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INTRODUCTION

This report is concerned with a geophysical exploration program for carbonate hosted zinc deposits.

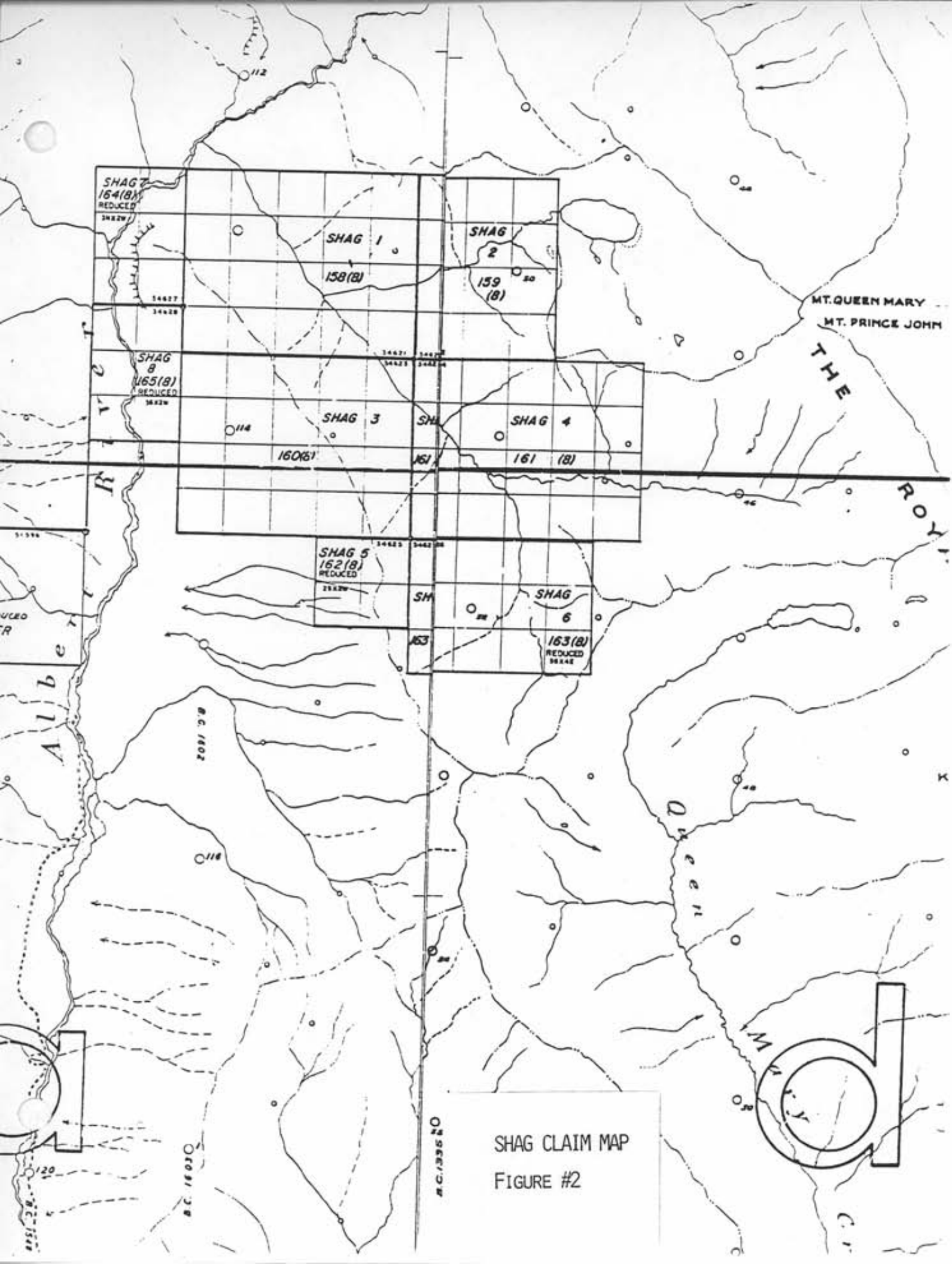
Delta Geoscience Ltd. was contracted by Mr. Chris Graf to conduct ground geophysical surveys on the Shag claims during the period August 4 to 12, 1988. The claims are owned by Mr. Graf and are located between the Albert and Palliser Rivers in the southern Rocky Mountains of British Columbia, 30km south of Mt. Assiniboine Provincial Park and 10km west of the Alberta border. Mr. Graf intends to place this property into a new company called Ecstall Mining Corporation thus this name will be used on the legends of the accompanying maps,

The exploration target is lead zinc silver ore bodies hosted in the carbonate rocks of the Waterfowl formation and the Cathedral formation. The Monarch and Kicking Horse deposits near Field, B.C., are the nearest examples of this type of exploration target.

A study of the general geophysical response of carbonate hosted lead zinc mineralization clearly showed that the induced polarization and resistivity techniques are best suited to the problem of detecting ore grade mineralization.

Access to the survey area was by logging roads which lead to the northern edge of the claim block on the Albert river. A helicopter chartered from Frontier Helicopters in Fairmont Hot Springs was used to position the crew and equipment into the grid from this logging road. A temporary tent camp was set up for the duration of the survey.





SHAG CLAIM MAP
FIGURE #2

PERSONNEL

Scott Cosman - Geophysicist/crew chief
Robert Wilson-Smith - Geophysicist/assistant crew chief
Tim Tokarsky - Geophysicist
Rick Ofner - Technician
Greg Martin - Technician
Grant Hendrickson - Senior Geophysicist/Supervisor (in
the field for the first two days
to oversee the start-up)

EQUIPMENT

- 1 - BRGM IP-2 Induced Polarization Receiver.
- 1 - BRGM IP-6 Induced Polarization Receiver.
- 1 - Hunttec 2.5kva Induced Polarization Transmitter.
- 1 - Hunttec Lopo Induced Polarization Portable
Transmitter.
- 2 - King Portable VHF Radios.
- 3 - Motorola Portable VHF Radios.
- 1 - Toshiba T3100 Field Computer.
- Camping Equipment for a 5 man crew.
- 1 - Honda Motor Generator.

DATA PRESENTATION

Chargeability and Resistivity data at a scale of 1:2500 is presented as follows:

- a) contoured plans.
- b) stacked profile plans.
- c) raw data listings.

The contoured plan format facilitates viewing the spatial position of anomalies. Contour intervals were chosen to point out the most salient features. The contour intervals and scale of the profiles are presented in the map legends.

The stacked profile plans assist in the interpretation of the results, since the profile shape is determined by the depth and dip of the anomaly.

The raw data listings satisfy assessment report requirements and allows one to review the actual numerical strength of anomalies prior to any data manipulation.

SURVEY PROCEDURE

Chris Graf had contracted out a line cutting crew to ensure that lines were cut and accurately chained prior to the arrival of the Delta Geoscience crew. A well cut grid consisting of five lines each 2.2km long, and 100m apart was established on the west side of Shag Creek. Station interval was set at 20 metres. The grid was placed to minimize topography problems. The survey area lies in an area of very rugged topography.

Induced Polarization and Resistivity:

The gradient electrode configuration was chosen for this survey, since it is capable of a deep depth of investigation and excellent horizontal resolution, combined with rapid surveying speed. In addition, a literature search showed that the gradient array approach had been used very successfully in the earlier exploration of many carbonate hosted lead zinc deposits.

The gradient blocks were set up with an AB of 1200 metres. The potential electrode separation, MN, was maintained at 40 metres. Readings were taken every 20 metres. Two I.P. receivers were used to achieve good daily production. Sufficient power was put by the Huntec 2.5kva transmitter to ensure primary voltages (Vp) at the receivers were excellent (in excess of 80 millivolts).

The 1200 metre AB allowed us to survey five lines from one set-up, each approximately 600 metres long. This limitation required us to survey the grid using four gradient blocks. The data was subsequently combined to present an overall view of the grid. Where the gradient blocks overlapped, the chargeability data agreed very well. Subtle differences in the resistivity data of the overlap areas are due to differences (alteration?) in the geology of each adjoining block.

The transmitting line was positioned on line 2W. The four gradient blocks were centered at 3N, 8N, 14N and 19N on line 2W.

Note: "AB" refers to current electrode separation.
"MN" refers to potential electrode separation.

A limited amount of detailing work was done using the Schlumberger array and the Hunttec LOPO portable transmitter. For the detailing work, the AB was 240m and the MN was 40m. More detailing would have been done if time permitted.

As mentioned earlier, the survey was designed to have good lateral resolution, excellent signal to noise response and to allow mobility in the field, in an attempt to solve four main exploration problems:

- a) spatial position and strength of sulphide zones.
- b) spatial position of structure (ore controls?).
- c) to give a good indication of the lithology present under the overburden.
- d) cost effective surveying.

It was expected that the Induced Polarization would respond primarily to sulphide zones and only weakly to lithology. The Resistivity was expected to respond primarily to the lithology (limestone versus dolomite), and only moderately to sulphide zones. Often in these types of deposits, the economic mineralization is interrupted by calcite and dolomite gangue, which degrades electrical continuity.

DISCUSSION OF THE DATA

The four main induced polarization anomalies found by this survey have very similar responses to induced polarization case histories from Pine Point, N.W.T., and central Ireland (Tynagh and Silvermines area). In particular, the reader is referred to Fig. 30.7 from the report by Cominco personnel referenced at the back of this report.

In general, a higher background chargeability and resistivity is present at the Shag. This higher background may in part be due to (a) less overburden at the Shag, (b) the widespread presence of thin conformable chargeable (sulphide?) horizon, and (c) 1 to 2% disseminated sulphides.

The four main I.P. anomalies are centered at:

- a) 100W, 4+80N.
- b) 400W, 7+60N.
- c) 400W, 9+50N.
- d) 400W, 15+20N.

However, it is apparent that the stronger anomalies persist to the west.

The areas of higher resistivity may be mapping zones of massive fine crystalline dolomite. Another possible cause of the high resistivity is silicified limestone. It is interesting to note that areas of high resistivity flank the main chargeability anomalies. Dolomitization is common in carbonate hosted lead zinc deposits.

Zones of coarse vuggy dolomite would likely be areas of low resistivity, since porosity and permeability would be improved, however this would be a very local effect. Sulphide mineralization would probably be concentrated in these areas.

The lowest resistivity zones correspond very well to the chargeability highs, which possibly is an excellent indication of a major accumulation of sulphide mineralization. The reader is referred to Fig. 6 in the report on the Irish deposits, referenced at the back of this report.

Graphite mineralization along structures, although unlikely, cannot be ruled out completely as the causative source of these I.P. anomalies.

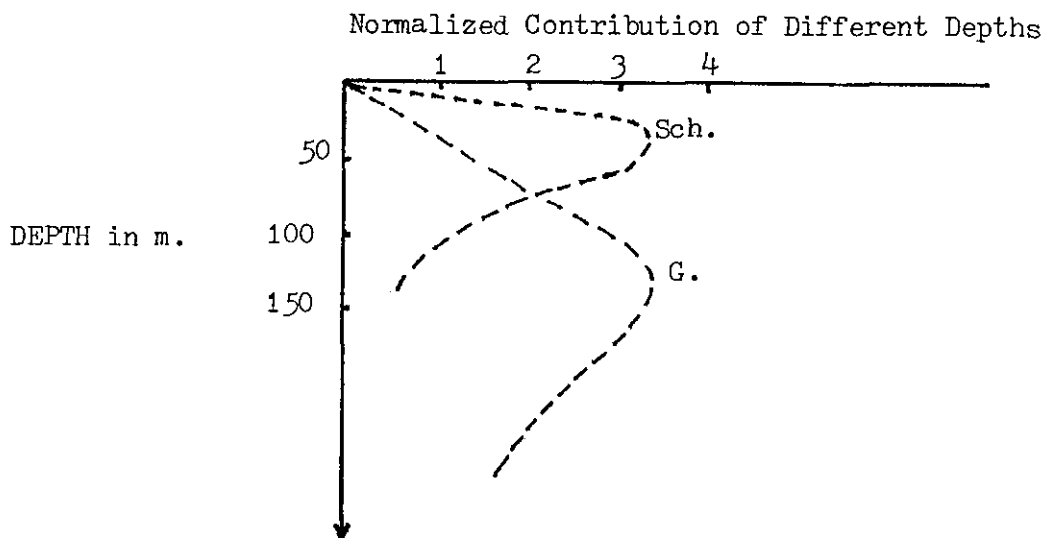
Prior to any drilling, more induced polarization work should be undertaken to improve the understanding of depth and spatial positions of the interesting zones.

If drilling is to be undertaken from the present results, I recommend setting up in the centre of each zone and drilling a vertical hole to a depth of 150 metres.

More deep gradient work is warranted in addition to shallow Schlumberger profiling or multi-dipole work.

The very strong chargeability and resistivity anomaly at 7+60N on line 4+00W is likely close to surface and would be a good location for detailed prospecting. This intense anomaly is likely part of a much larger anomaly at depth.

The following diagram illustrates the depth of investigation characteristics for the gradient and Schlumberger arrays used in this project.



CONCLUSION AND RECOMMENDATIONS

The I.P. anomalies found by this survey are very significant in the context of lead zinc mineralization in carbonate rock.

Follow-up work consisting of prospecting and drilling is highly recommended.

In addition, the grid should be expanded to the west and east with additional Induced Polarization surveys. In areas of high interest, the line separation should be reduced to 50 metres.

All of the old drill holes and geochemistry surveys should be located and tied precisely to the present grid to further aid in the evaluation of the I.P. results.



Grant A. Hendrickson, P.Geoph.

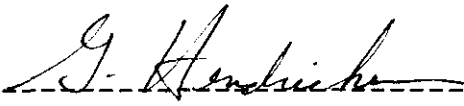
REFERENCES

- Bhattacharya, B.B., and Dutta, I., 1982: Depth of Investigation Studies for Gradient Arrays over Homogeneous Isotropic Half-Space: *Geophysics*, Vol.47, 1198-1203.
- Coggon, J.H., 1973: A Comparison of I.P. Electrode Arrays: *Geophysics*, Vol.38, 737-761.
- Lajoie, J.J., and Klein, J., 1977: Geophysical Exploration at the Pine Point Mines Ltd. Zinc-Lead Property, North-West Territories: Geological Survey of Canada Economic Geology Report 31, 653-664.
- Malmqvist, L., 1978: Some Applications of IP-Technique for Different Geophysical Prospecting Purposes: *Geophysical Prospecting* 26, 97-121.
- Seigel, H.O., 1966: Three Recent Irish Discovery Case Histories Using Pulse-Type Induced Polarization: *S.E.G. Case Histories: Mining Geophysics*, 341-349.

STATEMENT OF QUALIFICATION

Grant A. Hendrickson

- B.Science, U.B.C. 1971, Geophysics option.
- For the past 17 years, I have been actively involved in mineral exploration projects throughout Canada and the United States.
- I am a registered Professional Geophysicist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I am an active member of the S.E.G., E.A.E.G., and B.C.G.S.

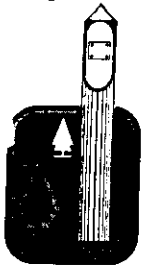


Grant A. Hendrickson, P.Geoph.

COST STATEMENT

SHAG CLAIMS

Linecutting	\$ 10,633.06
Helicopter (linecutting camp mob.)	530.70
Geophysical Survey	<u>17,964.16</u>
	\$ 29,127.92



DONEGAL
DEVELOPMENTS
• LTD. •

1500 - 409 Granville St.,
Vancouver, B.C. V6C 1T2
(604) 689-0299

August 18, 1988

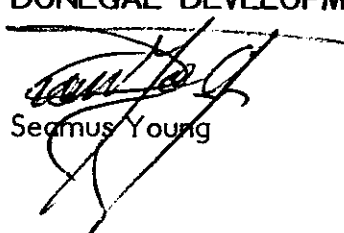
Ecstall Mining Corporation
1010 - 837 West Hastings Street
Vancouver, B.C.
V6C 1B6

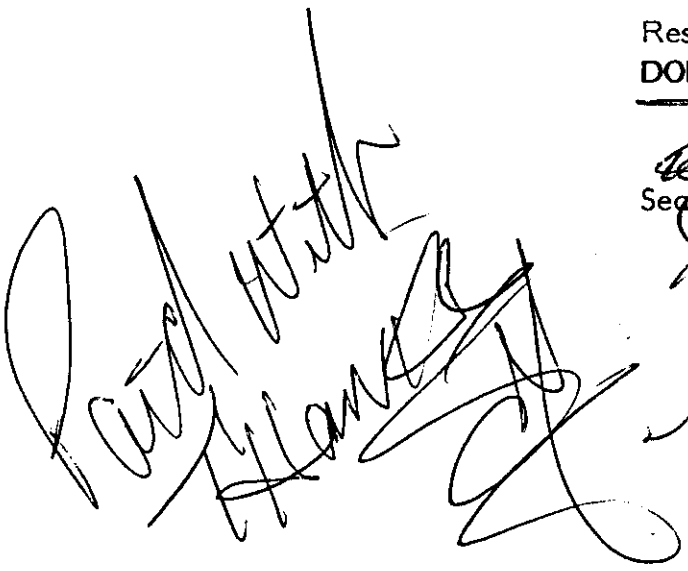
Attention: Chris Grath

Re: Linecutting - Shag Creek Project
July 18 - August 5, 1988
Crew: Richard Foster, Tom Duggan

Wages	\$ 6,700.00
Accommodation/Board	622.36
Truck Rental	950.00
Camp Equipment	360.00
Vehicle	480.00
Air Charter	792.42
Field Supplies	278.35
Office & Miscellaneous	444.91
	<u>\$!0,633.06</u>

Respectfully submitted,
DONEGAL DEVELOPMENTS LTD.


Seamus Young



DELTA GEOSCIENCE LTD.

Mineral Exploration Geophysics
Consulting and Contracting

642 English Bluff Rd.
Delta, B.C. V4M 2N4
Tel: (604) 943-0983



August 15, 1988.

Inv. C.033.

INVOICE

Mr. C. Graff,
Active Minerals Ltd.,
1010 - 837 West Hastings St.,
Vancouver, B.C.,
V6C 1B6.

Re: Geophysical Survey - Shag Creek Project,
Albert River Area, B.C. NTS 82J12.

Frontier Helicopters, Mob/Demob Charges	\$ 1,414.16.
Room, Board and Camp Charges	\$ 1,800.00.
1 day supervisory visit by G.Hendrickson ..	\$ 300.00.
7 days @ \$1,550.00	\$10,850.00.
Mob/Demob Charges	\$ 2,400.00.
Data Processing, Map and Report Preparation	\$ 1,200.00.

	\$17,964.16.
	=====

FRONTIER

FLIGHT REPORT

FRONTIER HELICOPTERS LIMITED
 P.O. BOX 220, ABBOTSFORD, B.C. CANADA V2S 4N9
 TELEPHONE (604) 853-5887 - ABBOTSFORD (403) 536-7766 - WATSON LAKE
 TELEFAX (604) 853-9017 TELEX 04-363529

NO 8020

CUSTOMER ACTIVE

ADDRESS _____

PILOT G. BISHOP ENGINEER B. NOLTINGER

AIRCRAFT TYPE 206 AIRCRAFT REGISTRATION GLMW

BASE FAIRMONT DATE JULY 21

Itinerary	Pass	Cargo	Time
FAS → QUEEN MARY			
AREA (MOVE CREW +			
SUPPLIES.) → FAS.			.9
TOTAL FLIGHT HOURS			1.9

SERVICES SUPPLIED BY:
 Place a check in applicable box(es)

Fuel	<input checked="" type="checkbox"/> FRON	<input type="checkbox"/> CUST	<input type="checkbox"/> N/A
Meals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Accom.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trans.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	_____		

Customer Code _____
 P.O. _____

Flying .9 hours @ 520⁰⁰ /h = \$ 468.00

FRONTIER FUEL AND OIL

100 liters from FAS @ .60 /l = 60.00

_____ liters from _____ @ _____ /l = _____

.9 hours oil @ 3.00 /hr. = 2.70

Total Fuel \$ _____

Cash Misc. Charges \$ _____

Charge TOTAL THIS REPORT \$ 530.70

Terms net 30 days. Interest charged on overdue accounts at 1.5% per month (18% per annum).

paid by visa

Approved By - Print _____ Agency Flight Report # _____

[Signature] Signature [Signature] Pilot

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PRE-FLIGHT INFORMATION RECEIVED BY ABOVE SIGNED.

LINE	STN	M1	M2	M3	M4	RESISTIVITY	SP
-400.	.	*	*	*	*	*	*
-400	0	*	*	25.	*	3365.	*
-400	20	*	*	25.	*	3730.	*
-400	40	*	*	24.	*	3443.	*
-400	60	*	*	24.	*	4031.	*
-400	80	*	*	22.	*	5772.	*
-400	100	*	*	20.	*	7726.	*
-400	120	*	*	18.	*	9151.	*
-400	140	*	*	16.	*	8316.	*
-400	160	*	*	16.	*	10373.	*
-400	180	*	*	16.	*	10959.	*
-400	200	*	*	17.	*	11387.	*
-400	220	*	*	17.	*	7454.	*
-400	240	*	*	17.	*	6951.	*
-400	260	*	*	18.	*	4675.	*
-400	280	*	*	17.	*	4717.	*
-400	300	*	*	14.	*	5768.	*
-400	320	*	*	14.	*	5517.	*
-400	340	*	*	14.	*	3623.	*
-400	360	*	*	14.	*	2581.	*
-400	380	*	*	15.	*	3063.	*
-400	400	*	*	18.	*	4132.	*
-400	420	*	*	18.	*	3587.	*
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-400	460	*	*	19.	*	3472.	*
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-400	500	*	*	18.	*	2951.	*
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-400	540	*	*	20.	*	2648.	*
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-400	580	*	*	18.	*	1610.	*
-400	600	*	*	20.	*	1089.	*
-400	620	*	*	22.	*	1228.	*
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00	280	*	*	16.	*	4401.	*
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-300	320	*	*	15.	*	2211.	*
-300	340	*	*	16.	*	3094.	*
-300	360	*	*	19.	*	3783.	*
-300	380	*	*	19.	*	3959.	*
-300	400	*	*	22.	*	2492.	*
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-300	560	*	*	18.	*	3580.	*
-300	580	*	*	16.	*	3053.	*
-300	600	*	*	14.	*	2925.	*
-300	620	*	*	13.	*	2633.	*
-300	640	*	*	12.	*	1453.	*
-300	660	*	*	13.	*	1699.	*
-300	680	*	*	16.	*	1597.	*
-300	700	*	*	20.	*	1223.	*
-300	720	*	*	27.	*	847.	*
-300	740	*	*	33.	*	756.	*
-300	760	*	*	43.	*	835.	*
-300	780	*	*	34.	*	1349.	*
-300	800	*	*	29.	*	2020.	*
-300	820	*	*	25.	*	3322.	*
-300	840	*	*	17.	*	6427.	*
-300	860	*	*	14.	*	8368.	*
-300	880	*	*	13.	*	8732.	*
-300	900	*	*	13.	*	8177.	*
-300	920	*	*	15.	*	5119.	*
-300	940	*	*	16.	*	2508.	*
-300	960	*	*	14.	*	2404.	*
-300	980	*	*	13.	*	2842.	*
-300	1000	*	*	13.	*	2861.	*
-300	1020	*	*	14.	*	3565.	*
-300	1040	*	*	14.	*	3358.	*
-300	1060	*	*	13.	*	2417.	*
-300	1080	*	*	14.	*	2897.	*
-300	1100	28.	22.	16.	10.	3940.	13.
-300	1120	33.	25.	18.	12.	4427.	-12.
-300	1140	34.	26.	19.	12.	3808.	-28.
-300	1160	35.	27.	20.	13.	2868.	16.
-300	1180	35.	27.	19.	12.	3468.	15.
-300	1200	36.	27.	19.	12.	3925.	13.
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-300	1240	42.	32.	23.	15.	3652.	2.
-300	1260	40.	31.	23.	15.	3503.	-1.
-300	1280	41.	31.	22.	15.	2789.	-6.
-300	1300	38.	29.	21.	14.	2101.	-16.
-300	1320	37.	29.	21.	14.	1910.	12.
-300	1340	36.	28.	20.	13.	2058.	16.
-300	1360	38.	29.	21.	13.	2542.	17.

-300	1380	38.	30.	22.	14.	2597.	23.
-300	1400	43.	33.	24.	16.	2489.	8.
-300	1420	44.	34.	25.	16.	2100.	-26.
-300	1440	44.	34.	25.	16.	1830.	-15.
-300	1460	50.	39.	28.	19.	1800.	-7.
300	1480	58.	45.	32.	21.	2393.	-4.
-300	1500	46.	36.	26.	17.	2564.	24.
-300	1520	37.	28.	20.	13.	2312.	28.
-300	1540	35.	27.	19.	13.	2369.	34.
-300	1560	37.	28.	20.	13.	2802.	-4.
-300	1580	42.	33.	24.	16.	2563.	-151.
-300	1600	51.	40.	29.	19.	2247.	-126.
-300	1620	53.	41.	30.	19.	2358.	38.
-300	1640	40.	31.	22.	15.	3343.	44.
-300	1660	25.	20.	14.	9.	3891.	69.
-300	1680	28.	21.	15.	10.	3005.	37.
-300	1700	29.	22.	16.	10.	2645.	7.
-300	1720	30.	22.	16.	10.	2837.	-1.
-300	1740	27.	21.	15.	9.	2850.	-12.
-300	1760	28.	21.	15.	10.	2721.	9.
-300	1780	30.	22.	16.	10.	3065.	4.
-300	1800	28.	22.	16.	10.	3028.	-4.
-300	1820	29.	22.	16.	10.	2755.	-3.
-300	1840	32.	25.	17.	11.	2945.	-8.
-300	1860	33.	25.	18.	11.	2636.	16.
-300	1880	34.	26.	19.	12.	2959.	8.
-300	1900	31.	24.	17.	11.	3247.	-1.
-300	1920	31.	23.	16.	10.	3105.	-16.
-300	1940	29.	22.	15.	10.	3051.	-3.
-300	1960	26.	20.	14.	9.	2387.	6.
-300	1980	25.	19.	14.	9.	2582.	-5.
-300	2000	25.	19.	13.	8.	2753.	-12.
-300	2020	24.	18.	12.	8.	2165.	-33.
-300	2040	21.	16.	11.	7.	2309.	-7.
-300	2060	21.	16.	11.	7.	3001.	-1.
-300	2080	20.	16.	11.	7.	3201.	18.
-300	2100	24.	18.	13.	8.	3657.	25.
-300	2120	25.	19.	14.	9.	4963.	-13.
-300	2140	26.	20.	14.	9.	4458.	-4.
-300	2160	26.	20.	14.	9.	4553.	-22.
-300	2180	23.	17.	12.	8.	4327.	-14.
-300	2200	20.	15.	10.	6.	4311.	-4.
-200.	*	*	*	*	*	*	*
-200	0	*	*	18.	*	4579.	*
-200	20	*	*	20.	*	6514.	*
-200	40	*	*	18.	*	8935.	*
-200	60	*	*	14.	*	8544.	*
-200	80	*	*	12.	*	8628.	*
-200	100	*	*	12.	*	8696.	*
-200	120	*	*	13.	*	8493.	*
-200	140	*	*	14.	*	6739.	*
-200	160	*	*	17.	*	5513.	*
-200	180	*	*	18.	*	5067.	*
-200	200	*	*	16.	*	4546.	*
-200	220	*	*	17.	*	4025.	*
-200	240	*	*	18.	*	4166.	*
-200	260	*	*	19.	*	4406.	*
-200	280	*	*	21.	*	3324.	*
-200	300	*	*	20.	*	2709.	*
-200	320	*	*	20.	*	2280.	*
-200	340	*	*	20.	*	1913.	*
-200	360	*	*	21.	*	2609.	*

-200	380	*	*	22.	*	2879.	*
-200	400	*	*	22.	*	2677.	*
-200	420	*	*	23.	*	2403.	*
-200	440	*	*	25.	*	2642.	*
-200	460	*	*	25.	*	2578.	*
-200	480	*	*	27.	*	1911.	*
-200	500	51.	40.	29.	20.	2101.	11.
-200	520	48.	38.	27.	18.	2444.	-34.
-200	540	44.	35.	25.	17.	2938.	32.
-200	560	39.	30.	21.	14.	3870.	41.
-200	580	37.	29.	21.	14.	4256.	-16.
-200	600	33.	25.	18.	12.	4641.	8.
-200	620	28.	21.	15.	10.	4414.	17.
-200	640	28.	21.	15.	9.	4222.	-10.
-200	660	25.	19.	14.	9.	3425.	-10.
-200	680	33.	25.	18.	12.	3010.	-24.
-200	700	50.	39.	29.	19.	2080.	-33.
-200	720	58.	46.	34.	23.	1427.	-56.
-200	740	40.	32.	23.	15.	2584.	-11.
-200	760	32.	25.	18.	12.	5649.	11.
-200	780	28.	21.	15.	10.	6550.	10.
-200	800	29.	22.	15.	10.	6439.	7.
-200	820	29.	22.	16.	10.	7023.	23.
-200	840	32.	24.	17.	11.	5810.	19.
-200	860	30.	23.	17.	11.	4689.	23.
-200	880	30.	24.	17.	11.	4419.	13.
-200	900	31.	24.	17.	11.	3568.	4.
-200	920	32.	24.	17.	11.	3468.	20.
-200	940	32.	25.	17.	11.	3658.	7.
-200	960	31.	24.	17.	11.	3188.	-5.
-200	980	31.	24.	17.	11.	3276.	3.
-200	1000	29.	22.	16.	10.	3004.	7.
-200	1020	29.	22.	16.	10.	2686.	40.
-200	1040	30.	22.	16.	10.	2696.	40.
-200	1060	28.	21.	15.	10.	2388.	-31.
-200	1080	28.	21.	15.	10.	2448.	-27.
-200	1100	30.	23.	17.	11.	3348.	3.
-200	1120	32.	25.	18.	12.	3428.	-1.
-200	1140	35.	27.	20.	13.	3565.	19.
-200	1160	38.	29.	21.	14.	2909.	8.
-200	1180	42.	32.	23.	15.	2980.	20.
-200	1200	46.	35.	25.	16.	2756.	55.
-200	1220	47.	37.	27.	18.	2099.	7.
-200	1240	53.	41.	30.	20.	2172.	6.
-200	1260	51.	40.	29.	19.	2425.	22.
-200	1280	51.	39.	28.	19.	2490.	12.
-200	1300	46.	36.	25.	17.	3038.	16.
-200	1320	37.	29.	21.	13.	3078.	-8.
-200	1340	38.	29.	20.	13.	2310.	-3.
-200	1360	49.	38.	27.	18.	1803.	-23.
-200	1380	45.	35.	25.	16.	2601.	-14.
-200	1400	37.	28.	20.	13.	3863.	-8.
-200	1420	27.	21.	15.	10.	3254.	20.
-200	1440	24.	19.	13.	9.	2444.	33.
-200	1460	35.	27.	20.	13.	2778.	-1.
-200	1480	39.	30.	22.	14.	3783.	25.
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-200	1540	32.	24.	17.	11.	3872.	-4.
-200	1560	26.	20.	14.	9.	3668.	3.
-200	1580	32.	24.	17.	11.	4519.	7.
-200	1600	33.	25.	18.	12.	4499.	-11.
-200	1620	32.	24.	17.	11.	3812.	-4.
-200	1640	29.	22.	16.	10.	4605.	5.

-200	1660	31.	24.	17.	11.	4445.	23.
-200	1680	*	*	20.	*	2833.	*
-200	1700	*	*	19.	*	2157.	*
-200	1720	*	*	17.	*	2392.	*
-200	1740	*	*	15.	*	2398.	*
-200	1760	*	*	16.	*	2747.	*
-200	1780	*	*	16.	*	2882.	*
-200	1800	*	*	14.	*	2200.	*
-200	1820	*	*	13.	*	1980.	*
-200	1840	*	*	13.	*	2443.	*
-200	1860	*	*	14.	*	2773.	*
-200	1880	*	*	15.	*	2718.	*
-200	1900	*	*	17.	*	2691.	*
-200	1920	*	*	18.	*	2911.	*
-200	1940	*	*	17.	*	2868.	*
-200	1960	*	*	16.	*	2988.	*
-200	1980	*	*	15.	*	2743.	*
-200	2000	*	*	13.	*	2628.	*
-200	2020	*	*	12.	*	3071.	*
-200	2040	*	*	12.	*	3410.	*
-200	2060	*	*	10.	*	3833.	*
-200	2080	*	*	10.	*	3476.	*
-200	2100	*	*	10.	*	3617.	*
-200	2120	*	*	10.	*	3660.	*
-200	2140	*	*	10.	*	3933.	*
-200	2160	*	*	11.	*	4144.	*
-200	2180	*	*	11.	*	4670.	*
-200	2200	*	*	11.	*	4355.	*
-100.	*	*	*	*	*	*	*
-100	0	39.	30.	21.	14.	4934.	-16.
-100	20	36.	28.	20.	13.	5390.	-27.
-100	40	35.	27.	19.	13.	5929.	40.
-100	60	37.	28.	20.	13.	4975.	42.
-100	80	38.	30.	21.	14.	3929.	12.
-100	100	37.	28.	20.	13.	3289.	-31.
-100	120	36.	28.	20.	13.	3030.	-31.
-100	140	36.	27.	19.	13.	3296.	8.
-100	160	35.	27.	19.	13.	3446.	-1.
-100	180	35.	27.	20.	13.	3643.	7.
-100	200	38.	29.	21.	13.	3410.	13.
-100	220	37.	28.	21.	13.	3022.	-10.
-100	240	38.	29.	21.	14.	2996.	-9.
-100	260	38.	30.	21.	14.	3102.	-4.
-100	280	40.	31.	22.	15.	2579.	-1.
-100	300	42.	32.	23.	15.	2602.	-1.
-100	320	42.	33.	23.	15.	2705.	-15.
-100	340	41.	32.	23.	16.	2631.	-16.
-100	360	46.	36.	26.	16.	2741.	-4.
-100	380	45.	35.	26.	17.	2470.	-8.
-100	400	48.	37.	26.	17.	2204.	6.
-100	420	49.	38.	27.	18.	2192.	12.
-100	440	52.	40.	29.	19.	2089.	-30.
-100	460	54.	42.	31.	21.	1896.	25.
-100	480	61.	47.	34.	23.	1777.	-2.
-100	500	58.	45.	33.	22.	2359.	-26.
-100	520	48.	37.	27.	18.	3659.	-30.
-100	540	40.	31.	23.	15.	4669.	2.
-100	560	35.	27.	19.	13.	4272.	19.
-100	580	32.	24.	17.	11.	4154.	2.
-100	600	29.	22.	16.	10.	4707.	23.
-100	620	29.	22.	16.	10.	5285.	5.
-100	640	28.	22.	15.	10.	5783.	8.
-100	660	29.	22.	16.	10.	5325.	14.

-100	680	29.	22.	16.	10.	4728.	17.
-100	700	31.	23.	17.	11.	4231.	-11.
-100	720	28.	22.	16.	11.	4662.	-14.
-100	740	32.	24.	17.	11.	4926.	12.
-100	760	31.	24.	17.	11.	4963.	-18.
-100	780	32.	24.	17.	11.	4874.	17.
-100	800	31.	24.	17.	11.	4212.	23.
-100	820	32.	25.	18.	11.	3961.	-2.
-100	840	31.	24.	17.	11.	3608.	15.
-100	860	34.	26.	18.	12.	3460.	-7.
-100	880	33.	25.	18.	12.	3398.	-3.
-100	900	33.	25.	18.	12.	3151.	10.
-100	920	33.	26.	18.	12.	3084.	-9.
-100	940	34.	26.	19.	12.	2903.	-4.
-100	960	35.	27.	19.	12.	2739.	-10.
-100	980	36.	28.	20.	13.	2607.	-11.
-100	1000	36.	28.	20.	13.	2575.	-3.
-100	1020	36.	27.	19.	12.	2486.	12.
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-100	1080	32.	25.	18.	11.	1965.	-3.
-100	1100	*	*	18.	*	2350.	*
-100	1120	*	*	20.	*	2983.	*
-100	1140	*	*	21.	*	3035.	*
-100	1160	*	*	22.	*	2750.	*
-100	1180	*	*	24.	*	3051.	*
-100	1200	*	*	25.	*	3092.	*
-100	1220	*	*	25.	*	2561.	*
-100	1240	*	*	25.	*	3015.	*
-100	1260	*	*	26.	*	2885.	*
-100	1280	*	*	26.	*	2046.	*
-100	1300	*	*	23.	*	1954.	*
-100	1320	*	*	21.	*	2138.	*
-100	1340	*	*	20.	*	2210.	*
-100	1360	*	*	18.	*	2187.	*
-100	1380	*	*	17.	*	2262.	*
-100	1400	*	*	16.	*	2671.	*
-100	1420	*	*	15.	*	2791.	*
-100	1440	*	*	16.	*	2745.	*
-100	1460	*	*	18.	*	3704.	*
-100	1480	*	*	19.	*	4348.	*
-100	1500	*	*	17.	*	4189.	*
-100	1520	*	*	15.	*	4078.	*
-100	1540	*	*	14.	*	3813.	*
-100	1560	*	*	15.	*	4038.	*
-100	1580	*	*	17.	*	4944.	*
-100	1600	*	*	17.	*	5286.	*
-100	1620	*	*	16.	*	4053.	*
-100	1640	*	*	15.	*	4317.	*
-100	1660	*	*	18.	*	5093.	*
-100	1680	38.	29.	21.	14.	3728.	10.
-100	1700	34.	27.	19.	13.	2920.	-15.
-100	1720	35.	27.	20.	13.	1931.	-7.
-100	1740	34.	27.	19.	13.	1799.	-6.
-100	1760	38.	29.	21.	14.	2242.	9.
-100	1780	34.	26.	19.	12.	2666.	15.
-100	1800	29.	22.	16.	10.	2208.	2.
-100	1820	26.	20.	14.	9.	1710.	-21.
-100	1840	24.	19.	13.	9.	2093.	-17.
-100	1860	25.	19.	13.	9.	2457.	-13.
-100	1880	26.	20.	14.	9.	2538.	-13.
-100	1900	27.	21.	15.	10.	2493.	-4.
-100	1920	30.	23.	16.	10.	2171.	-23.
-100	1940	28.	21.	15.	10.	1973.	-12.

-100	1960	29.	22.	16.	10.	2594.	-24.
-100	1980	28.	22.	16.	10.	3545.	-7.
-100	2000	26.	21.	15.	9.	3708.	19.
-100	2020	25.	19.	14.	9.	3403.	-34.
-100	2040	24.	18.	13.	8.	3548.	-36.
-100	2060	23.	18.	13.	8.	3593.	13.
-100	2080	23.	17.	12.	8.	2983.	3.
-100	2100	21.	16.	11.	7.	3024.	-18.
-100	2120	21.	16.	11.	7.	3497.	-7.
-100	2140	21.	16.	11.	7.	3750.	-15.
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-100	2180	20.	15.	10.	6.	3963.	-5.
-100	2200	19.	14.	10.	6.	2967.	-7.
0.	*	*	*	*	*	*	*
0	0	36.	28.	20.	13.	2926.	-11.
0	20	35.	27.	20.	13.	2813.	-1.
0	40	36.	27.	19.	13.	2342.	-6.
0	60	34.	26.	19.	12.	2187.	4.
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0	100	33.	26.	18.	12.	2509.	18.
0	120	33.	25.	18.	12.	2565.	-22.
0	140	32.	25.	18.	12.	2333.	-20.
0	160	35.	27.	19.	12.	2615.	17.
0	180	35.	27.	19.	13.	3094.	21.
0	200	35.	27.	20.	13.	3245.	0.
0	220	36.	28.	20.	13.	2924.	-10.
0	240	38.	29.	21.	13.	2688.	30.
0	260	40.	32.	18.	12.	3063.	9.
0	280	40.	31.	22.	15.	3232.	-3.
0	300	44.	34.	24.	16.	3521.	1.
0	320	45.	35.	25.	16.	2981.	10.
0	340	45.	35.	26.	17.	2391.	21.
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0	380	42.	33.	24.	16.	2011.	-43.
0	400	46.	35.	25.	16.	1921.	-17.
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0	560	37.	29.	21.	14.	5572.	-26.
0	580	32.	25.	18.	12.	3400.	-14.
0	600	28.	22.	16.	10.	3570.	23.
0	620	28.	21.	15.	10.	5662.	69.
0	640	20.	15.	10.	6.	4841.	27.
0	660	18.	14.	9.	6.	3728.	4.
0	680	25.	19.	13.	8.	4367.	-6.
0	700	26.	19.	14.	9.	4550.	0.
0	720	27.	21.	14.	9.	5108.	32.
0	740	29.	22.	16.	10.	4825.	26.
0	760	31.	24.	17.	11.	3158.	13.
0	780	32.	25.	18.	12.	2681.	4.
0	800	31.	24.	17.	11.	2290.	-8.
0	820	31.	24.	17.	11.	2265.	-1.
0	840	32.	24.	18.	12.	2528.	17.
0	860	33.	25.	18.	12.	3298.	-9.
0	880	38.	29.	21.	13.	3304.	8.
0	900	39.	30.	21.	14.	2015.	8.
0	920	40.	30.	22.	14.	1591.	4.
0	940	37.	29.	21.	14.	1716.	0.
0	960	40.	31.	22.	14.	1781.	-5.
0	980	38.	30.	21.	14.	1645.	10.

0	1000	40.	31.	22.	14.	1695.	21.
0	1020	37.	29.	21.	13.	1780.	-3.
0	1040	38.	30.	22.	14.	1227.	5.
0	1060	38.	30.	22.	14.	1142.	17.
0	1080	39.	30.	21.	14.	1845.	-7.
0	1100	*	*	20.	*	2609.	*
0	1120	*	*	20.	*	2700.	*
0	1140	*	*	21.	*	2407.	*
0	1160	*	*	21.	*	2113.	*
0	1180	*	*	22.	*	2072.	*
0	1200	*	*	22.	*	2216.	*
0	1220	*	*	24.	*	2232.	*
0	1240	*	*	25.	*	2288.	*
0	1260	*	*	26.	*	2066.	*
0	1280	*	*	26.	*	1764.	*
0	1300	*	*	27.	*	1704.	*
0	1320	*	*	27.	*	1779.	*
0	1340	*	*	27.	*	1866.	*
0	1360	*	*	23.	*	2033.	*
0	1380	*	*	21.	*	1874.	*
0	1400	*	*	21.	*	1384.	*
0	1420	*	*	19.	*	1415.	*
0	1440	*	*	18.	*	1605.	*
0	1460	*	*	20.	*	1630.	*
0	1480	*	*	23.	*	1565.	*
0	1500	*	*	25.	*	1245.	*
0	1520	*	*	25.	*	946.	*
0	1540	*	*	27.	*	1046.	*
0	1560	*	*	25.	*	1570.	*
0	1580	*	*	22.	*	1883.	*
0	1600	*	*	22.	*	1620.	*
0	1620	*	*	21.	*	1200.	*
0	1640	*	*	20.	*	968.	*
0	1660	45.	35.	25.	17.	895.	2.
0	1680	44.	34.	25.	17.	788.	2.
0	1700	42.	33.	24.	16.	872.	7.
0	1720	42.	33.	24.	16.	1016.	5.
0	1740	41.	32.	23.	15.	1010.	-9.
0	1760	37.	29.	21.	14.	995.	-1.
0	1780	37.	29.	21.	14.	1027.	2.
0	1800	35.	27.	20.	13.	1081.	3.
0	1820	35.	27.	20.	13.	1235.	2.
0	1840	25.	19.	14.	9.	1509.	-3.
0	1860	34.	27.	19.	13.	1445.	0.
0	1880	34.	26.	19.	12.	1229.	2.
0	1900	34.	26.	19.	12.	1257.	-2.
0	1920	33.	25.	18.	12.	1577.	-20.
0	1940	35.	27.	19.	12.	1657.	0.
0	1960	33.	25.	18.	12.	1517.	23.
0	1980	35.	27.	19.	13.	1650.	0.
0	2000	36.	28.	20.	13.	1593.	-3.
0	2020	41.	31.	23.	15.	961.	-1.
0	2040	30.	23.	17.	11.	1832.	-25.
0	2060	30.	23.	17.	11.	1180.	-2.

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SHAG CREEK PROJECT ALBERT RIVER AREA, B.C. NTS 82J12 CHARGEABILITY PLAN, GRADIENT ARRAY AB = 1200m, MN = 40m
contour interval 4 ms
SCALE 1:2500
DELTA GEOSCIENCE LTD

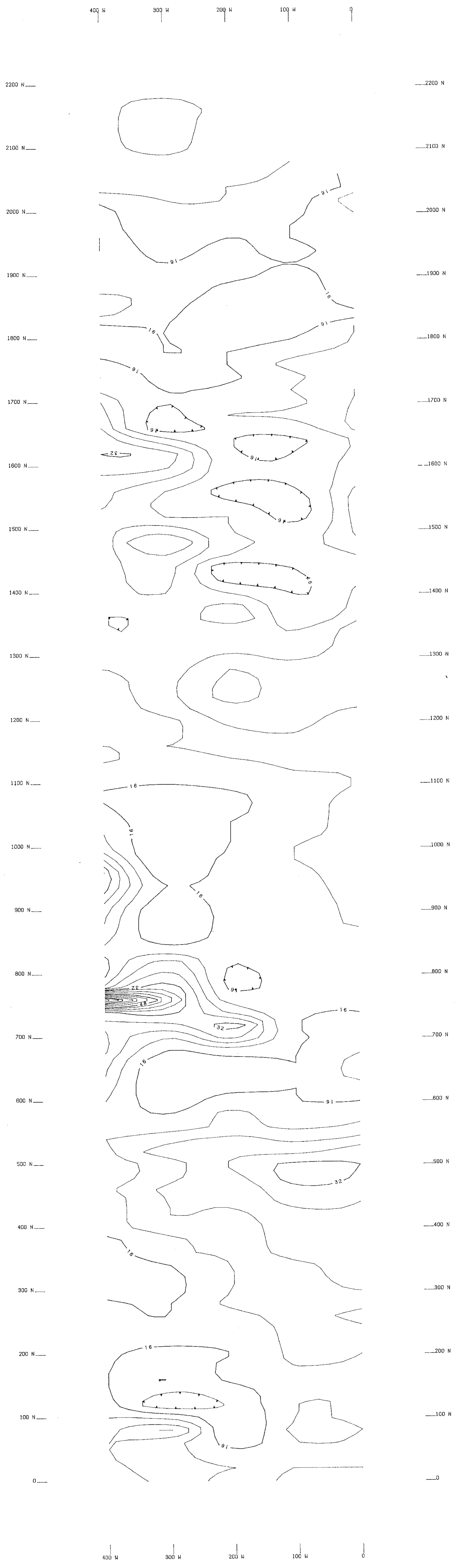
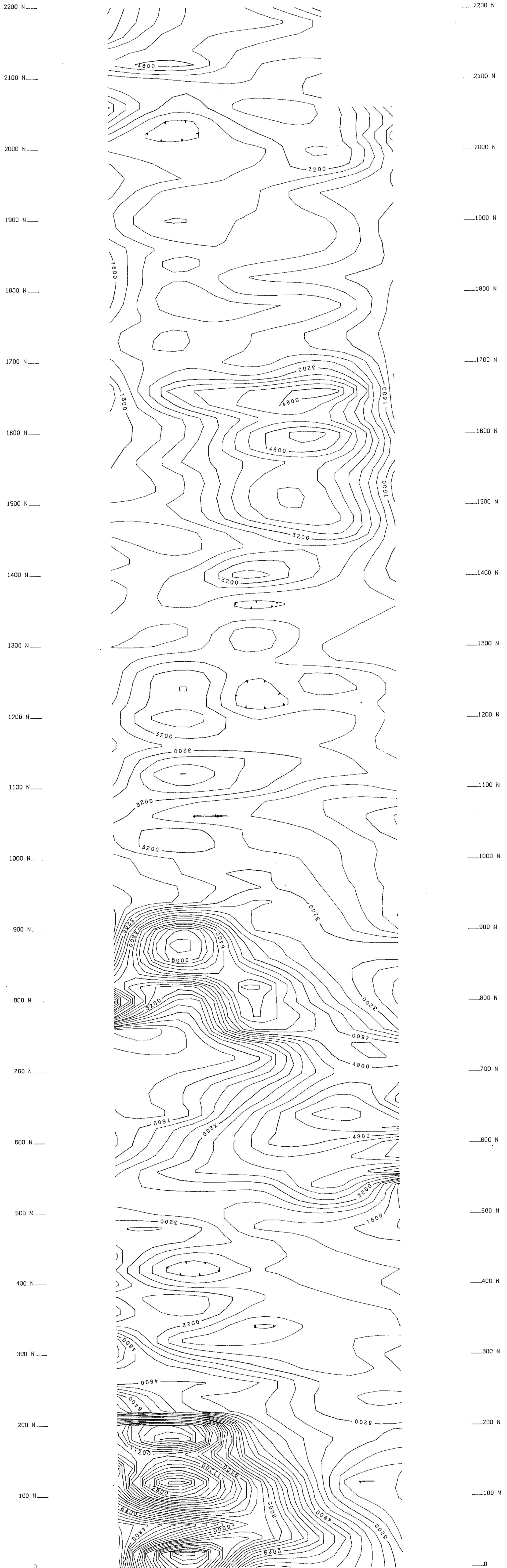


FIG. 3 A

400 W 300 W 200 W 100 W 0



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Inclination: 72 Deg
Declination: 21 Deg E

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400 W 300 W 200 W 100 W 0

ECSTALL MINES LTD

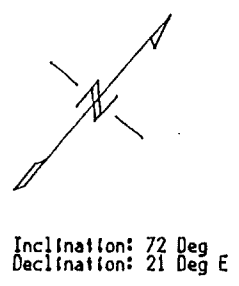
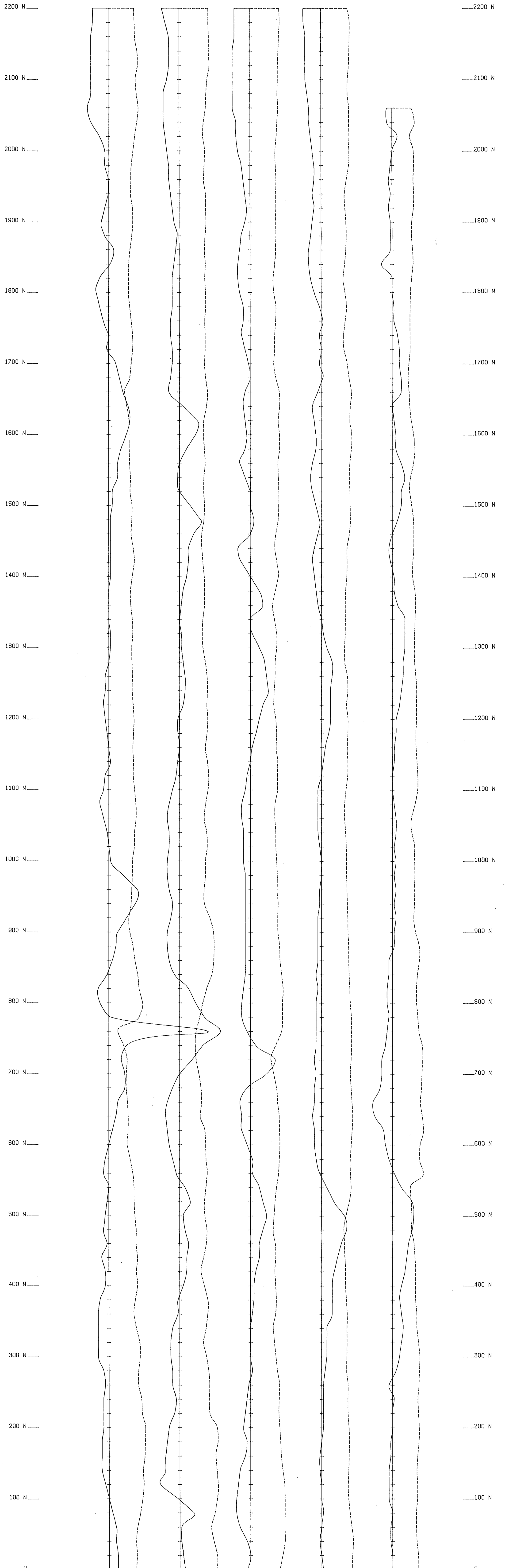
SHAG CREEK PROJECT
ALBERT RIVER AREA, B.C. NTS 82J12
RESISTIVITY PLAN, GRADIENT ARRAY
AB = 1200m, MN = 40m

contour interval 400 ohm-m

SCALE 1:2500

DELTA GEOSCIENCE LTD

400 W 300 W 200 W 100 W 0



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ECSTALL MINES LTD

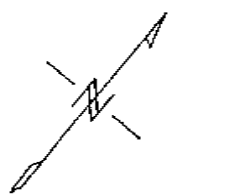
SHAG CREEK PROJECT
ALBERT RIVER AREA, B.C. NTS 82J12
CHARGEABILITY & RESISTIVITY PROFILES
GRADIENT ARRAY, AB=1200m, MN=40m

Charg. is solid line, $1cm=10ms$, base 20ms
Resist. is dashed line, $1cm=1$ log decade, base 100 ohm-m
SCALE 1:2500

DELTA GEOSCIENCE LTD

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Inclination: 72 Deg
Declination: 21 Deg E

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SHAG CREEK PROJECT
ALBERT RIVER AREA, B.C. NTS 82J12
CHARGEABILITY & RESISTIVITY PROFILES
SCHLUMBERGER ARRAY, AB=240m, MN=40m

Charg. is solid line, 1cm=10ms, base 10ms
Resist. is dashed line, 1cm=1 log decade, base 100 ohm-m
SCALE 1:2500

DELTA GEOSCIENCE LTD

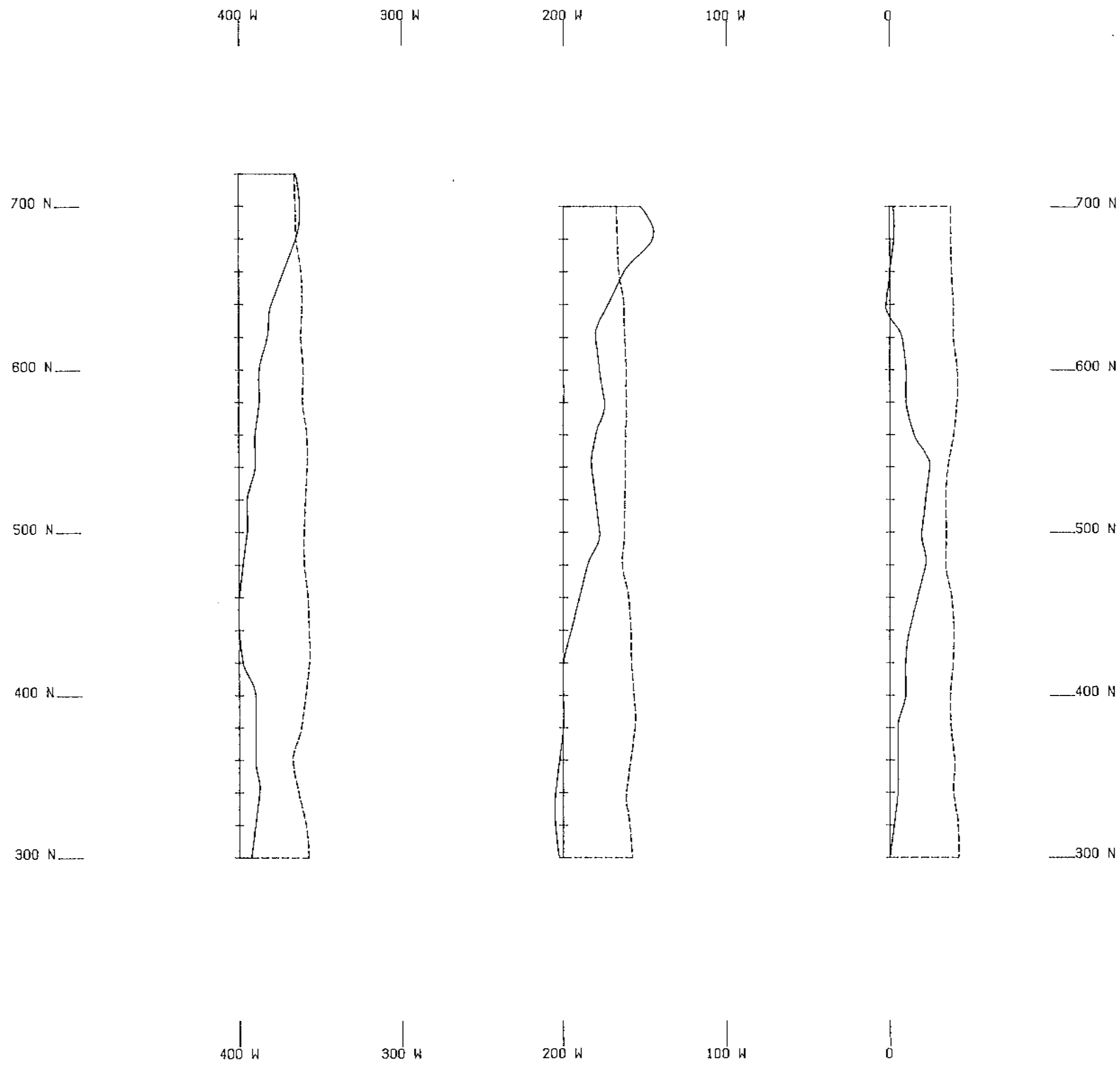


FIG. 4