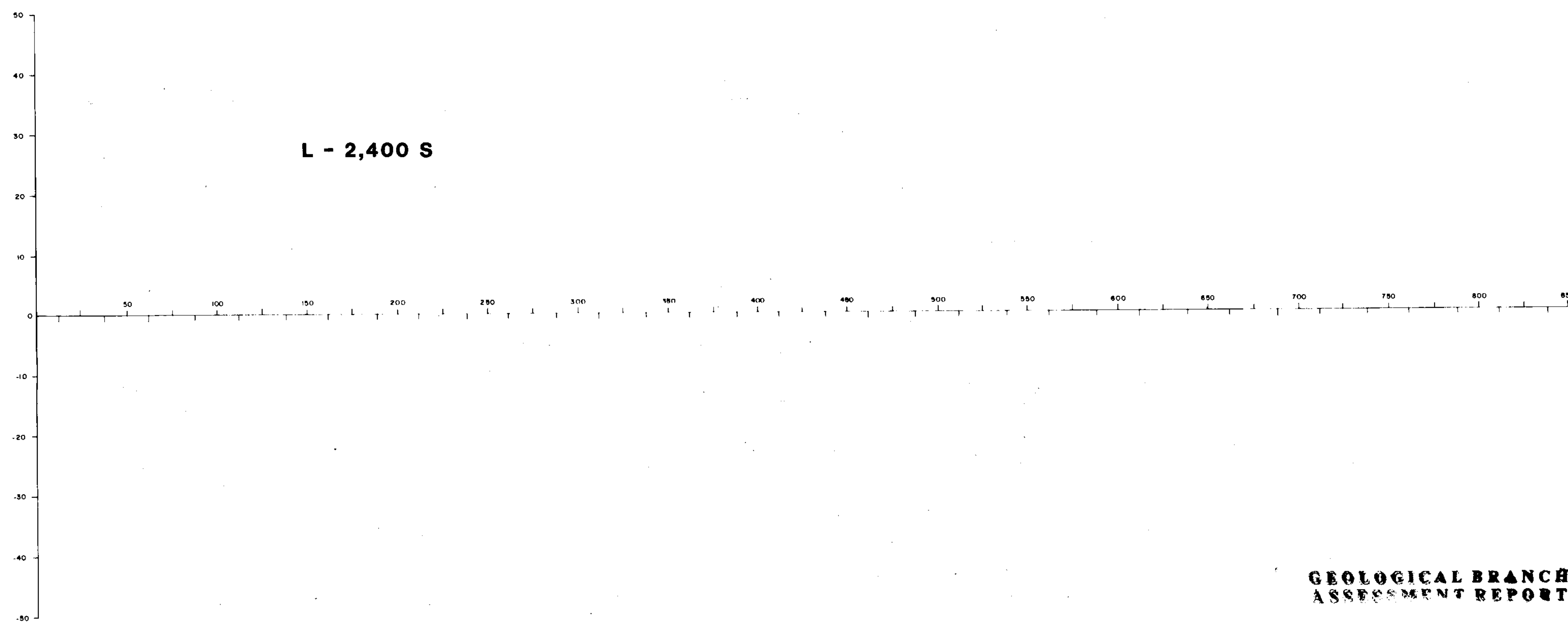
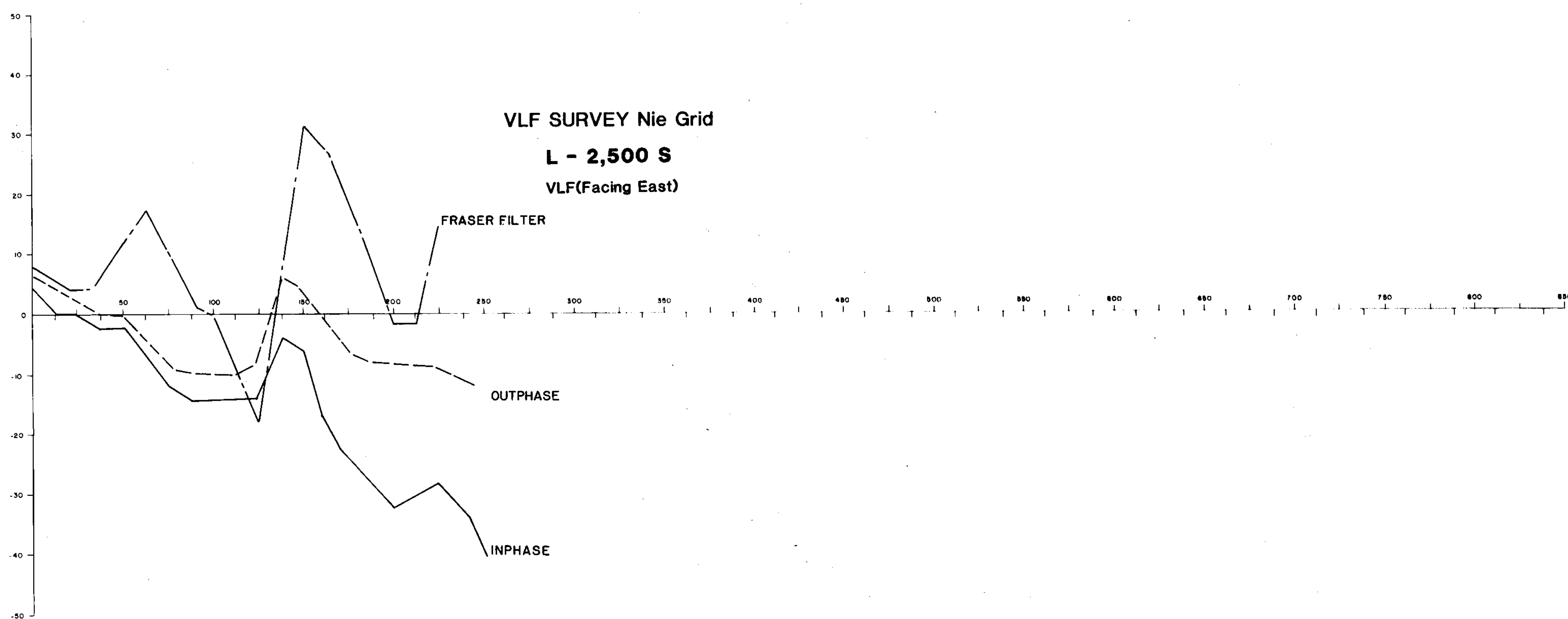
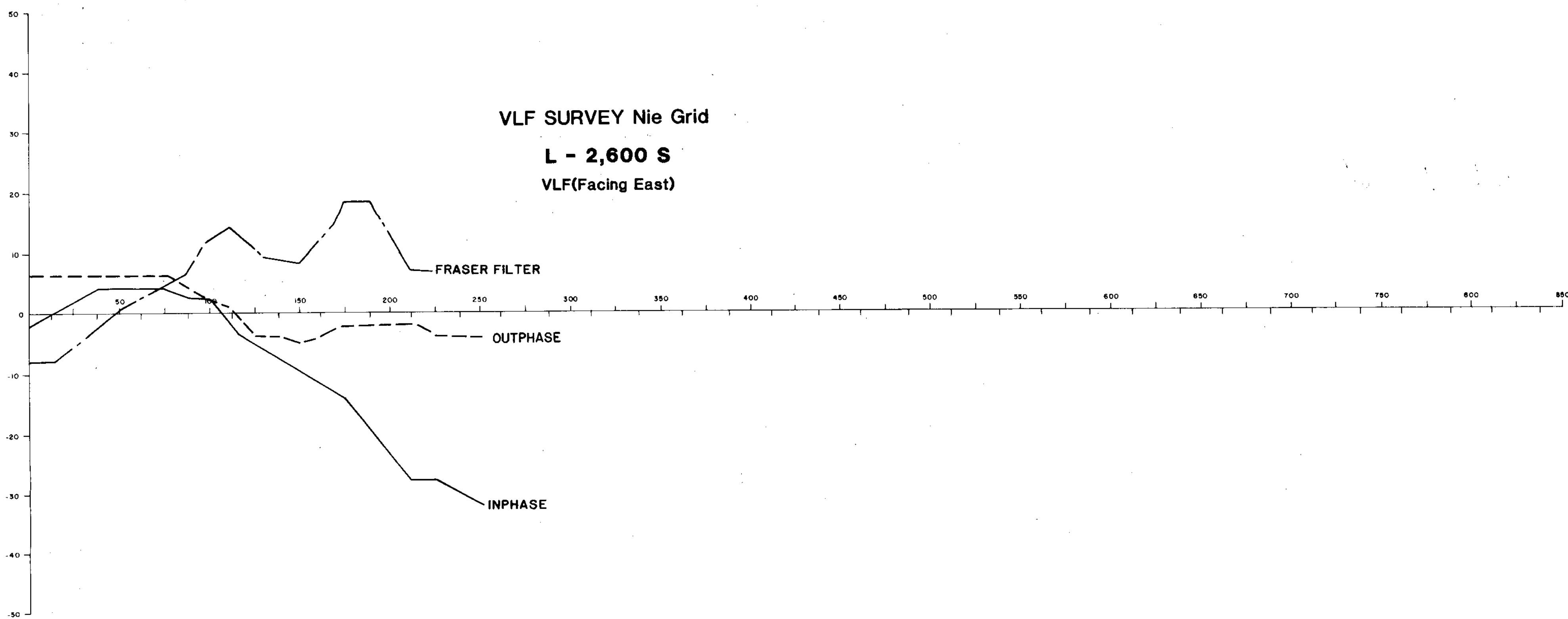
FIGURE No. 9E	PROJECT No. M 504
DATE OCT. 1984	REVISIONS
NTS No.	SCALE 1:1666.6
COMPILED BY	FILE No.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No 9F		PROJECT No M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No			FILE No
COMPILED BY			

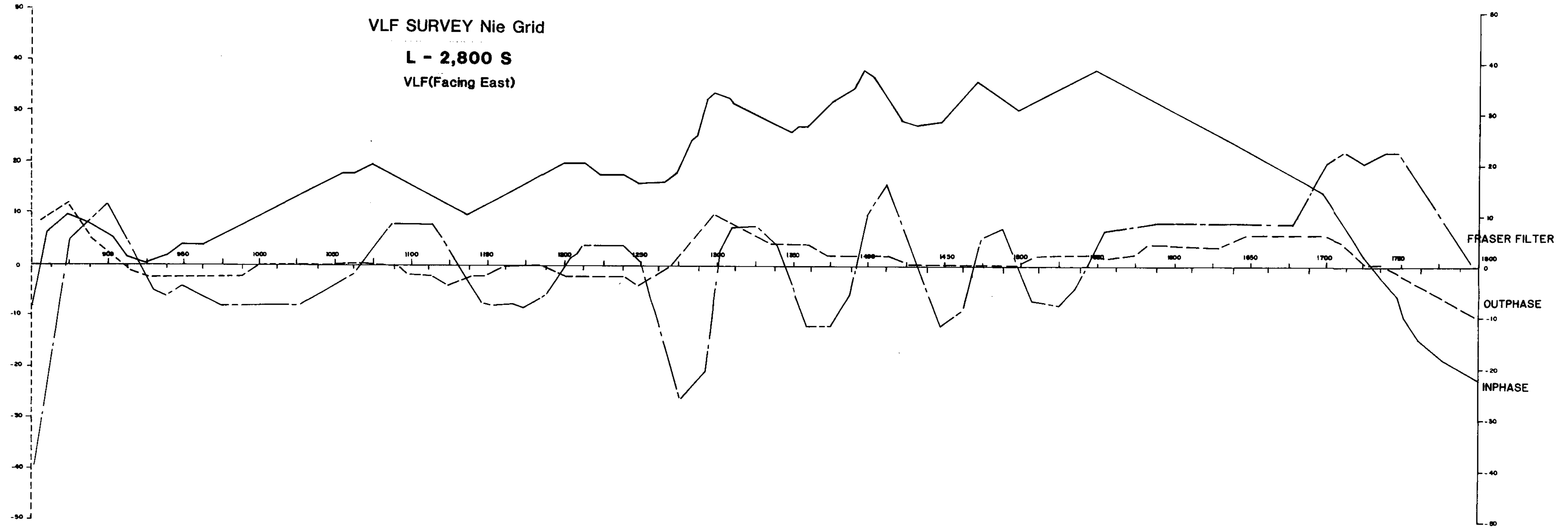


GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No. 9G	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	FILE No.
MTS No.			
COMPILED BY			

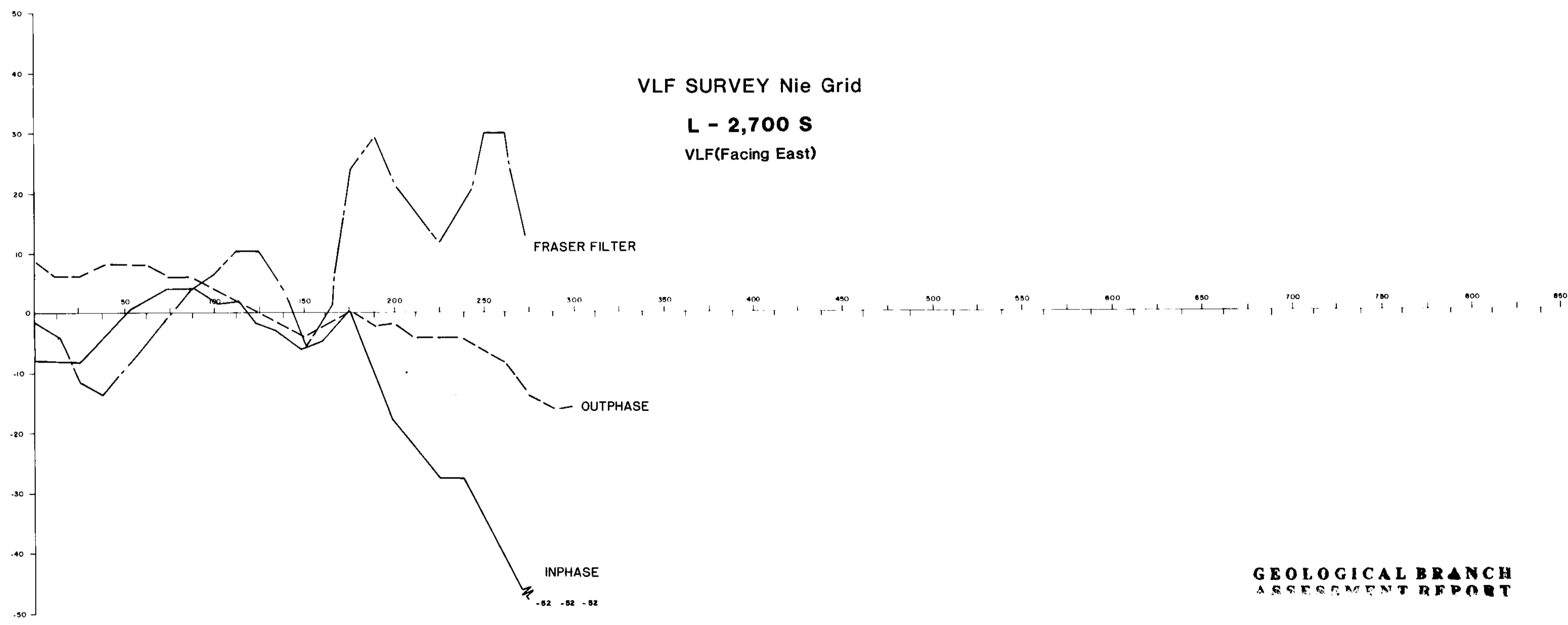
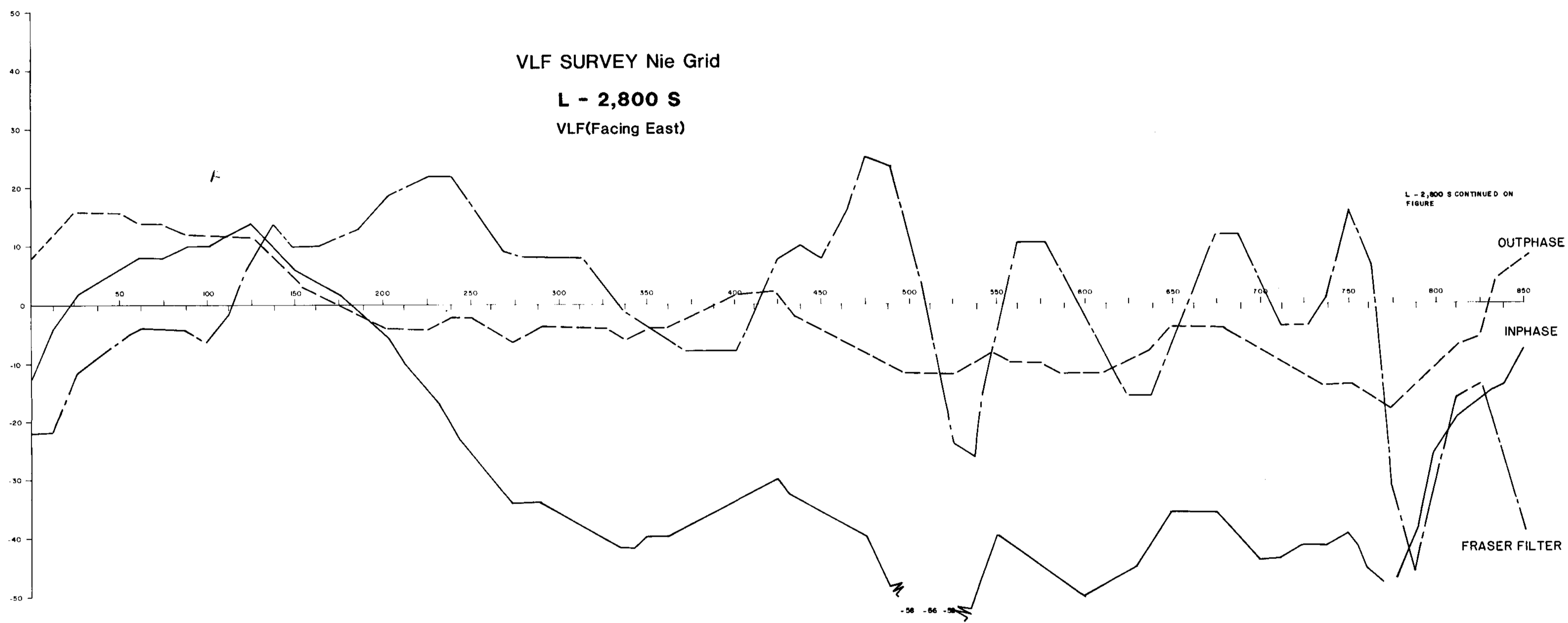
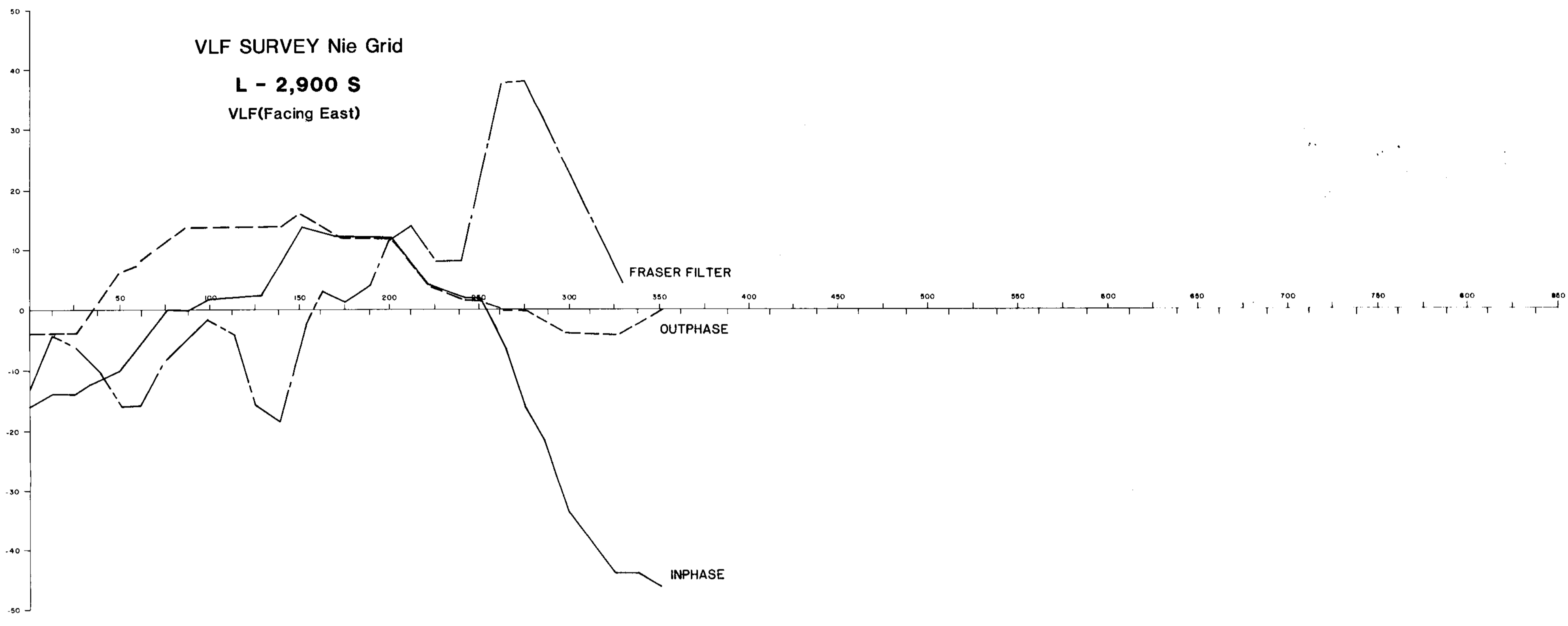
L - 2,800 S CONTINUED FROM FIGURE



GEOLOGICAL BRANCH
REGISTRATION REPORT

12,688

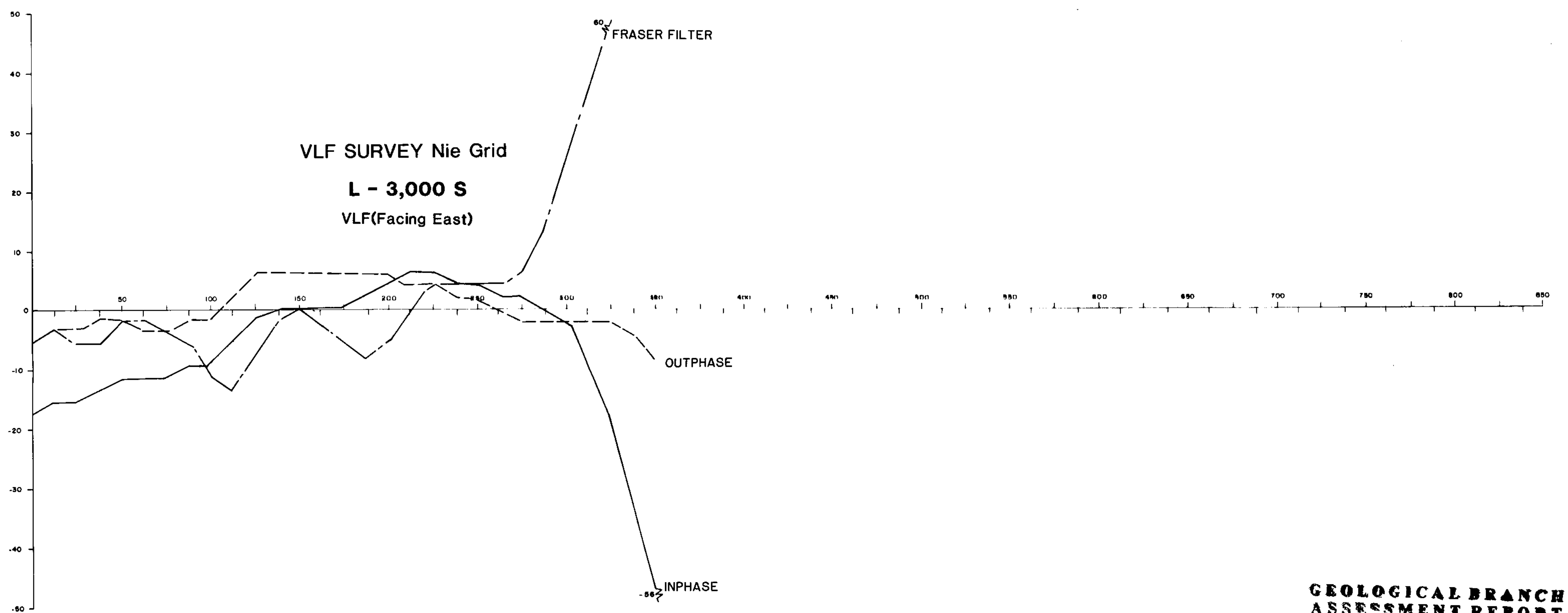
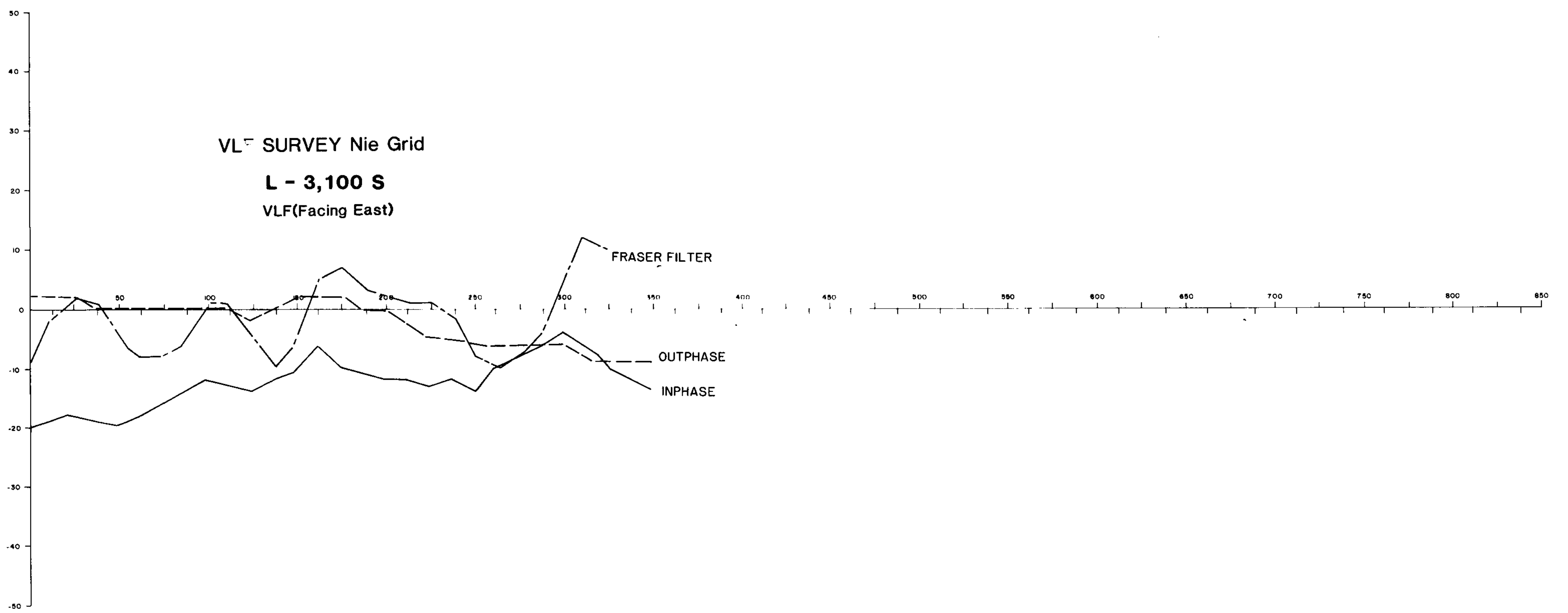
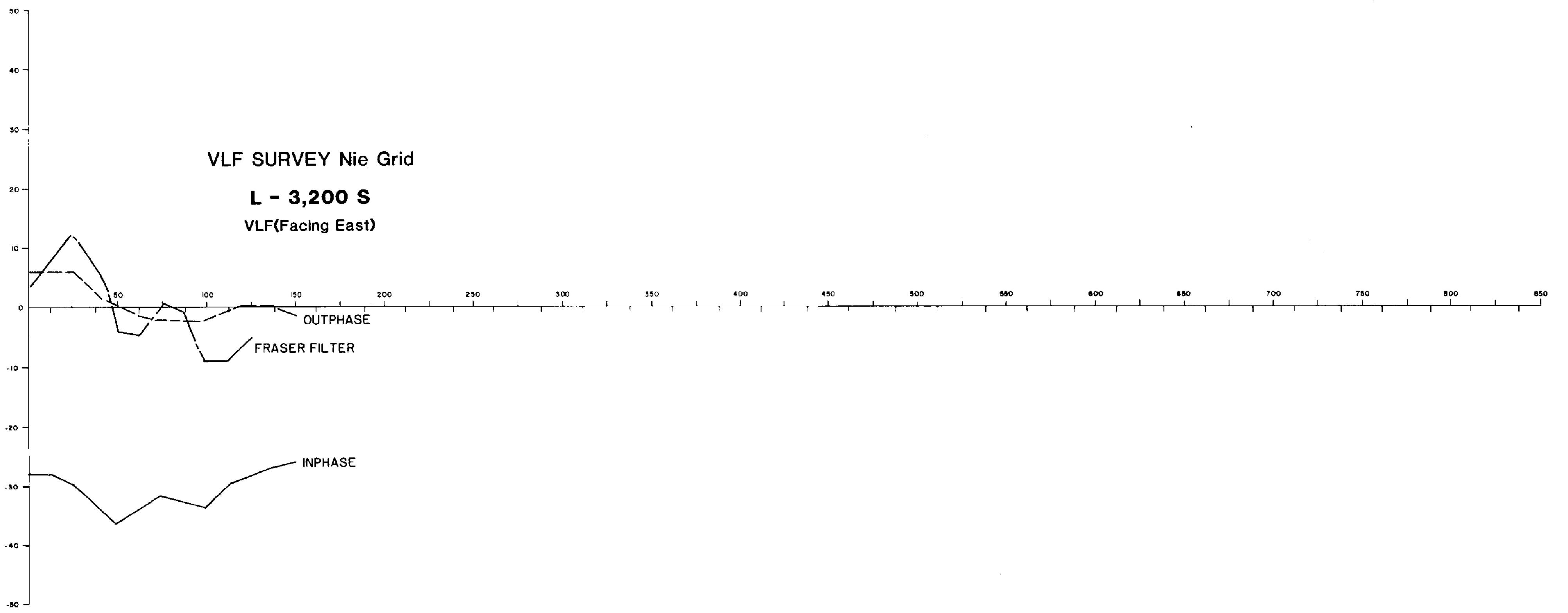
Chevron Canada Resources Limited Minerals Staff		
NIE GROUP E. VLF PROFILES		
FIGURE No. 9H	PROJECT No. M 504	
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6
WTS No.		FILE No.
COMPILED BY		



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

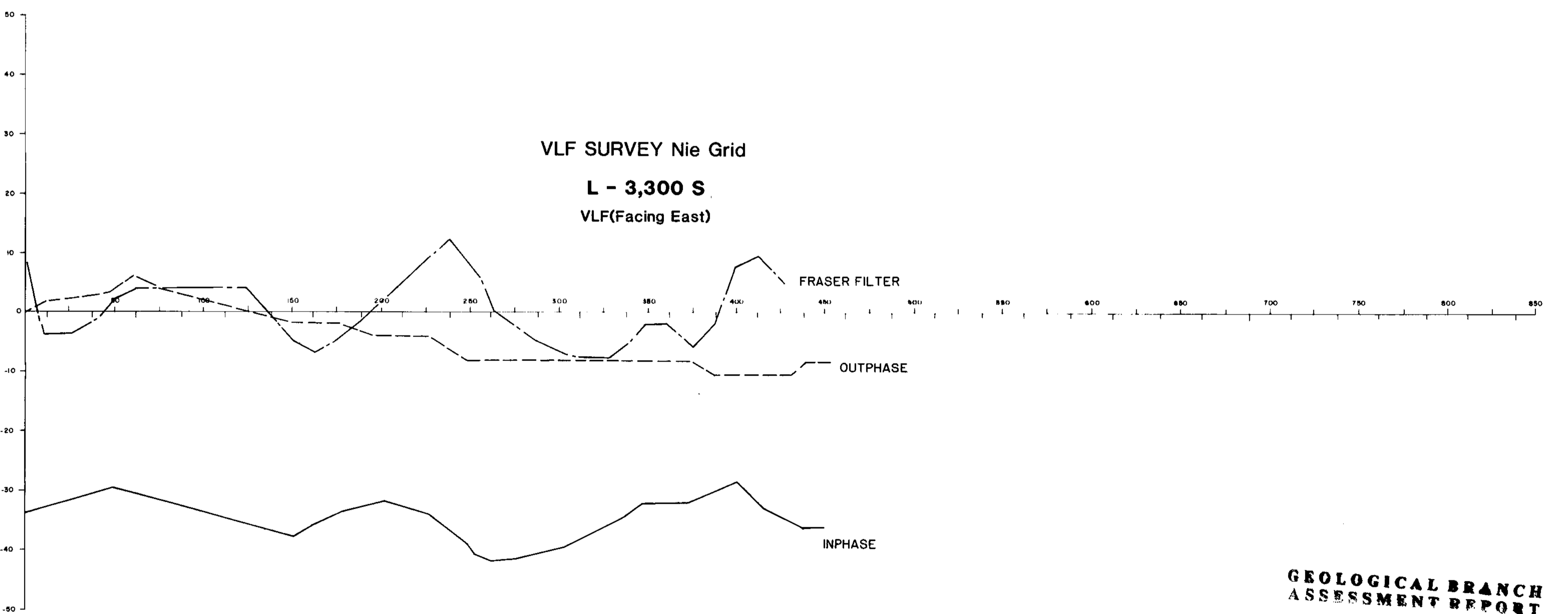
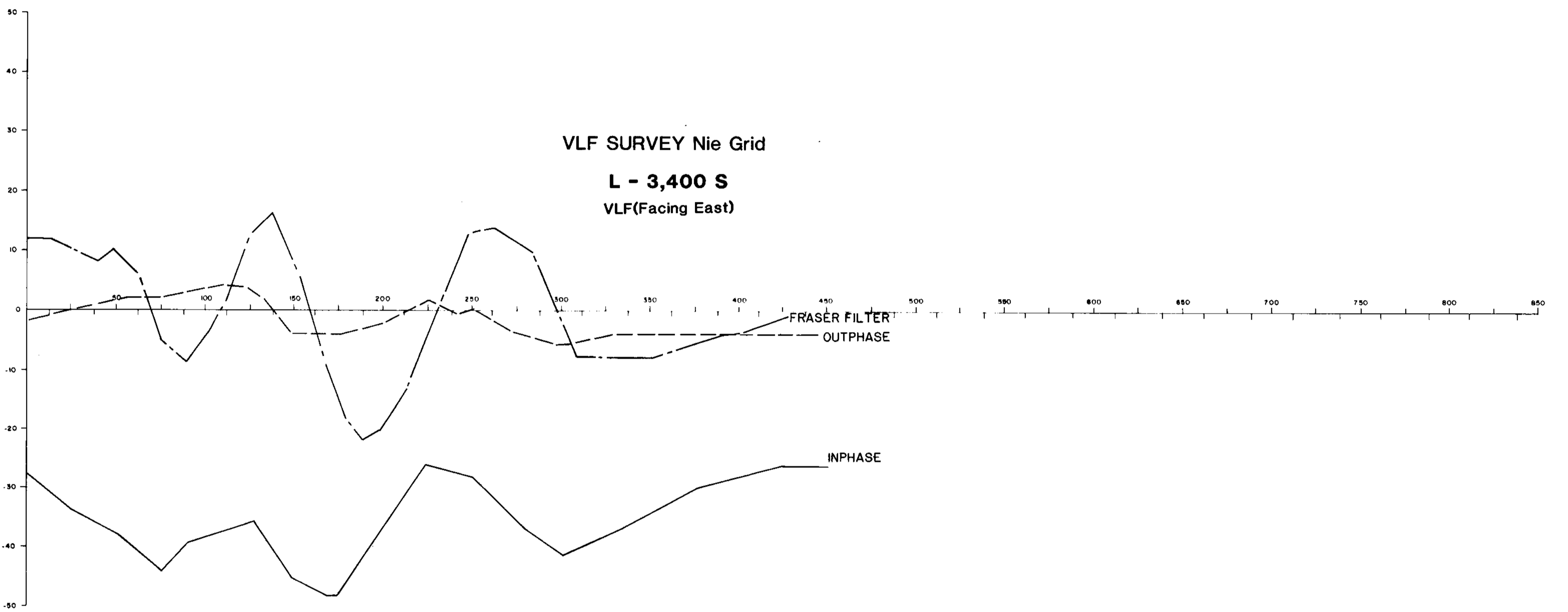
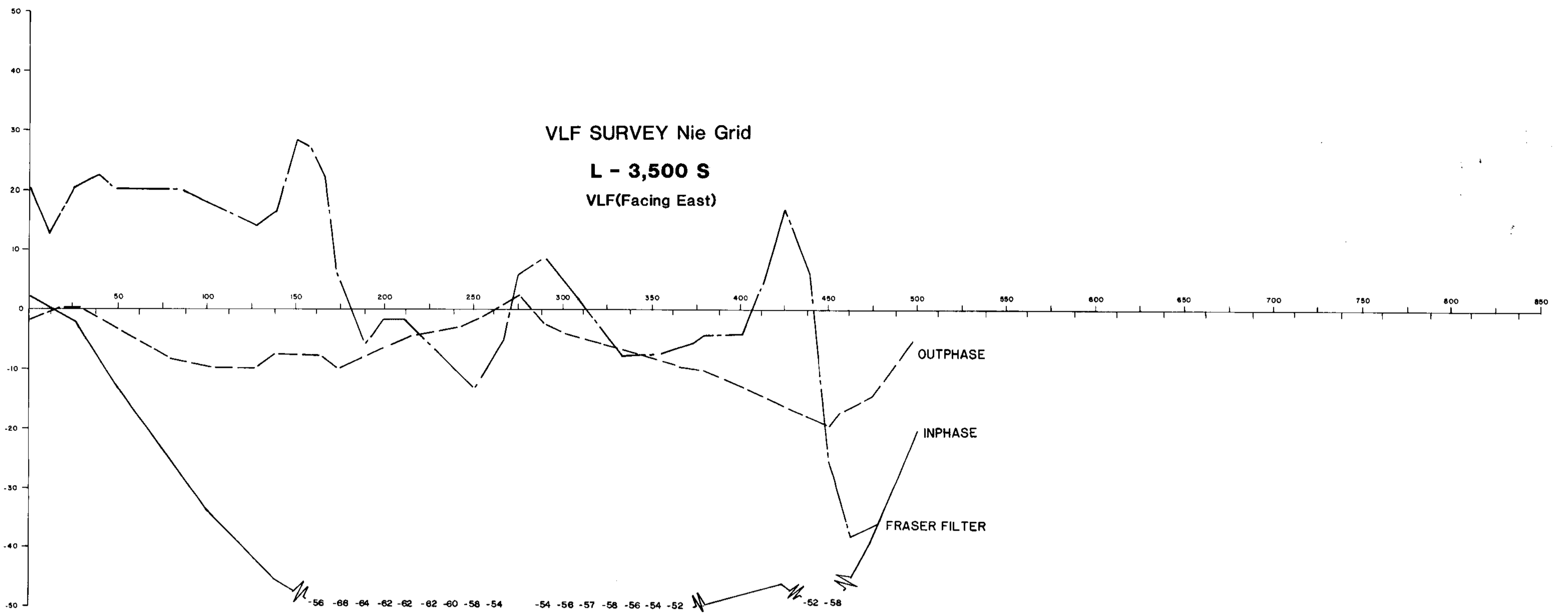
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E.			
VLF PROFILES			
FIGURE No. 91	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	
NTS No.			FILE No.
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

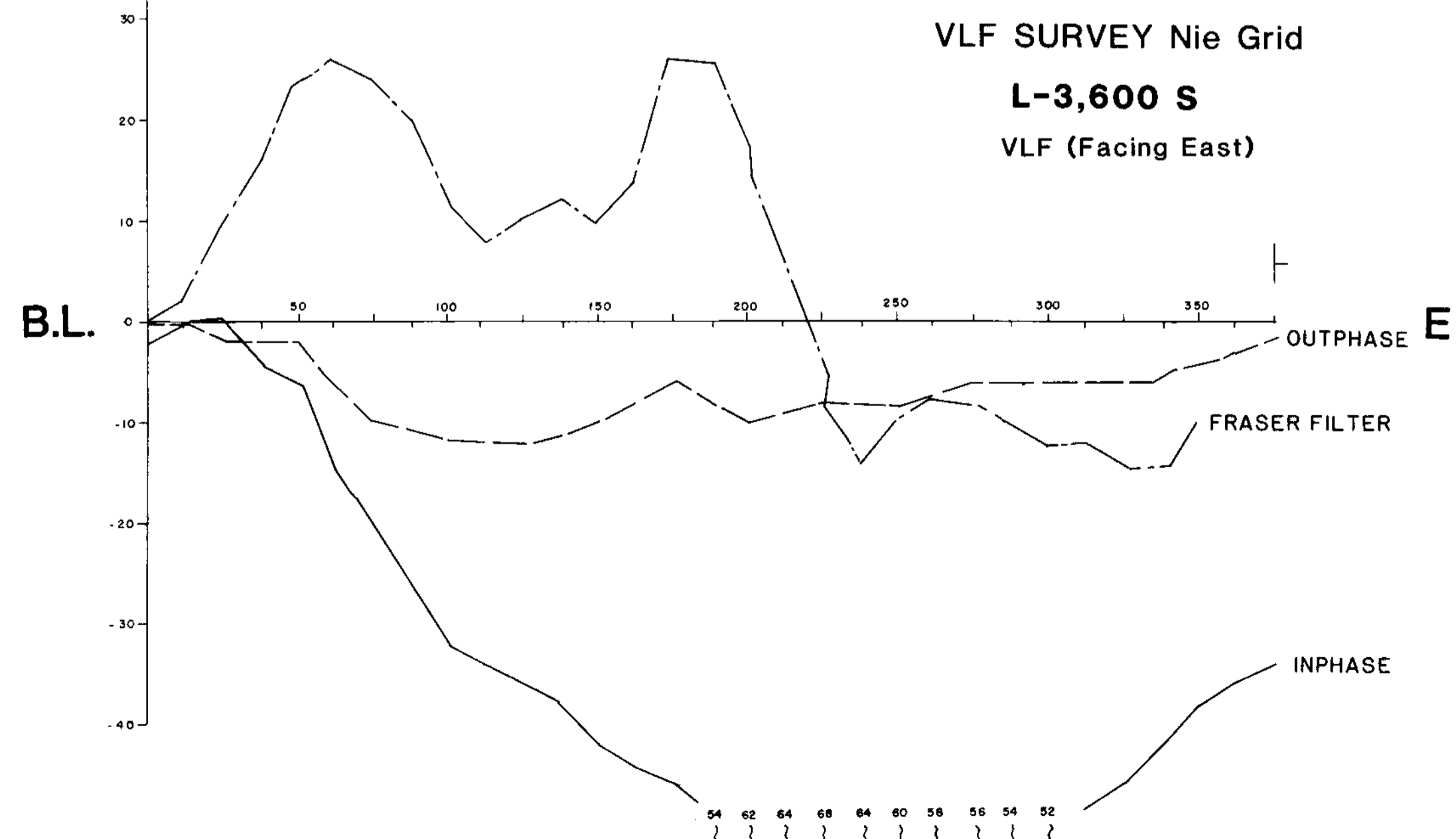
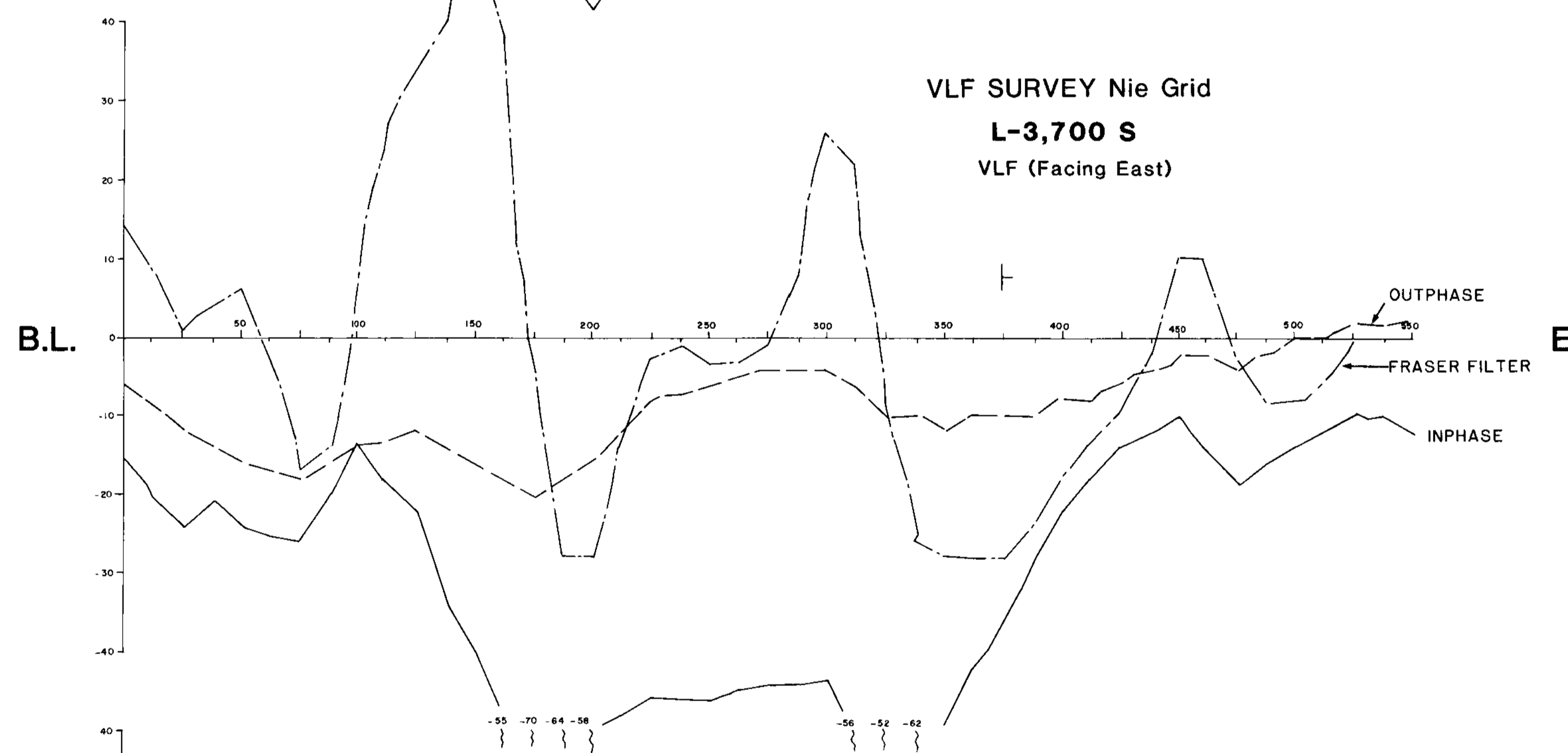
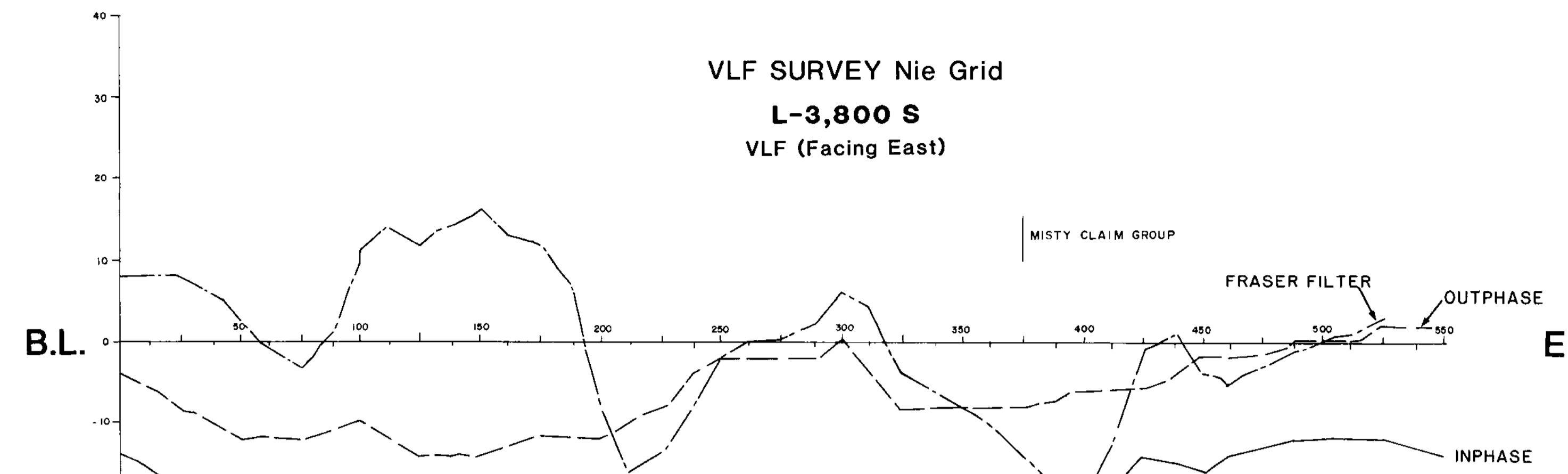
Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No. 9J	PROJECT No. M 504		
DATE OCT. 1964	REVISIONS	SCALE 1:1666.6	
NTS No.			FILE No.
COMPILED BY			



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E.			
VLF PROFILES			
FIGURE No. 9K	PROJECT No. M 504		
DATE OCT. 1984	REVISIONS	SCALE 1:1000.0	
DTS No.			FILE No.
COMPILED BY			



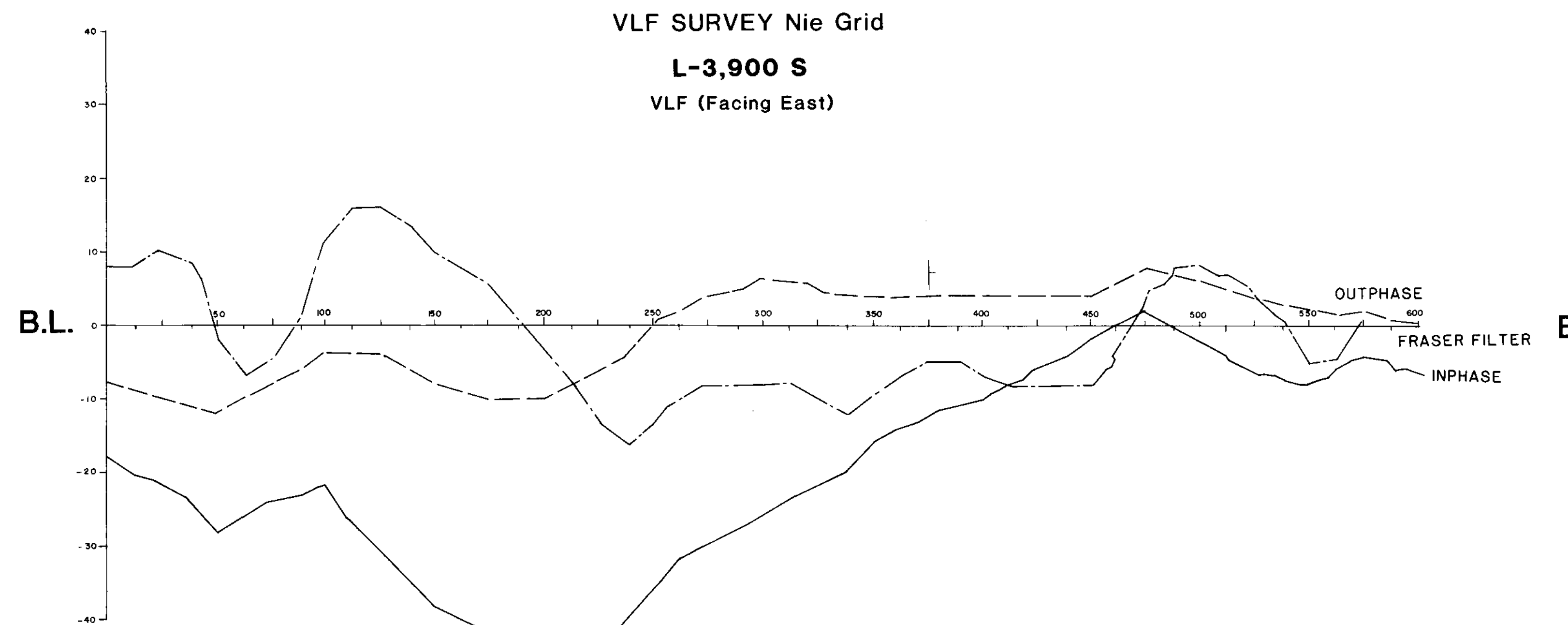
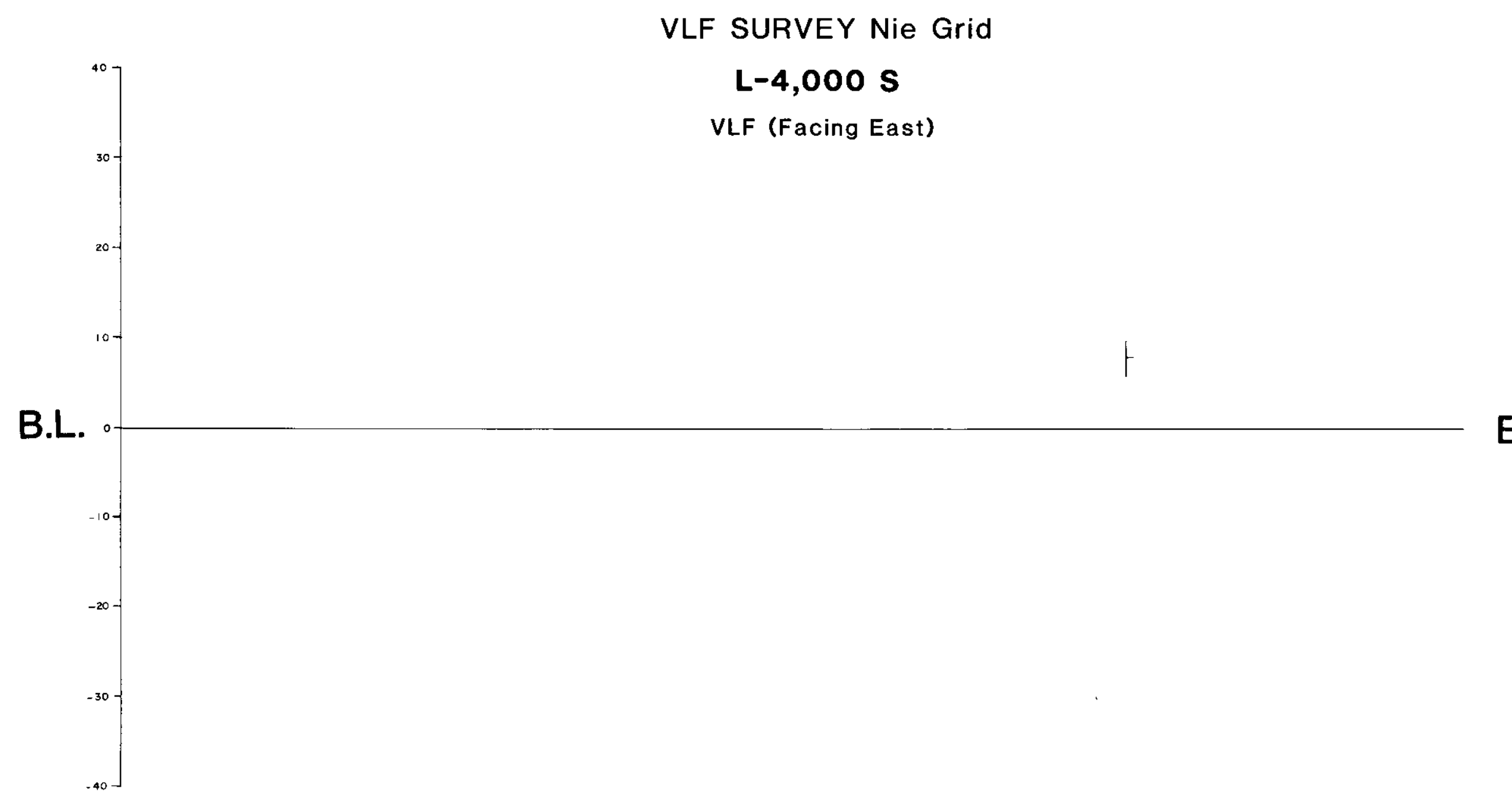
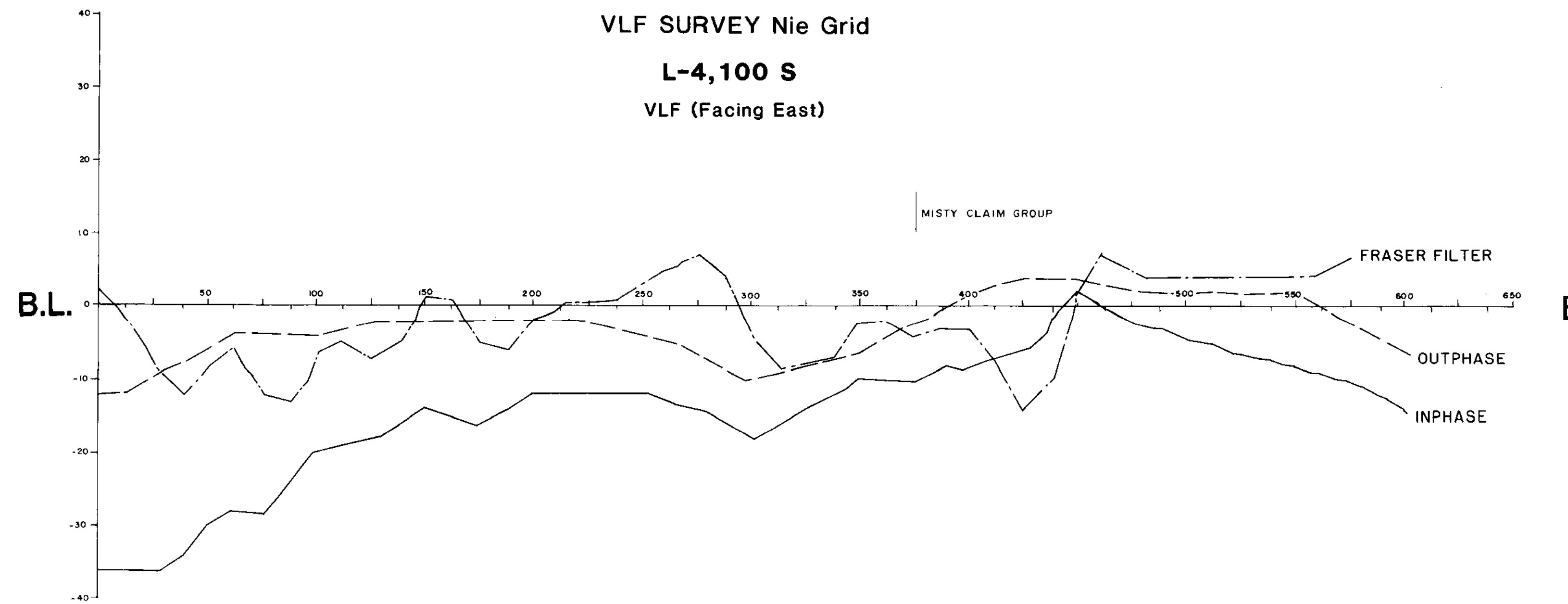
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited
Minerals Staff

NIE GROUP E.
VLF PROFILES

FIGURE No. 9L		PROJECT No. M504
DATE OCT. 1984	REVISIONS	SCALE : 1:666.6
NTS No.		FILE No.
COMPILED BY		



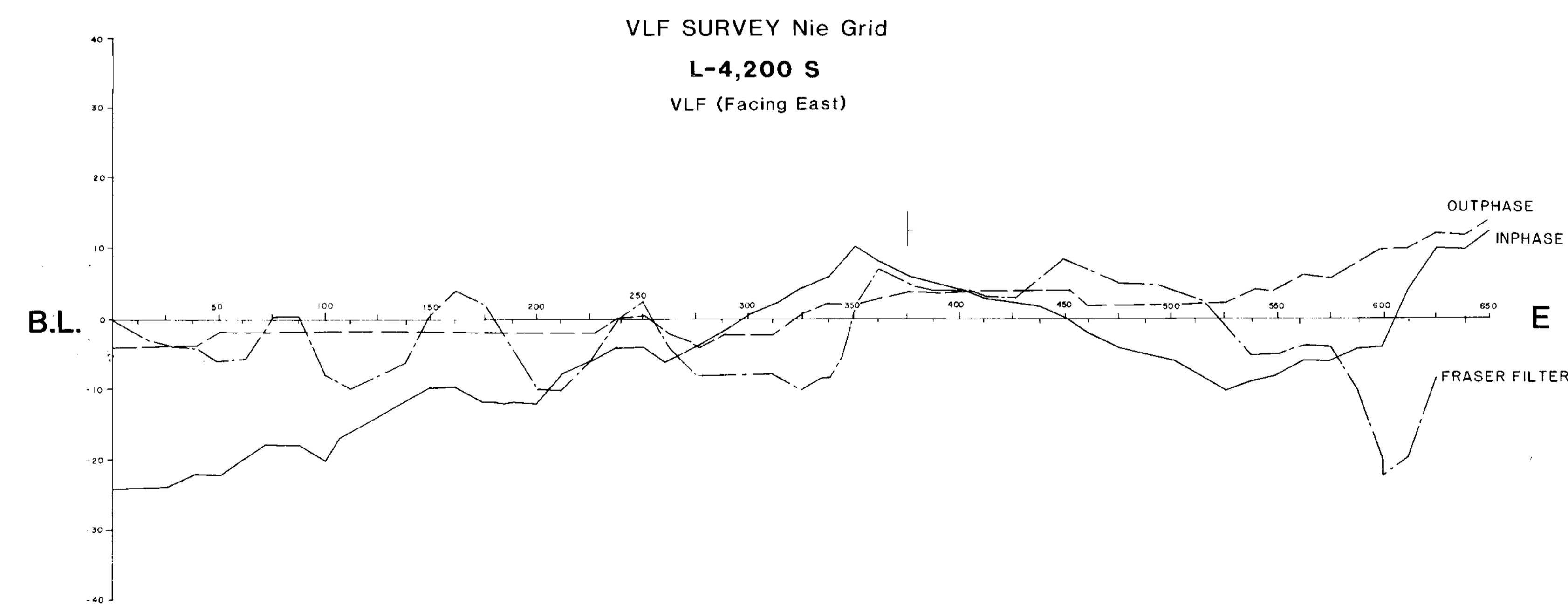
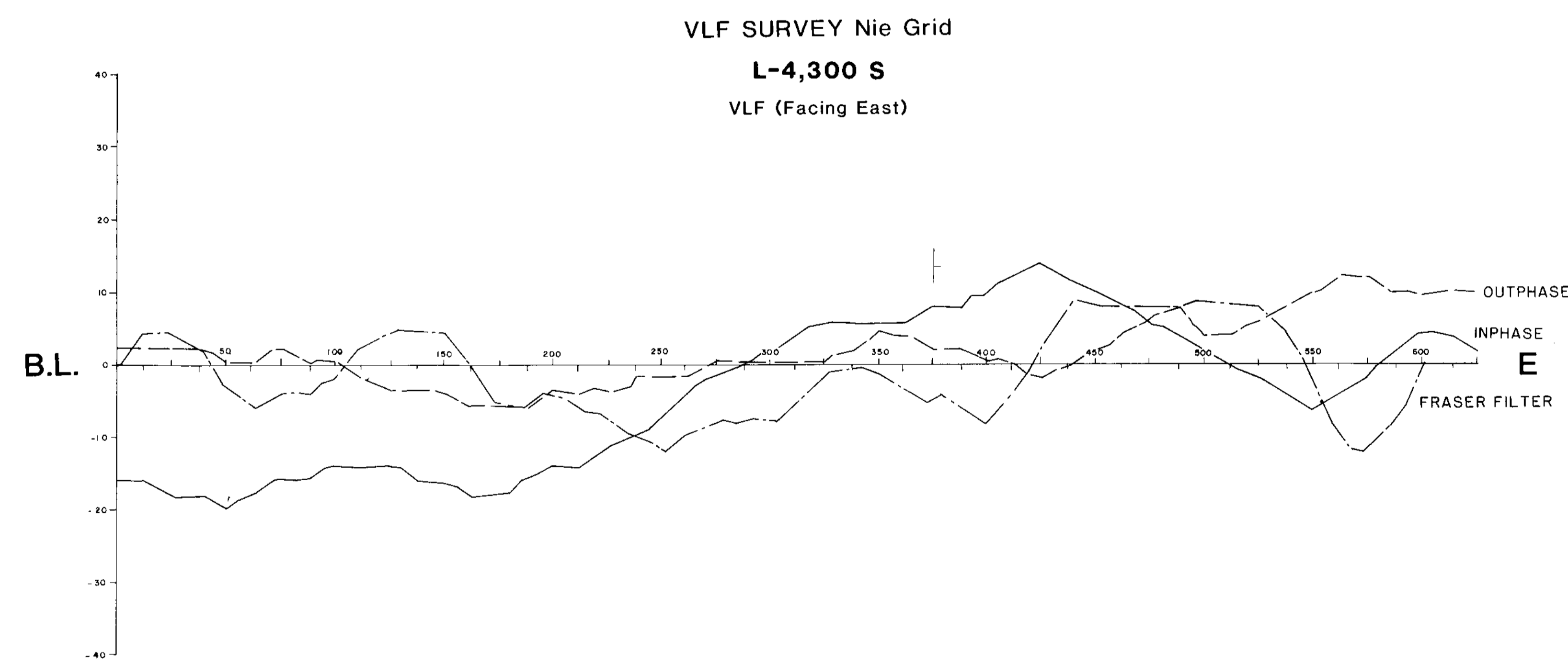
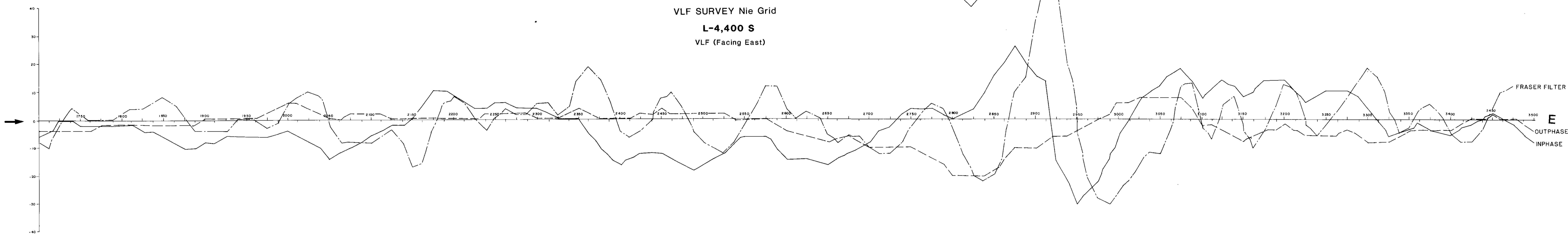
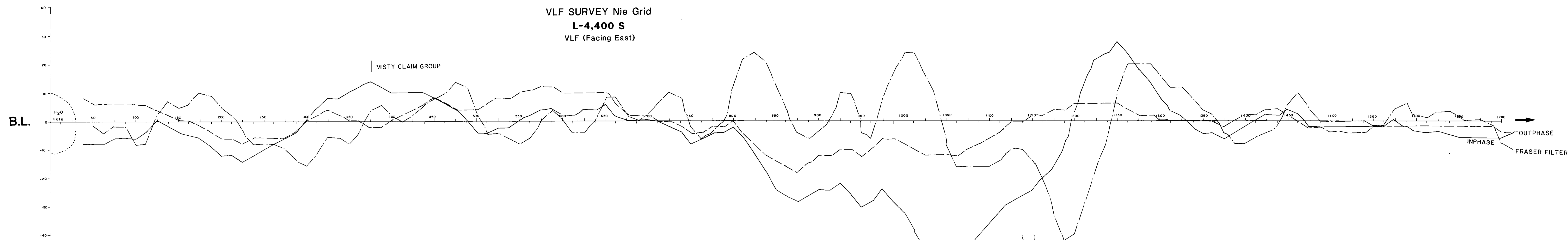
GEOLOGICAL BRANCH
 ASSESSMENT REPORT

12,688

Chevron Canada Resources Limited
 Minerals Staff

NIE GROUP E.
VLF PROFILES

FIGURE No. 9M	PROJECT No. M504
DATE OCT. 1984	REVISIONS
NTS No.	SCALE 1:1666.6
COMPILED BY	FILE No.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

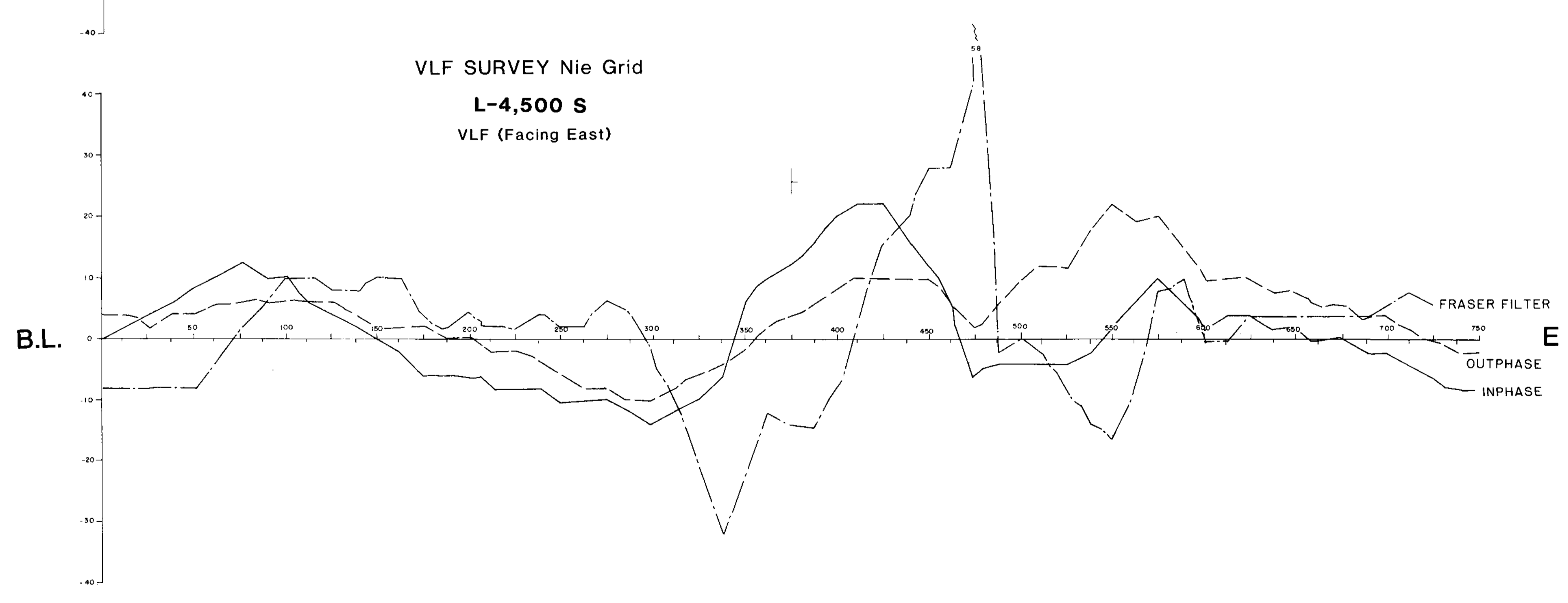
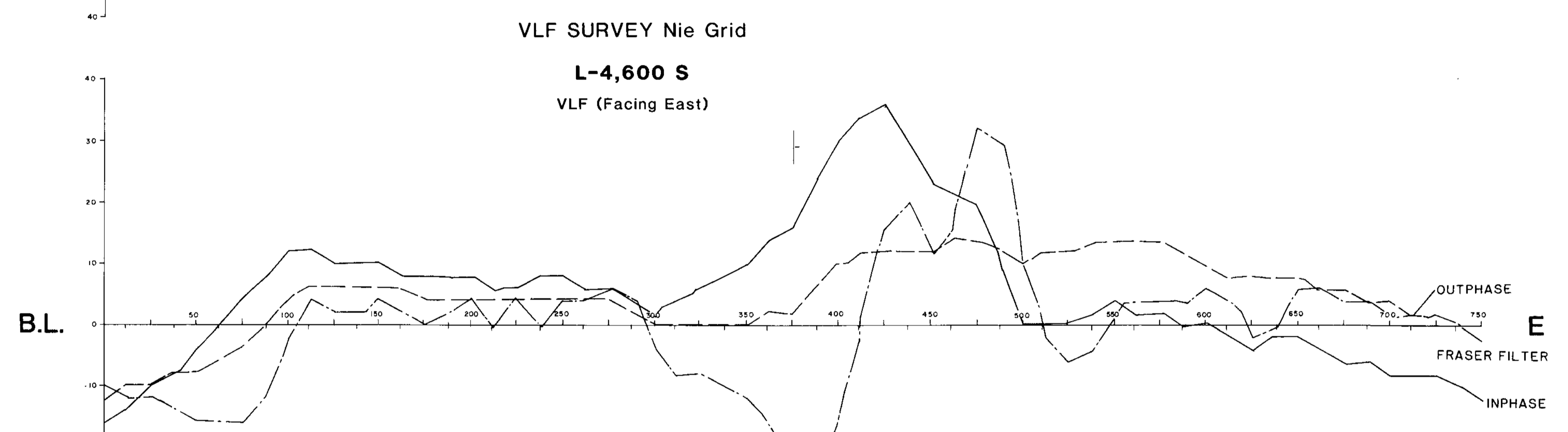
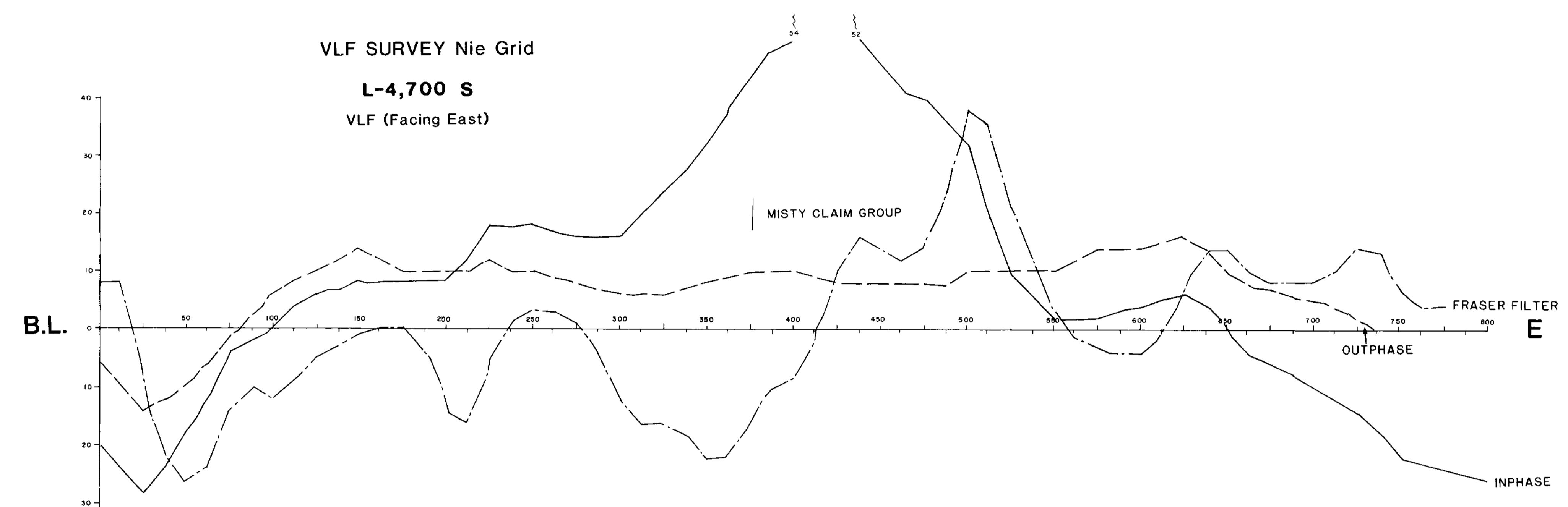
12,688

 Chevron Canada Resources Limited
Minerals Staff

NIE GROUP E.


VLF PROFILES

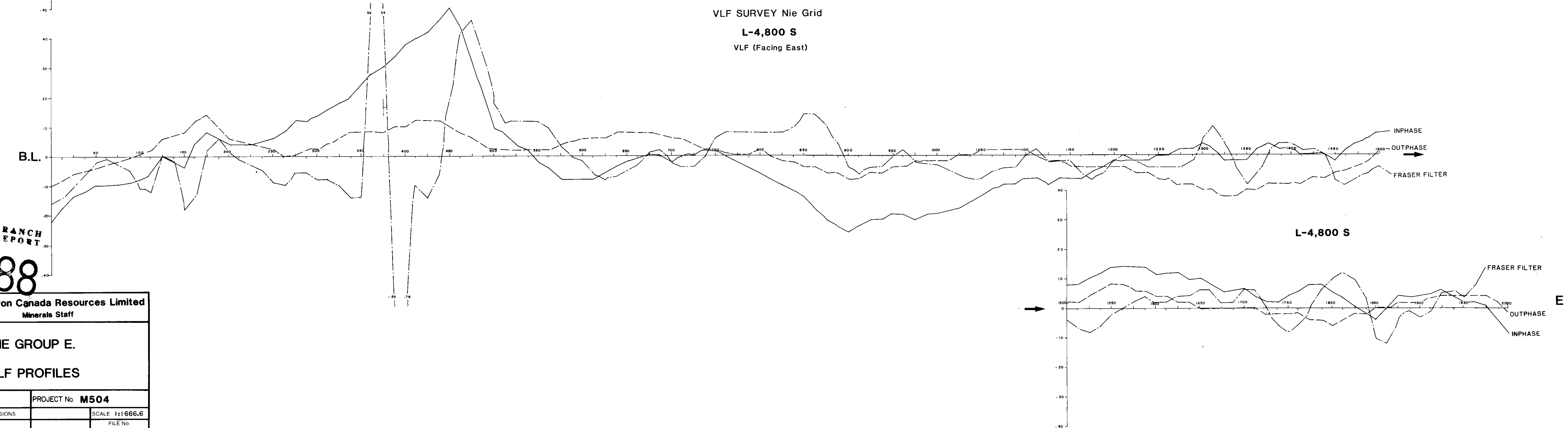
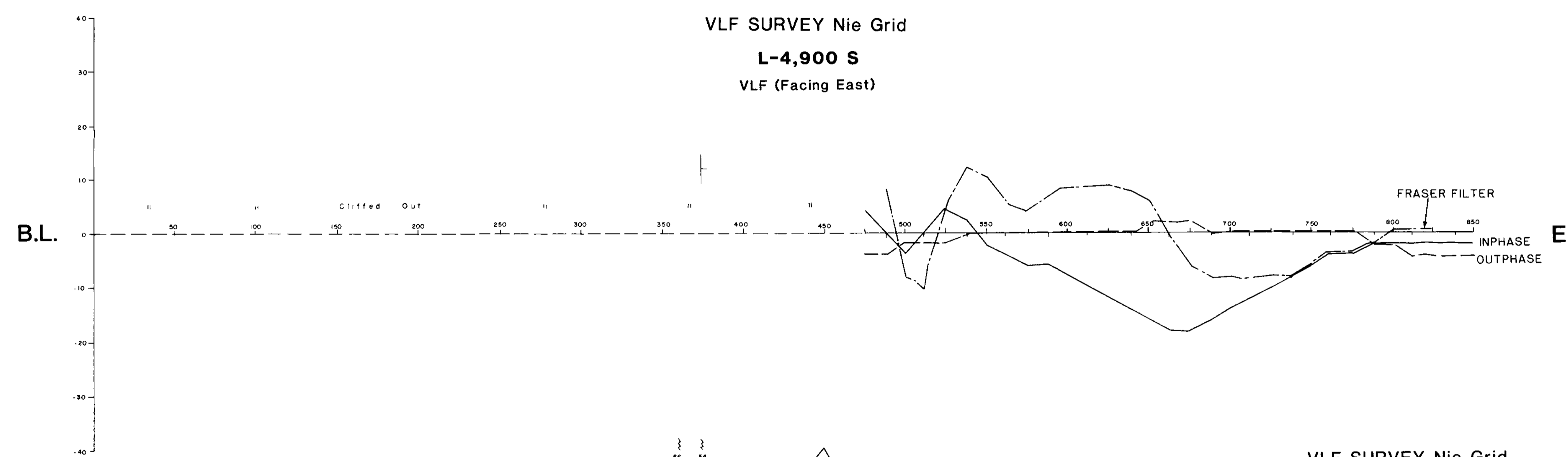
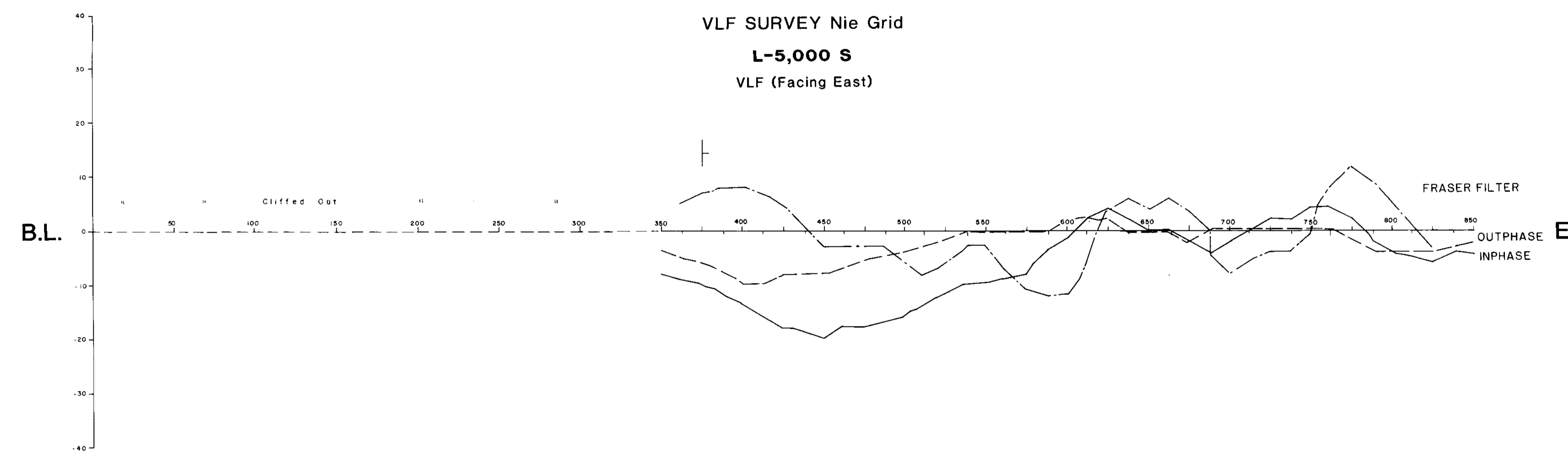
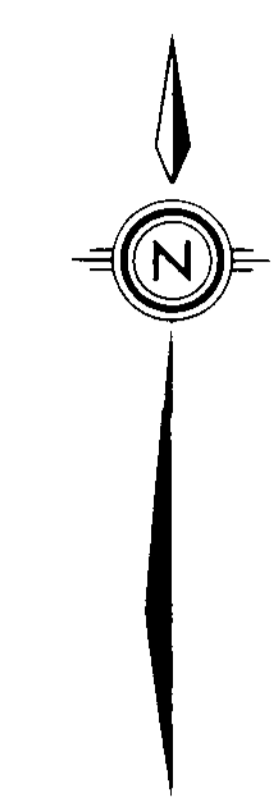
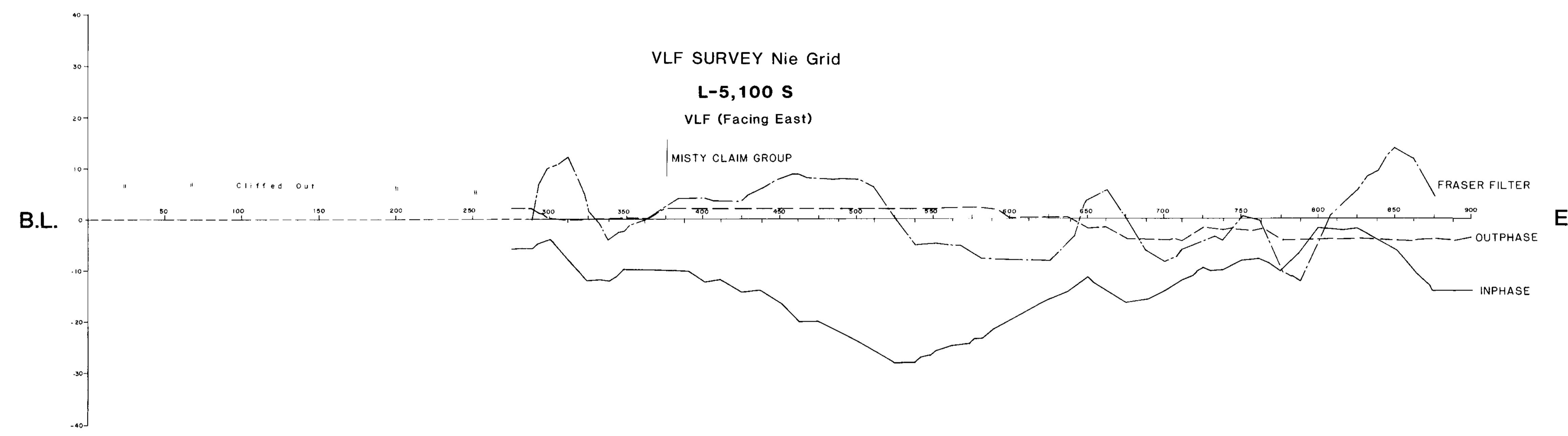
FIGURE No. 9 N	PROJECT No. M504
DATE OCT. 1984	SCALE 1:1666.6
NTS No.	FILE No.
COMPILED BY	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,688

 Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E. VLF PROFILES			
FIGURE No 90	PROJECT No M504		
DATE OCT. 1984	REVISIONS	SCALE 1:1666.6	FILE No
NTS No			
COMPILED BY			



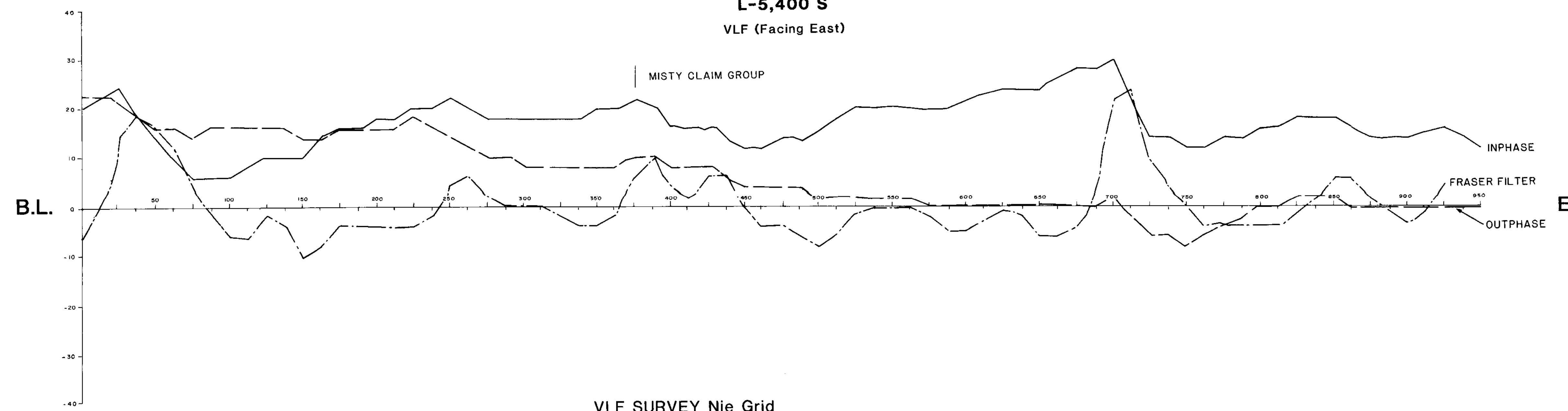
GEOLOGICAL BRANCH
 ASSESSMENT REPORT
12,688

Chevron Canada Resources Limited Minerals Staff			
NIE GROUP E.			
VLF PROFILES			
FIGURE No 9 P	PROJECT No M504		
DATE OCT.1984	REVISIONS	SCALE 1:1666.6	
NTS No.		FILE No.	
COMPILED BY			

VLF SURVEY Nie Grid

L-5,400 S

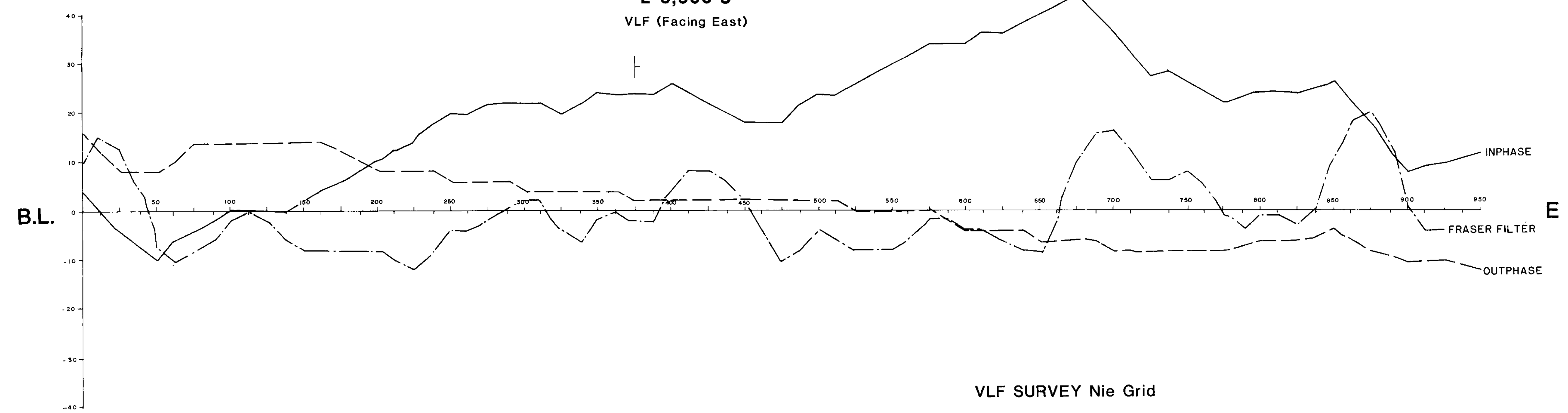
VLF (Facing East)



VLF SURVEY Nie Grid

L-5,300 S

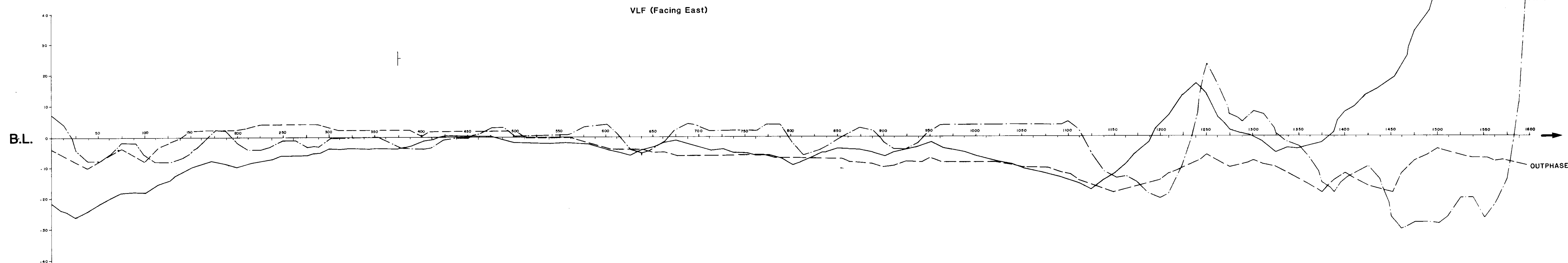
VLF (Facing East)



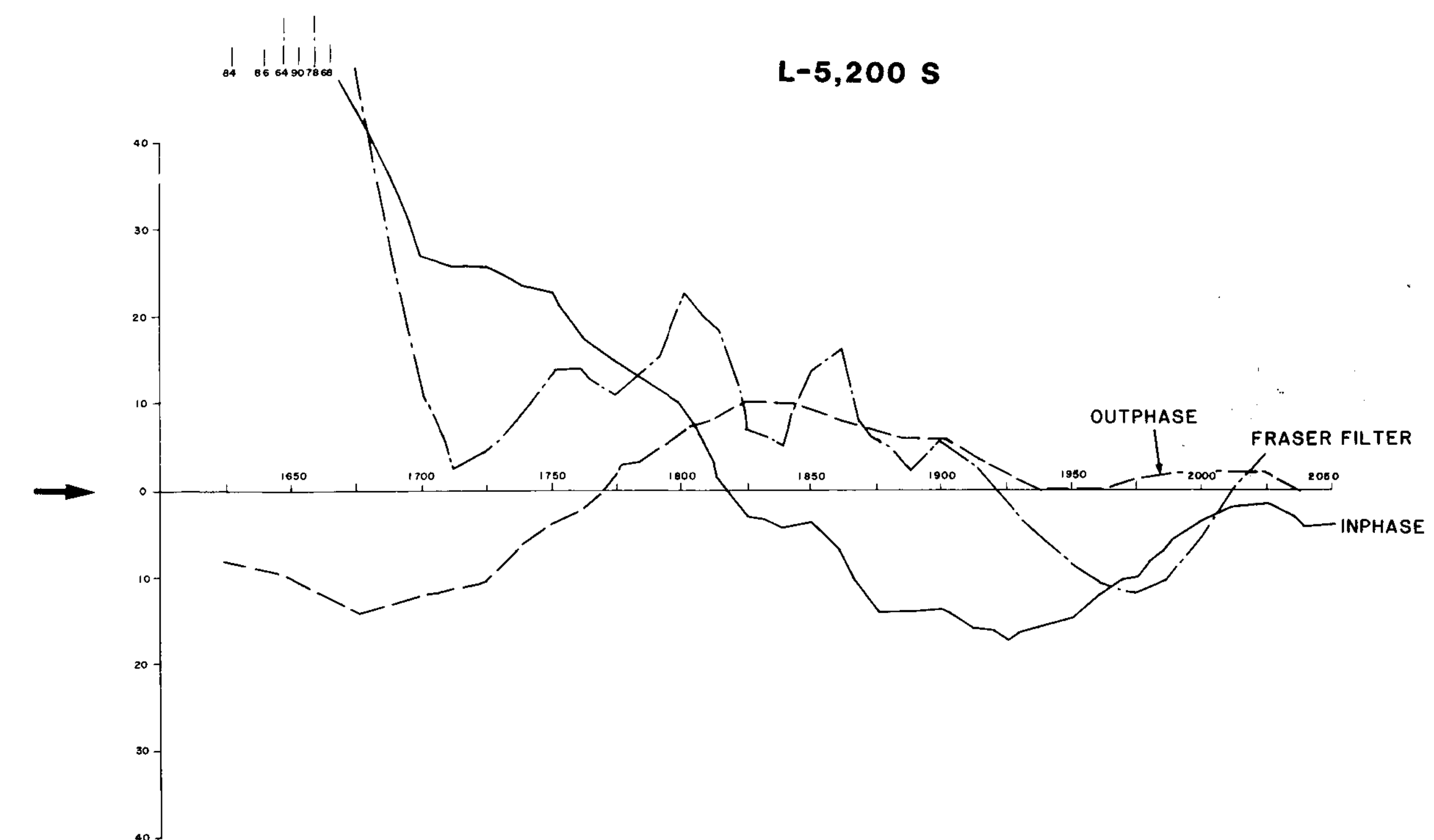
VLF SURVEY Nie Grid

L-5,200 S

VLF (Facing East)



L-5,200 S



GEOLOGICAL BRANCH
ASSESSMENT REPORT

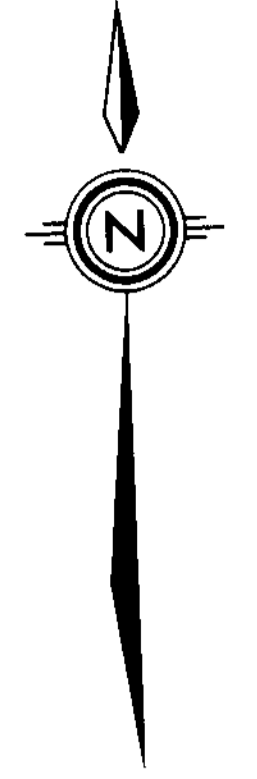
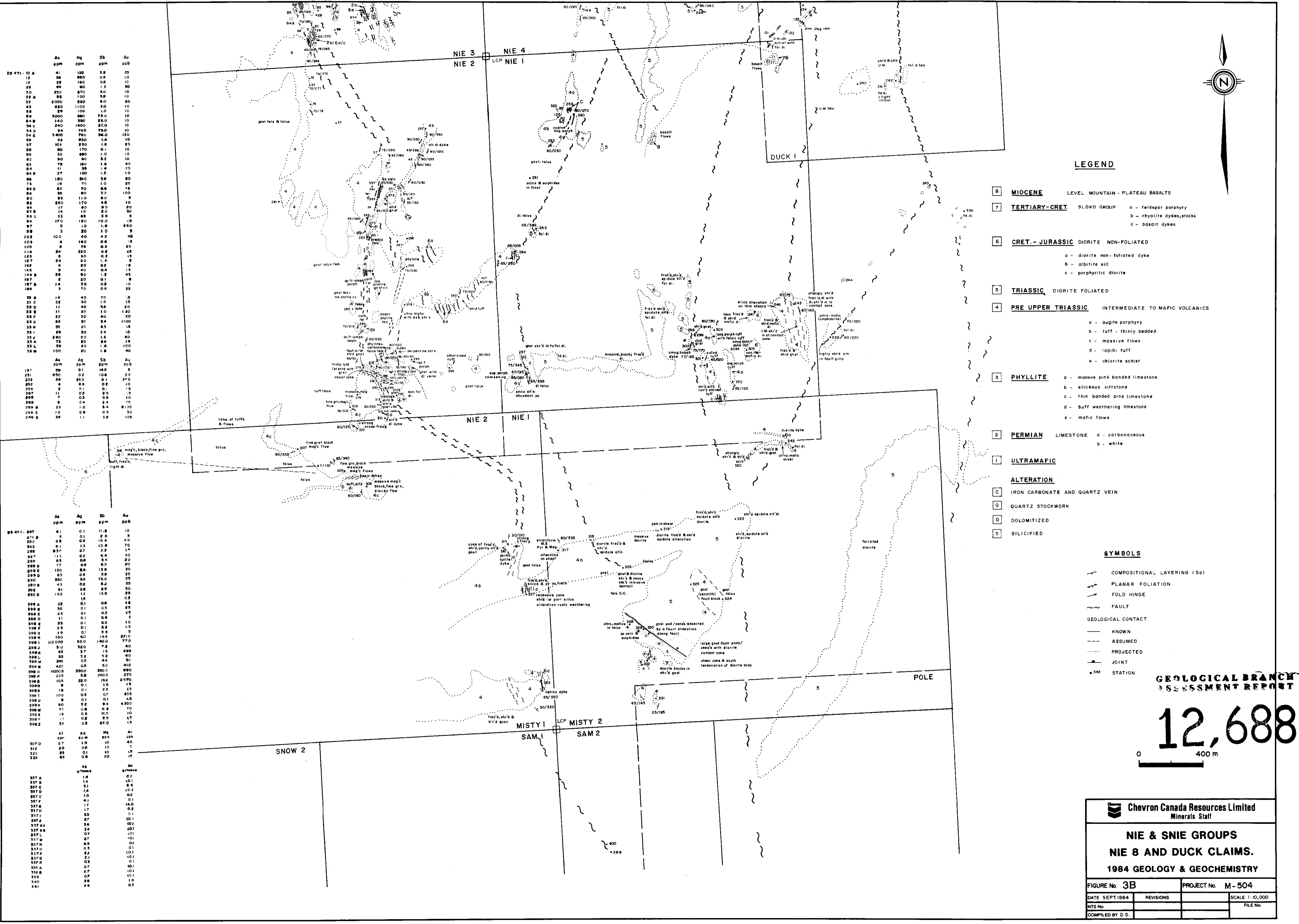
12,688

 Chevron Canada Resources Limited
Minerals Staff

NIE GROUP E.

VLF PROFILES

FIGURE No. 9 q	PROJECT No. M504
DATE OCT. 1984	REVISIONS
NTS No.	SCALE 1:1666.6
COMPILED BY	FILE No.



LEGEND

- 8 MIOCENE** LEVEL MOUNTAIN - PLATEAU BASALTS
 - 7 TERTIARY-CRET.** SLOKO GROUP
 - a - feldspar porphyry
 - b - rhyolite dykes, stocks
 - c - basalt dykes
 - 6 CRET. - JURASSIC** DIORITE NON-FOLIATED
 - a - diorite non-foliated dyke
 - b - albite sill
 - c - porphyritic diorite
 - 5 TRIASSIC** DIORITE FOLIATED
 - 4 PRE UPPER TRIASSIC** INTERMEDIATE TO MAFIC VOLCANICS
 - a - augite porphyry
 - b - tuff - thinly bedded
 - c - massive flows
 - d - lapilli tuff
 - e - chlorite schist
 - 3 PHYLLITE**
 - a - massive pink banded limestone
 - b - siliceous siltstone
 - c - thin banded pink limestone
 - d - buff weathering limestone
 - e - mafic flows
 - 2 PERMIAN** LIMESTONE
 - a - carbonaceous
 - b - white
 - 1 ULTRAMAFIC**
- ALTERATION**
- C** IRON CARBONATE AND QUARTZ VEIN
 - Q** QUARTZ STOCKWORK
 - D** DOLOMITIZED
 - S** SILICIFIED

SYMBOLS

- COMPOSITIONAL LAYERING (So)
- PLANAR FOLIATION
- FOLD HINGE
- FAULT
- GEOLOGICAL CONTACT**
- KNOWN
- ASSUMED
- PROJECTED
- JOINT
- STATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,688

0 400 m

	As ppm	Hg ppm	Sb ppm	Au ppb
DS 4T1 - 10 A	41	120	3.2	20
12	36	960	0.9	10
18	28	160	0.8	10
20	89	60	1.2	90
22 A	220	870	3.0	10
23	88	100	3.8	10
24	2000	820	6.0	20
25	820	1100	3.0	10
26	89	100	1.0	10
27	1000	960	79.0	10
28 A	140	360	23.0	10
28 C	240	1600	27.0	0
28 D	94	740	79.0	10
28 E	3400	790	34.0	130
29	29	890	2.4	10
29 A	101	280	1.6	25
29 B	30	170	0.1	10
29 C	30	890	1.0	10
29 D	80	80	3.2	10
29 E	79	180	1.8	40
29 F	11	58	1.4	25
29 G	27	100	1.2	10
29 H	180	910	5.6	80
29 I	19	70	1.0	25
29 J	83	70	6.8	15
29 K	36	80	4.0	100
29 L	83	110	6.0	5
29 M	850	170	4.6	10
29 N	17	80	8.0	20
29 O	14	10	2.0	50
29 P	33	69	3.6	5
29 Q	170	180	10.0	15
29 R	9	10	1.8	290
29 S	3	20	1.0	8
29 T	100	40	4.2	48
29 U	4	160	0.6	5
29 V	5	78	0.3	25
29 W	36	220	0.2	45
29 X	9	120	0.2	15
29 Y	24	20	1.4	9
29 Z	4	4	0.8	18
29 AA	9	40	0.4	15
29 AB	38	80	1.2	45
29 AC	2	0	0.1	8
29 AD	14	30	0.8	10
29 AE	3	70	0.8	25
29 AF	14	40	7.0	25
29 AG	32	30	1.8	48
29 AH	11	40	5.8	20
29 AI	11	30	1.0	130
29 AJ	32	30	4.0	100
29 AK	88	30	2.8	1100
29 AL	50	20	6.5	45
29 AM	29	30	2.4	45
29 AN	280	13	1.3	40
29 AO	75	80	2.4	18
29 AP	20	20	1.8	100
29 AQ	100	80	1.8	80

	As ppm	Ag ppm	Sb ppm	Au ppb
DS 4T1 - 207	41	0.1	11.2	10
271 B	5	0.1	2.6	8
282	88	0.8	16.6	40
283	6.1	1.3	10.8	70
285	830	0.7	2.2	1.4
287	115	0.2	6.4	10
288	65	0.8	3.4	20
289	77	0.8	8.5	20
289 B	150	2.8	13.8	20
289 D	63	0.6	3.9	25
290	850	3.6	73.0	28
290 B	45	0.2	9.2	35
292	81	2.6	2.6	30
292 B	190	11	13.8	88
298 A	22	0.1	0.6	48
298 B	50	0.1	0.5	45
298 C	24	0.1	0.2	45
298 D	11	0.1	0.6	5
298 E	28	0.1	6.0	10
298 F	29	0.1	2.8	42
298 G	19	0.1	6.6	5
298 H	100	60	14.4	270
298 I	100000	500	14000	770
298 J	810	320	7.2	40
298 K	45	3.7	1.6	488
298 L	83	3.2	5.2	40
298 M	240	0.5	4.4	30
298 N	420	0.8	5.0	410
298 O	10000	3900	8500	880
298 P	230	9.8	2800	270
298 Q	103	22.0	192	2370
298 R	9	0.1	1.6	45
298 S	16	0.1	2.6	45
298 T	100	0.8	0.7	235
298 U	9	0.1	0.1	45
298 V	90	3.2	9.4	4200
298 W	57	0.8	15.8	70
298 X	19	0.3	11.0	10
298 Y	11	0.2	5.9	45
298 Z	33	0.3	27.0	15

	Ag ppb	Au ppb
337 A	1.4	0.1
337 B	1.4	0.1
337 C	3.1	8.6
337 D	1.4	0.1
337 E	1.4	0.2
337 F	4.1	0.1
337 G	1.7	0.2
337 H	1.7	0.2
337 I	9.5	0.1
337 J	2.7	0.1
337 K	3.4	0.1
337 L	0.9	0.1
337 M	2.7	0.1
337 N	8.9	0.1
337 O	0.3	0.1
337 P	2.1	0.1
337 Q	0.3	0.1
337 R	0.3	0.1
338 A	0.7	0.1
338 B	2.7	0.1
338 C	0.9	0.1
340	8.8	1.9
341	2.4	0.3

Chevron Canada Resources Limited
Minerals Staff

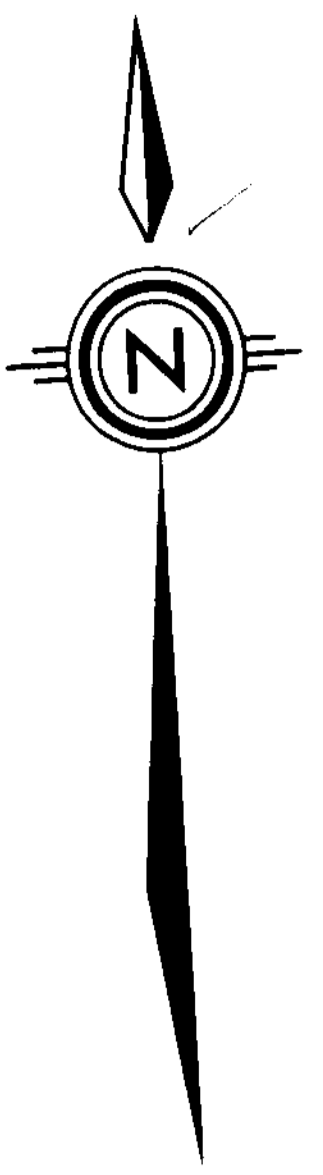
**NIE & SNIE GROUPS
NIE 8 AND DUCK CLAIMS.
1984 GEOLOGY & GEOCHEMISTRY**

FIGURE No. 3B PROJECT No. M-504

DATE SEPT. 1984 REVISIONS SCALE 1:10,000

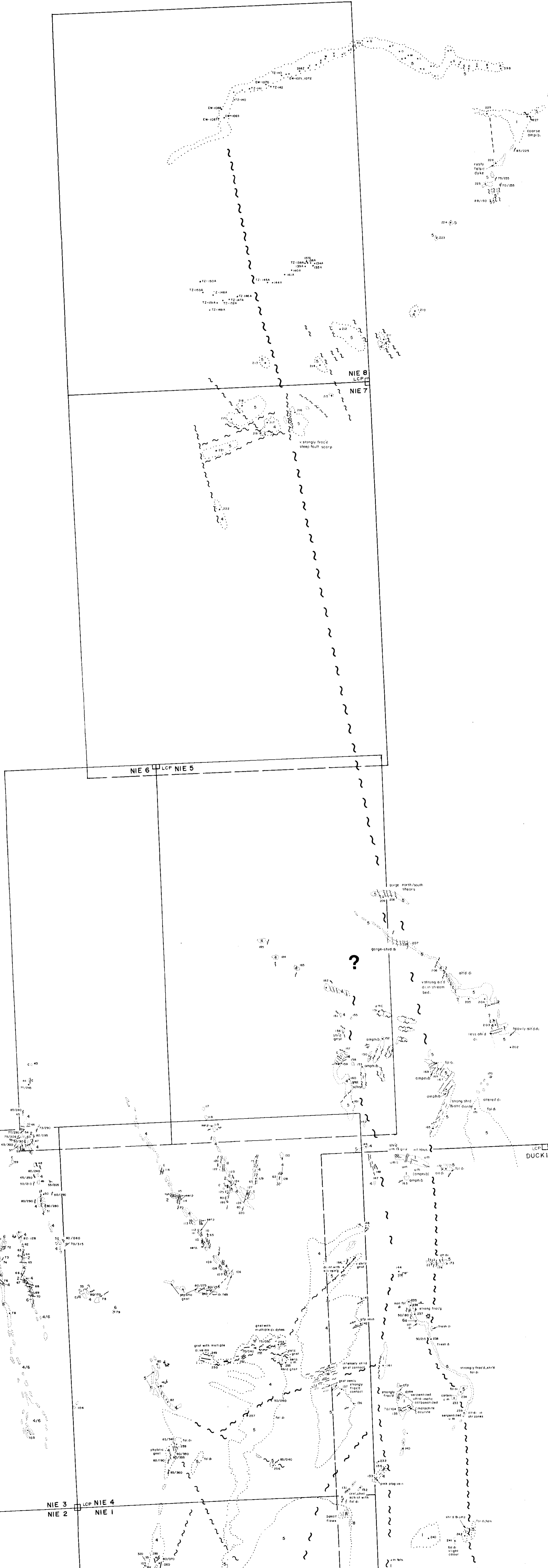
NTS No. FILE No.

COMPILED BY D.S.



AS	AS	AS	AS
1247	1247	1247	1247
1248	1248	1248	1248
1249	1249	1249	1249
1250	1250	1250	1250
1251	1251	1251	1251
1252	1252	1252	1252
1253	1253	1253	1253
1254	1254	1254	1254
1255	1255	1255	1255
1256	1256	1256	1256
1257	1257	1257	1257
1258	1258	1258	1258
1259	1259	1259	1259
1260	1260	1260	1260
1261	1261	1261	1261
1262	1262	1262	1262
1263	1263	1263	1263
1264	1264	1264	1264
1265	1265	1265	1265
1266	1266	1266	1266
1267	1267	1267	1267
1268	1268	1268	1268
1269	1269	1269	1269
1270	1270	1270	1270
1271	1271	1271	1271
1272	1272	1272	1272
1273	1273	1273	1273
1274	1274	1274	1274
1275	1275	1275	1275
1276	1276	1276	1276
1277	1277	1277	1277
1278	1278	1278	1278
1279	1279	1279	1279
1280	1280	1280	1280
1281	1281	1281	1281
1282	1282	1282	1282
1283	1283	1283	1283
1284	1284	1284	1284
1285	1285	1285	1285
1286	1286	1286	1286
1287	1287	1287	1287
1288	1288	1288	1288
1289	1289	1289	1289
1290	1290	1290	1290
1291	1291	1291	1291
1292	1292	1292	1292
1293	1293	1293	1293
1294	1294	1294	1294
1295	1295	1295	1295
1296	1296	1296	1296
1297	1297	1297	1297
1298	1298	1298	1298
1299	1299	1299	1299
1300	1300	1300	1300

AS	AS	AS	AS
1301	1301	1301	1301
1302	1302	1302	1302
1303	1303	1303	1303
1304	1304	1304	1304
1305	1305	1305	1305
1306	1306	1306	1306
1307	1307	1307	1307
1308	1308	1308	1308
1309	1309	1309	1309
1310	1310	1310	1310
1311	1311	1311	1311
1312	1312	1312	1312
1313	1313	1313	1313
1314	1314	1314	1314
1315	1315	1315	1315
1316	1316	1316	1316
1317	1317	1317	1317
1318	1318	1318	1318
1319	1319	1319	1319
1320	1320	1320	1320
1321	1321	1321	1321
1322	1322	1322	1322
1323	1323	1323	1323
1324	1324	1324	1324
1325	1325	1325	1325
1326	1326	1326	1326
1327	1327	1327	1327
1328	1328	1328	1328
1329	1329	1329	1329
1330	1330	1330	1330
1331	1331	1331	1331
1332	1332	1332	1332
1333	1333	1333	1333
1334	1334	1334	1334
1335	1335	1335	1335
1336	1336	1336	1336
1337	1337	1337	1337
1338	1338	1338	1338
1339	1339	1339	1339
1340	1340	1340	1340
1341	1341	1341	1341
1342	1342	1342	1342
1343	1343	1343	1343
1344	1344	1344	1344
1345	1345	1345	1345
1346	1346	1346	1346
1347	1347	1347	1347
1348	1348	1348	1348
1349	1349	1349	1349
1350	1350	1350	1350



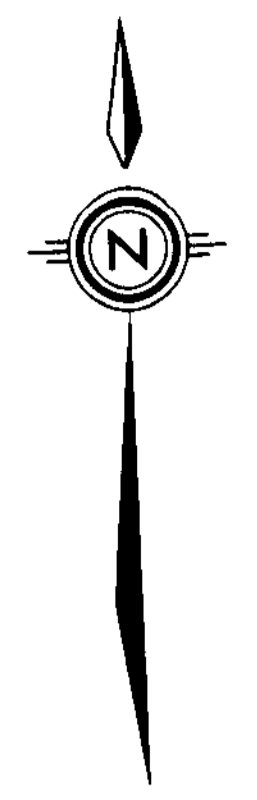
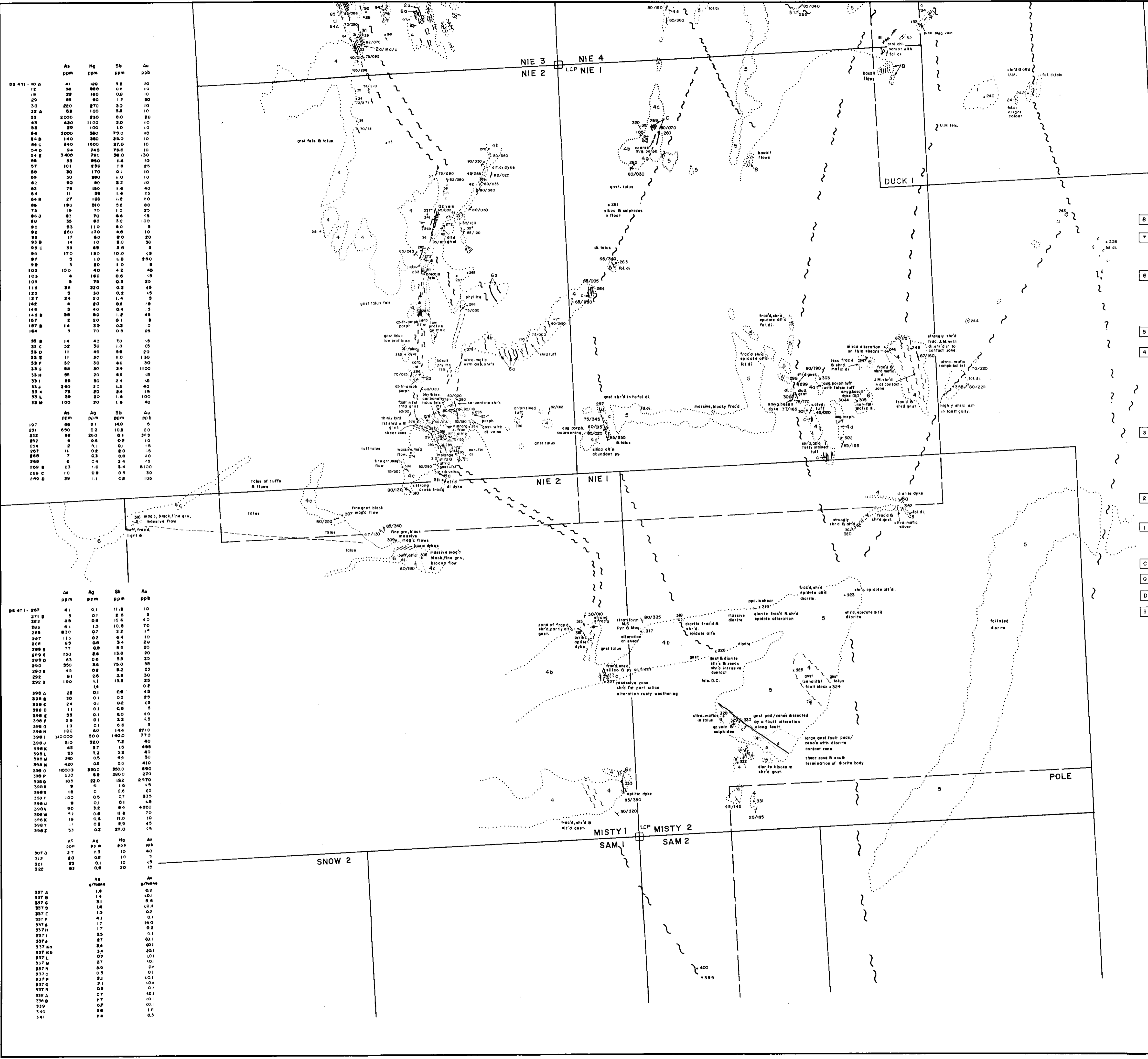
- 8 MIOCENE LEVEL MOUNTAIN - PLATEAU BASALTS
- 7 TERTIARY-CRET SLOKO GROUP
 - a - felsitic porphyry
 - b - rhyolite dykes, stocks
 - c - basalt dykes
- 6 CRET - JURASSIC DIORITE NON-FOLIATED
 - a - diorite min. foliated rhye
 - b - gabbro silt
 - c - porphyritic diorite
- 5 TRIASSIC DIORITE FOLIATED
- 4 PRE UPPER TRIASSIC INTERMEDIATE TO MAFIC VOLCANICS
 - a - quartz porphyry
 - b - tuff - thinly bedded
 - c - massive flows
 - d - lapilli tuff
 - e - chlorite schist
- 3 PHYLLITE
 - a - massive pink banded limestone
 - b - siliceous siltstone
 - c - thin banded pink limestone
 - d - buff weathering limestone
 - e - mafic flows
- 2 PERMIAN LIMESTONE
 - a - carbonaceous
 - b - white
- 1 ULTRAMAFIC

- ALTERATION**
- 5 IRON CARBONATE AND QUARTZ VEIN
 - 4 QUARTZ STOCKWORK
 - 3 OOLITIZED
 - 2 SILICIFIED

- SYMBOLS**
- COMPOSITIONAL LAYERING (Sv)
 - PLANAR FOLIATION
 - FOLD HINGE
 - FAULT
 - GEOLOGICAL CONTACT
 - KNOWN
 - ASSUMED
 - PROJECTED
 - JOINT
 - STATION

Geological Branch
Assessment Report
12688
T.K.

Chevron Canada Resources Limited Minerals Staff	
NIE & SNIE GROUPS NIE 8 AND DUCK CLAIMS. 1984 GEOLOGY & GEOCHEMISTRY	
FIGURE No 3A	PROJECT No M504
DATE NOV 1984	REVISIONS
NFS No	FILE No
COMPILED BY D.S.	



LEGEND

- 8 MIOCENE** LEVEL MOUNTAIN - PLATEAU BASALTS
 - 7 TERTIARY-CRET.** SLOKO GROUP
 - a - felspar porphyry
 - b - rhyolite dykes, stocks
 - c - basalt dykes
 - 6 CRET. - JURASSIC** DIORITE NON-FOLIATED
 - a - diorite non-foliated dyke
 - b - albite sill
 - c - porphyritic diorite
 - 5 TRIASSIC** DIORITE FOLIATED
 - 4 PRE UPPER TRIASSIC** INTERMEDIATE TO MAFIC VOLCANICS
 - a - augite porphyry
 - b - tuff - thinly bedded
 - c - massive flows
 - d - lapilli tuff
 - e - chlorite schist
 - 3 PHYLLITE**
 - a - massive pink banded limestone
 - b - siliceous siltstone
 - c - thin banded pink limestone
 - d - buff weathering limestone
 - e - mafic flows
 - 2 PERMIAN** LIMESTONE
 - a - carbonaceous
 - b - white
 - 1 ULTRAMAFIC**
- ALTERATION**
- C** IRON CARBONATE AND QUARTZ VEIN
 - Q** QUARTZ STOCKWORK
 - D** DOLOMITIZED
 - S** SILICIFIED

SYMBOLS

- COMPOSITIONAL LAYERING (S0)
- PLANAR FOLIATION
- FOLD HINGE
- FAULT
- GEOLOGICAL CONTACT**
- KNOWN
- ASSUMED
- PROJECTED
- JOINT
- STATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,688

0 400 m

As ppm	Hg ppm	Sb ppm	Au ppb
41	120	3.2	20
12	36	0.8	10
18	28	0.8	10
29	89	6.0	80
30	220	87.0	30
32 A	88	100	3.8
33	2000	230	8.0
43	820	1100	3.0
33	29	100	1.0
84	5000	560	75.0
84 B	140	380	25.0
84 C	240	1600	27.0
84 D	94	740	75.0
84 E	3400	790	36.0
85	23	850	1.4
87	101	180	1.6
88	30	170	0.1
89	30	880	1.0
82	90	80	3.2
83	79	180	1.6
84	11	58	1.4
84 B	27	100	1.2
86	180	510	5.6
87	19	70	1.0
86 B	83	70	6.6
86	35	60	3.2
80	83	110	6.0
92	250	170	4.6
93	17	80	8.0
93 B	14	10	2.0
93 C	33	69	3.8
94	170	100	10.0
97	5	10	1.8
99	3	20	1.0
102	100	40	4.2
103	4	140	0.6
105	5	75	0.3
116	26	210	0.8
123	5	30	0.2
127	24	20	1.4
148	4	40	0.2
146	5	40	0.4
146 B	39	80	1.2
167	2	20	0.1
167 B	14	30	0.3
164	3	70	0.8
83 B	14	40	7.0
83 C	32	30	1.8
83 D	11	40	5.8
83 E	11	30	1.0
83 F	32	30	4.0
83 G	86	30	24
83 H	50	20	6.5
83 I	29	30	2.4
83 J	240	10	1.3
83 K	73	20	8.4
83 L	38	20	1.8
83 M	100	20	1.8
As ppm	Ag ppm	Sb ppm	Au ppb
197	59	0.1	14.8
231	650	0.2	10.8
232	86	0.6	0.1
252	4	0.6	0.2
254	0.1	0.1	0.1
267	11	0.2	2.0
269	7	0.3	0.8
269 B	6	0.4	1.4
269 C	23	1.0	3.4
269 D	10	0.8	0.5
269 E	39	1.1	0.8
As ppm	Ag ppm	Sb ppm	Au ppb
271 B	5	0.1	7.6
282	85	0.8	10.6
283	6.1	1.3	10.8
285	830	0.7	2.2
287	11.5	0.2	6.4
288	65	0.8	3.4
289 B	77	0.8	8.5
289 C	150	8.8	13.8
289 D	63	0.6	5.9
290	850	2.6	78.0
290 B	45	0.2	9.2
292	81	2.6	2.8
292 B	190	1.1	15.8
398 A	22	0.1	0.8
398 B	30	0.1	0.5
398 C	24	0.1	0.2
398 D	11	0.1	0.6
398 E	95	0.1	6.0
398 F	2.9	0.1	2.2
398 G	19	0.1	0.6
398 H	100	60	14.4
398 I	100000	50.0	1400.0
398 J	8.0	32.0	7.2
398 K	45	3.7	1.8
398 L	53	3.2	3.2
398 M	240	0.5	4.4
398 N	420	0.8	30.0
398 O	10000	350.0	880.0
398 P	230	5.8	280.0
398 Q	105	22.0	192.0
398 R	9	0.1	1.6
398 S	16	0.1	2.6
398 T	100	0.8	2.7
398 U	8	0.1	0.1
398 V	90	3.2	9.4
398 W	57	0.8	10.8
398 X	19	0.5	11.0
398 Y	11	0.2	2.9
398 Z	33	0.3	87.0
As ppm	Ag ppm	Hg ppm	Au ppb
307 D	27	1.8	1.8
312	20	0.6	1.0
323	23	0.1	1.0
322	83	0.6	2.0
As g/tonne	Ag g/tonne	Sb g/tonne	Au g/tonne
337 A	1.4	1.4	0.7
337 B	1.4	1.4	0.7
337 C	3.1	0.6	0.4
337 D	1.4	0.2	0.2
337 E	1.0	0.2	0.2
337 F	4.1	0.1	0.1
337 G	1.7	0.2	0.2
337 H	1.7	0.2	0.2
337 I	5.5	0.1	0.1
337 J	2.7	0.1	0.1
337 K	9	0.1	0.1
337 L	3.4	0.1	0.1
337 M	0.7	0.1	0.1
337 N	2.7	0.1	0.1
337 O	8.9	0.1	0.1
337 P	0.3	0.1	0.1
337 Q	2.1	0.1	0.1
337 R	0.3	0.1	0.1
337 S	0.7	0.1	0.1
337 T	2.7	0.1	0.1
337 U	0.9	0.1	0.1
337 V	2.4	0.1	0.1

**Chevron Canada Resources Limited
Minerals Staff**

**NIE & SNIE GROUPS
NIE 8 AND DUCK CLAIMS.
1984 GEOLOGY & GEOCHEMISTRY**

FIGURE No. 3B	PROJECT No. M-504
DATE SEPT. 1984	REVISIONS
NTS No.	SCALE 1:10,000
FILE No.	
COMPILED BY D.S.	